

**FREE AUTOSPORT ENGINEERING SUPPLEMENT**

 **AUTOSPORT**

# PORSCHE

## F1'S PURSUIT OF AN ICON

How comeback  
could happen for  
famous marque



**PLUS**

**FORMULA 1**

HARTLEY IN SHOCK  
TORO ROSSO CALL-UP

ARTIST'S IMPRESSION

**FORMULA 3**

BRITAIN'S NEXT  
STAR TAKES CROWN

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ARTISTS' IMPRESSION  
BY DEAN & EMMA WRIGHT

# Porsche spice can only benefit Formula 1

## WE DON'T USUALLY BEGIN AN AUTOSPORT

editorial talking about a besuited Porsche executive. But, when the Stuttgart manufacturer's deputy chairman Lutz Meschke arrived at Monza during last month's Italian Grand Prix to meet Formula 1's bosses, the rumour mill went into overdrive. Was Porsche coming back, and in what form – team or engine supplier?

The answer is: we still don't know. And, in all likelihood, neither do Meschke or his colleagues – yet. But the capture of such a glamorous, prestige manufacturer would be a coveted feather in the cap for F1. Much depends on the outcome of discussions concerning the engine regulations that will be introduced in 2021, but there are so many other factors to consider, as Edd Straw details in our cover feature on page 18. Of course, success can never be guaranteed, and you can read Adam Cooper's sorry tale of Porsche's last F1 involvement in 1991 on p24.

Elsewhere in the magazine, you can read Matt James's review of a gripping BTCC season won by Ash Sutton and the Team BMR Subaru squad, and of how Toyota conquered the elements in a traditional weather-affected Fuji WEC round. But perhaps the most noteworthy achievement is that of Lando Norris, the first Briton to be crowned as FIA Formula 3 European champion, and the first from these shores to win any Euro F3 title since Paul di Resta in 2006. Congratulations to our 2016 McLaren Autosport BRDC Award winner and the Carlin boys and girls down in Farnham, who've enjoyed such a successful season in so many categories!



*MJS*

**MARCUS SIMMONS**  
**DEPUTY EDITOR**

marcus.simmons@autosport.com

@MarcusSimmons54



COVER IMAGE  
Dean & Emma Wright

## COVER STORY

- 18** How Porsche can return to F1
- 24** The 1991 disaster with Footwork

## PIT+PADDOCK

- 4** Fifth Column: Nigel Roebuck
- 6** Hartley and his Toro Rosso F1 shot
- 8** Norris and Russell could team up in F2
- 10** No place for Button in Penske squad
- 15** In the paddock: Dieter Rencken
- 17** Feedback: your letters

## FEATURES AND REPORTS

- 26** BTCC review: Sutton and Subaru on top
- 46** WEC Fuji: Toyota beats Porsche, and rain

## RACE CENTRE

- 36** European F3; DTM; MotoGP; WTCC; NASCAR

## CLUB AUTOSPORT

- 63** F3/F4 Algarve Winter Series canned
- 64** Carrera Cup GB junior finalists revealed
- 66** Historic prototypes for Silverstone Classic
- 67** Humble Pye: the voice of club racing
- 68** Donington Park; Silverstone; Castle Combe; Oulton Park; Snetterton; Pembrey
- 76** BTCC support series review

## FINISHING STRAIGHT

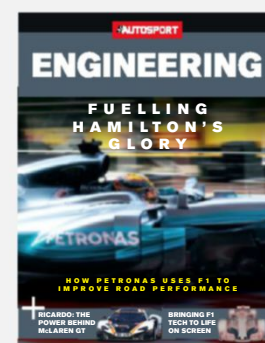
- 80** What's on this week
- 82** Top 5: Red Bull rejects who flourished

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# FREE INSIDE

## ENGINEERING SUPPLEMENT



Investigating Petronas's F1 programme with Mercedes, Ricardo's GT work with McLaren, and the latest news in the marketplace.

# NIGEL ROEBUCK

## Equal opportunities

Fernando Alonso is wearing a replica of his Indy lid this weekend; wouldn't it be great if *more* top drivers 'crossed the floor'?

[@autosport](#)

IN AUSTIN THIS WEEKEND FERNANDO ALONSO IS to reprise the helmet he used for the Indianapolis 500, and he's doing it, he says, in tribute to Indy and to American racing fans. The only pity is that the helmet won't be seen in an orange car, as at the 500, where the reappearance of the colour resonated strongly with one and all. What we need over the winter is for McLaren's marketing/brand people to replace the nondescript livery of this year with the papaya synonymous, in Bruce's day, with the cars that bore his name.

As I wrote at the time, the Alonso I saw at the Speedway was overtly happier than at any race for a long time: for one thing, the fresh environment in which he found himself was much to his liking; for another, for the first time in four years he was going into a race with a competitive car.

As it was, Fernando's Honda engine let go 20 laps from the end when he was in with a genuine shot at victory, and as he pulled off at Turn 1, the cheers from the crowd were audible over the sound of the engines. No surprise that, for all it ended in disappointment, the 500 experience has been very much the highlight of Alonso's year.

When we talked before the race he mentioned that one of the many little pleasures of Indy had been the procedure

for starting the engine: "Formula 1 engines are so complex now, but this is like the old days – you just raise a finger, and away you go!"

There is of course endless debate about the specification of the next engine in Formula 1, although by common consent it must be considerably simpler and cheaper than that in current use. When I suggested to Fernando that maybe there was a case to be made for using the contemporary IndyCar engine – a turbocharged 2.2-litre V6 – as a basis, he agreed: apart from being far less complex

and costly, relatively equal performance was more or less guaranteed.

Trouble is, it ain't a hybrid, and Alonso made another point, too: "It would never work in Formula 1 because the big manufacturers

will never accept the idea of 'similar' engines, will they? It's a never-ending story.

"For sure," he went on, "the actual racing would be more spectacular if you had F2 cars, driven by Formula 1 drivers. Compared with what we have now, it would be cheap, and with the cars so equal, the driver would matter more – I think the spectators would love that kind of racing, but of course Ferrari, Mercedes and Renault would not be there..."

Alonso's words came back to me last week when I watched on TV the F2 race at Jerez, this final European round of the

**"Drivers participated in other series, and worked hard for their money"**



F1 star McLaren leads youngster Ickx in 1967 Crystal Palace F2...



...if only new F2 champ Leclerc could have taken on F1 stars 50 years on



Indy 500 was probably Alonso's most enjoyable race of 2017



year a 'stand alone' event, run the weekend of the Japanese Grand Prix. The race, I'm told by a friend who was there, received absolutely no publicity, and in this day and age it was thus no surprise that hardly anyone showed up to watch, which was a shame because Charles Leclerc – surely Ferrari's next star – and the other frontrunners put on a fine show.

The same thought occurred on race day at Monza. In the morning there was a riveting Formula 2 race, with passing left, right and centre, and that served only to highlight the acute dreariness of the Italian Grand Prix, a race whose only virtue was its brevity.

Formula 2 is of course seen as a feeder series for Formula 1, and such was always the case, but time was when it had far greater cachet than now. In the 1960s and '70s the racing world was a very different place, and although Formula 1 was obviously the top of the tree, it was not to the degree we take for granted these days. For one thing, there were far fewer grands prix.

For another, a driver couldn't make a living from Formula 1 alone. In 1965 Jim Clark, the greatest on earth, won not only his second world championship, but also the Indy 500, and his share of the \$166,000 prize money will have been most welcome: for a season of Formula 1 with Lotus, Colin Chapman was paying Jimmy £7500.

Therefore the top drivers participated in other series, too, be it world championship sportscar racing, Can-Am,

touring cars, Formula 2, whatever – and they worked very hard for their money: if, in 1967, there were but 11 grands prix, there were also half a dozen non-championship F1 races (four of them in the UK) – and no fewer than 22 F2 races (six of them on these shores), in which the likes of Clark, Surtees, Brabham, Hill, Stewart and Ickx routinely took part. After the Canadian Grand Prix, indeed, five of them took a 'red eye' from Toronto to compete at Brands Hatch the following day.

Drivers on this level – designated 'graded drivers' by the FIA – were not eligible for points in the European Championship, but that didn't matter: what was so intoxicating – and revealing – about Formula 2 was that it enabled future stars to measure themselves against the aces of the moment. When, for example, an Austrian unknown beat Graham Hill in a straight fight at Crystal Palace in 1964, that registered: the following year Jochen Rindt was into Formula 1.

Formula 2 cars were of course slower and less sophisticated than their big brothers, but the thing was, they *raced* superbly, and yes, being relatively equal, the driver – as Alonso suggested – mattered more. I'm afraid it's a pipe dream, Fernando, but I'd travel a long way for an F2 race featuring guys like you and Lewis and Max, with such as Leclerc thrown into the mix. The challenge for Ross Brawn is to make Formula 1 as entertaining as that. ✨



FORMULA 1

## Hartley F1 debut could

PORSCHE WORLD ENDURANCE Championship star Brendon Hartley will make his Formula 1 debut at this weekend's United States Grand Prix at Austin as part of Toro Rosso's evaluation programme for its 2018 driver line-up.

Pierre Gasly is favourite to land one of those seats, having impressed the team when he stepped up and drove the car in the recent Malaysian and Japanese grands prix, but the identity of the second driver is less certain.

Carlos Sainz Jr's early departure to Renault, combined with Gasly's return to Super Formula for this weekend's title showdown at Suzuka, presented Toro Rosso team principal Franz Tost with an opportunity to run another driver in F1 machinery at Austin as a test for 2018.

Red Bull wanted to give Hartley a seat and lined up his WEC rival, Toyota's former Toro Rosso racer Sebastien Buemi, as a back-up if a deal could not be done, given that the New Zealander is contracted to Porsche.

But after several discussions an agreement was reached, and 27-year-old Hartley will race the car in Austin alongside the returning Daniil Kvyat. The last time a team changed both drivers from one race to another was Lotus between the 1994 Portuguese and European grands prix, when Alex Zanardi and Eric Bernard replaced

Johnny Herbert and Philippe Adams.

It is a remarkable turnaround in fortunes for Hartley, who was Red Bull's official reserve driver in 2009 and '10 before being dropped from the company's junior programme in the middle of his '10 Formula Renault 3.5 campaign.

Hartley, who is in contention to secure the 2017 WEC title as part of Porsche's LMP1 team, told Autosport: "I will try to make the most of this opportunity. I don't want to put too much expectation on it. It's a dream for so many people and I'm finally getting to achieve it. It's an incredible feeling. Six to seven years ago, I was not sure if I was ever going to make it onto the F1 grid. I've battled hard to get to where I am and taken every opportunity I could.

"I always had the dream in the back of my mind. It's the same reason I called Helmut [Marko, Red Bull motorsport advisor] after this [Red Bull junior] programme was finishing. I was going through a tough time in my career and he knew that. I left home at 16 and had a lot of things to deal with at that time.

"I definitely feel that I'm a more well-rounded driver now. Mentally I'm much stronger. I don't make nearly so many mistakes. I'm more prepared than ever as a racing driver. I have a lot more experience behind me."

Hartley tested for Toro Rosso at the end of





## HARTLEY'S F1 TESTS



Hartley has tested F1 cars before: 1 Mercedes in 2012; 2 Toro Rosso in '09; 3 Red Bull in '08

LAT IMAGES

MAIN IMAGE: PORSCHE



## OPINION

# Is it such a strange choice?

IT HAS BEEN BILLED BY SOME AS A LEFT-field choice. But is it really so strange that Brendon Hartley should be given a Formula 1 chance with Toro Rosso in this weekend's United States Grand Prix at Austin?

It wouldn't have been regarded as such when he was still a member of the Red Bull driver programme or in the few years afterwards as he continued on the single-seater ladder. Yet Brendon Hartley Version 2.0 in 2017 is not only a better driver, he is far better qualified for a race seat at the pinnacle of the sport.

The reason is his four-season stint with the Porsche LMP1 team in the World Endurance Championship. Experience of sportscar racing will help any young driver on the way up: they get to work with a team bigger and more complex in structure than any they are likely to have encountered in junior single-seaters. Multiply that by a massive factor in Hartley's case, because he has been driving for a factory P1 squad in the era of hybrid technology.

Racing for Porsche in the WEC has been Hartley's finishing school. It has enabled him to take the next step as a driver, but also polished off the rough edges, made him mentally stronger and given him vital experience, inside and out of the car, that will be supremely relevant when he walks through the gates of the Austin paddock.

Andre Lotterer's one-off at Spa in 2014 for Caterham proved the level of the best P1 WEC drivers – don't forget he outqualified team-mate Marcus Ericsson. But Hartley is jumping straight into a car significantly faster than his regular Porsche 919 Hybrid. That wasn't the case for Lotterer, who also had his experience from Super Formula in Japan to fall back on.

The dramatic performance increase in an F1 car for this year will undoubtedly make Hartley's task that much harder.

GARY WATKINS



LAT IMAGES

# lead to 2018 chance

2009, but hasn't driven an F1 car since '12, when he took part in a young-driver test at Magny-Cours for Mercedes. In preparation, and as part of the evaluation for Austin, Hartley has spent time in the Red Bull simulator.

"[The opportunity] came up at the last minute and quite out of the blue," he said. "First I did a simulator test. I didn't ask too many questions. They said 'come along' and I said 'OK'. I didn't know there was a chance to be on the grid for Austin. It has come about very quickly. I didn't know too long before the media did, let's say that."

The United States Grand Prix will be Hartley's third different car and series in three weekends. He won the IMSA SportsCar Championship-closing Petit Le Mans race at Road Atlanta in an Extreme Speed Motorsports Nissan Onroak Daytona Prototype international before heading to Japan and finishing fourth last weekend in the rain-shortened Fuji round of the WEC.

For the deal to go through, Hartley required Porsche to give its blessing. "I am super-thankful to Porsche for allowing me to do this," he said. "They gave me a huge opportunity four years

ago after I started endurance racing. This was a huge opportunity allowing me to be there and it has turned into another huge opportunity."

Hartley is in the fortunate position that he has a chance to forge a career in F1 with the Red Bull family, but if that does not work out he has the opportunity to move to the US. It is believed that there is an arrangement with Chip Ganassi Racing for him to race in IndyCar next season, either through the main team or via a loan deal with another squad.

But for now, Hartley downplayed his expectations and is refusing to look beyond Austin. "To be put in the situation last minute, I feel as ready as I can be," he said. "I've been there [Circuit of the Americas]

recently [Hartley won the 2017 WEC round with Earl Bamber and Timo Bernhard], which will obviously help, but it's a very different car and a very different challenge. I'm not taking it lightly. Maybe there is [the chance of a full-time F1 drive in 2018] but I don't want to look that far ahead. I just want to enjoy my experience on the grid and make the most of it."

LAWRENCE BARRETTO AND GARY WATKINS

## "I'm super-thankful to Porsche for allowing this"



## EU/MOTORSPORT

## ONUS ON FIA AND ASNs TO EXEMPT SPORT FROM RULE

THE FIA IS TO RESPOND to an EU consultation into a proposed insurance law that could 'close down all motorsport', according to one trade association.

The consultation, which closes tomorrow (Friday), is into the Vnuk ruling, which could dictate that all motor vehicles must have unlimited third-party liability insurance, even on private land.

That means anything from lawnmowers to single-seater and tin-top racers needing the insurance. It also means any crash would be treated as a road-traffic collision, meaning the police could be involved. That would make obtaining the insurance at a reasonable price difficult for many competitors due to the high premiums resulting from a sport where contact and collisions are regular.

Chris Aylett, chief executive officer of the Motorsport Industry Association, has called on any employer or business in European or UK motorsport to respond to the EU consultation and has provided guidelines to help them do so.

"This threat is real, make no mistake, it could close down all motorsport [in countries in the EU]," said Aylett. "If you want to protect your job in motorsport then make sure your employer responds

before the deadline of October 20.

"The EU offers an option, known as Option 3, where their insurance requirement applies 'in traffic only'.

"If we succeed in getting this option supported then motorsport will be safe."

The FIA issued a response to the statement in light of an increased spotlight on the subject given the October 20 deadline.

The statement read: "This is of course a matter that we have been following closely since the ECJ ruling on Vnuk. The public consultation being conducted by the European Commission covers a wider scope than only motorsport.

"Over the past months the FIA has consulted its European ASNs to determine a common position and will be replying officially to the Commission prior to the deadline."

The findings of the consultation are expected soon, as the EU wants to make a decision on Vnuk before the end of 2017.

Because the implementation of the law is expected soon after the decision on whether to implement it, the position of the UK will be the same as other EU countries as the country will not leave the EU until 2019 at the earliest.

**JACK BENYON**

## FORMULA 2

# Norris, Russell in ART links

F3 and GP3 champions could form an all-British superteam as they step up for 2018 season

**G**ood and bad things happened for Lando Norris last weekend. While the 17-year-old McLaren Formula 1 protege clinched the Formula 3 European Championship at Hockenheim with Carlin, the much-anticipated move into Formula 2 next season with top team Prema Racing finally collapsed, leaving his management to find a new berth.

Autosport understands that Norris's Prema deal came within a couple of days of being signed one month ago, until it got vetoed by Lawrence Stroll, the father of

Williams Formula 1 racer Lance who owns a significant share of Prema.

The upshot is that the smart money is now on Norris (below) joining ART Grand Prix, where he could line up alongside new GP3 champion and Mercedes F1 protege George Russell – a mouthwatering prospect for any follower of young British racing talent. Until a couple of weeks ago Russell looked to be heading to DAMS, but sources suggest that the pendulum has swung since then in favour of F2's other leading French team, ART, the same squad with which he claimed the GP3 crown this year.

Immediately after winning the F3 title on Saturday, Norris told Autosport: "The three possibilities are Prema, ART and DAMS, because it depends on whether McLaren want me to try to win the championship or prepare for what to expect in F1." But that was hours before the attempts to salvage the Prema situation finally collapsed. Norris could even contest this season's final F2 round at Yas Marina, which falls a week after his bid to win the Macau Grand Prix. "It's a possibility and we are doing the post-race tests," he added. "About the race, I'm not too sure which teams would allow me to do it as a complete rookie. It's hard to know. I need to speak to Mark [Berryman from ADD Motorsports, Norris's manager] and McLaren to see if it's a good idea to prepare for next year."

So where does this leave the rest of the F2 driver market? It is well known that Prema is close to a deal with Sean Gelael, which would represent the Indonesian's third team in three seasons in the category. Gelael's father Ricardo already lends significant support to Nyck de Vries through his Jagonya Ayam initiative, and it is understood that the Dutch McLaren protege is a contender for the other seat, but sources also suggest that 2017 F2 runner-up Oliver Rowland should not be ruled out.

Current GP3 runner-up Jack Aitken had been tipped to graduate to F2 with ART with support from the Renault Sport Academy, but if he is gazumped by Norris and Russell then he could very well head to DAMS, which has long had very strong links with Renault. Another of ART's GP3 starlets, Honda junior Nirei Fukuzumi, would logically be expected to move up to F2, where Honda stablemate Nobuharu Matsushita already races, while Matsushita's 2017 F2 ART team-mate Alexander Albon will also be jockeying for a seat somewhere.

**MARCUS SIMMONS**







**DTM** A glimpse into the future, or just a nice idea? Lexus and Nissan brought Super GT cars from Japan, driven by Heikki Kovalainen and Ronnie Quintarelli respectively, to Hockenheim's DTM finale last weekend for performance runs and demos alongside the indigenous German behemoths. Not surprisingly, the Super GT cars were quicker. "This is definitely something for the future," said Kovalainen when asked about a possible DTM/Super GT tie-up. "This is just the first step, to have a feel of the DTM paddock, and they can have a feel of our paddock at Motegi next month. At the moment it's a concept, but in the medium or long term it could happen." **Photograph by DTM**

**FORMULAE**

# Frijns ousting could benefit Sims, Blomqvist

ROBIN FRIJNS LOST HIS ANDRETTI Formula E drive due to "complexities" arising from his relationship with Audi.

Frijns secured the Blancpain GT Series Sprint title last month driving for Audi customer team WRT, and has been ousted at Andretti in FE as its technical partner BMW looks to embed works drivers ahead of the factory takeover of the entry for the 2018-19 season.

Antonio Felix da Costa has been retained and tested at Valencia recently alongside BMW GT ace Alexander Sims and DTM race winner Tom Blomqvist, with those two would-be FE rookies potentially splitting the campaign.

Andretti co-team principal Roger Griffiths told Autosport that Frijns's relationship with Audi had become an insurmountable obstacle as BMW ramped up its involvement. "There were some other complexities in the relationship that Robin has with Audi, and BMW is a big competitor," said Griffiths. "We certainly were supportive of keeping

Robin within the team but it had to be a relationship that worked for everybody."

It means Frijns is on the FE sidelines after two seasons with Andretti in which he scored a best finish of third. He will try to test with an FE team in the next few months and force his way back into the electric single-seater series for 2018-19.

He is hopeful he will continue racing with Audi next season and said the manufacturer's new-for-2017-18 full works FE programme is a realistic target.

Andretti's final driver decision is complicated by the DTM not announcing its 2018 calendar yet, but one option would be to run Blomqvist in the opening few races before bringing Sims (right) in once the German category kicks off.

FE teams can change drivers twice in a season without sanction, but not in the final three events unless it is deemed force majeure. Reverting to the driver named on the season's entry list would not be considered one of those changes.

**SCOTT MITCHELL**



LAT IMAGES



GP3 SERIES

## DAMS GIVES UP ON GP3 AS MP TAKES OVER ENTRY

LEADING SINGLE-SEATER squad DAMS will stop racing in the GP3 Series at the end of the 2017 season, with the MP Motorsport team taking over its entry for next year.

DAMS is quitting GP3 to devote additional resources to its e.dams Formula E entry, which it runs in partnership with Renault.

“It’s mainly because we were too stretched between F2, GP3 and Formula E,” said DAMS managing director Francois Sicard. “Renault is reinforcing to develop in Formula E and they asked us to be stronger. The idea is to be focused only on F2 and Formula E and to reinforce the staff of Formula E, especially the development and the racing team.”

DAMS, which only joined GP3 in 2016 and has scored two wins – both courtesy of Jake Hughes (below) that year – is sixth and last in the teams’ championship so far this year.

“We would have preferred to finish as we did in World Series by Renault,” said Sicard. “We won the last race and the championship twice – job done. Here we have the feeling that we are leaving a bit too early. But it’s a strategic decision we had to take. We had the opportunity that MP was interested to jump in, so we made the deal.”

DAMS will operate its GP3 cars at the end-of-season test at Abu Dhabi alongside MP. The Dutch squad’s team principal Sander Dorsman called the GP3 expansion to its existing F2 team “a very exciting development”.

ALEX KALINAUCKAS



Penske ran an ORECA in recent Petit Le Mans, with Castroneves, Montoya and Pagenaud finishing third

LAT IMAGES

IMSASPORTSCAR

## Button misses out as Penske finalises drivers

HONDA PERFORMANCE DEVELOPMENT HAS admitted that ex-Formula 1 world champion Jenson Button was in serious consideration for Penske’s Acura 2018 IMSA SportsCar Championship campaign.

Penske announced last week that 2017 IMSA prototype champion Ricky Taylor would join IndyCar convert Helio Castroneves in one its cars, with Juan Pablo Montoya and Dane Cameron in the other.

Button has said that he is looking for a return to motorsport next season after his one-off Super GT outing at Suzuka reignited his passion. And his Honda links led to talk that he could join its luxury brand Acura in its new Penske partnership. Button had shown interest in IMSA’s top-class DPi platform, with Honda HPD chief Art St Cyr admitting he was a candidate.

“We were looking at a lot of different dynamics when we were putting this together,” said St Cyr. “Of course, someone with Jenson Button’s talent and also his pedigree with Honda is definitely someone that we had considered. But there were other circumstances that precluded him from being part of this programme.”

“We are extremely happy, and we think we got the right six to really compete for a championship right now. One of the things that we talked about is we wanted to pair experienced drivers in other series, with people who are experienced in IMSA.”

Button could have joined the line-up for the enduros, but Penske opted for 2016 IndyCar champion Simon Pagenaud and Graham Rahal as third drivers.

TOM ERRINGTON



LE MANS 24 HOURS

## LMP2 constructors given leg-up

LMP2 CONSTRUCTORS LIGIER, Dallara and Riley/Multimatic will be allowed to upgrade their cars for next season to allow them to close the performance deficit to the benchmark ORECA chassis.

The new P2 regulations introduced for the 2017 season, which limited the category to four car makers and mandated a spec Gibson V8 normally-aspirated engine, allow for developments to remove performance

gaps between the different chassis. The FIA and the Automobile Club de l’Ouest, who jointly framed the new rules, have decided to allow three of the constructors to develop their cars after analysing their performance in key races this year.

These events include the Le Mans 24 Hours, at which all four constructors were represented, and the opening five rounds of 2017 European Le Mans Series, in which

the Ligier JSP217 and the Dallara P217 (above) have gone up against the ORECA. Rounds of the World Endurance Championship other than Le Mans were not taken into consideration because only the ORECA 07 races in the series.

ORECA has hit out at the move, accusing the rule makers of trying to introduce a Balance of Performance system.

GARY WATKINS



## IN THE HEADLINES

### KUBICA COMPLETES SILVERSTONE TEST

Robert Kubica completed his one-day test in a 2014-spec Williams at Silverstone on Wednesday of last week, as the team evaluates him for a potential race seat next season. He was due out again at the Hungaroring on Tuesday, with existing reserve driver Paul di Resta also expected to test.

### WILLIAMS SELECTS ENGINEER FINALISTS

The evaluations for the 2017 Autosport Williams Engineer of the Future were held last week, with the winner to be announced at the Autosport Awards on December 3. The finalists are Alfie Dent (University of Cambridge), Henry Fidler (University of Bath), Lottie Gilmore (Bath), Martins Zalmans (Bath) and Jack Simmons (Loughborough). Chief technical officer Paddy Lowe was among those on the judging panel.

### NEW PRIVATEER V10 FOR LMP1

Engine Developments is working on a new V10 powerplant to take advantage of regulation changes aimed at boosting the number of privateer LMP1 entrants in the World Endurance Championship from next year. The British company is continuing its collaboration with Japanese design company AIM to produce the new AIM-Judd 5.5-litre normally-aspirated V10, which builds on the success of its previous sportscar designs.

### VAN DER ZANDE GETS MACAU HONDA GT

Dutch sportscar ace Renger van der Zande will be Honda's driver for its attack on the FIA GT World Cup at Macau next month. The factory-entered NSX will be run by Honda's European motorsport specialist JAS Engineering. Van der Zande is a Macau expert, and usually contests the race with Mercedes.

### F4 ACES MAKE EURO F3 DEBUTS

German Formula 4 champion Juri Vips and his title rival Felipe Drugovich made their F3 European Championship debuts at Hockenheim last weekend, with Motopark and Van Amersfoort Racing respectively. Brazilian Drugovich got the best qualifying position (14th), while Estonian Vips put in the best race performance (12th).

### 'LEGEND' STIPPLER BEATS DI GRASSI

Audi's DTM-supporting TT Cup bowed out of its final season at Hockenheim last weekend, with Anglo-Swiss Philip Ellis winning the title, before the manufacturer handed the 16 cars over to a grid of superstars for a Race of Legends. Frank Stippler held off a last-lap attack from Lucas di Grassi – who charged from 10th on the grid – to win. Frank Biela grabbed the lead at the start but was harpooned by a spinning Tom Kristensen, who had collided with Filipe Albuquerque. A hefty whack between Lucas Luhr and Marco Werner left Marcel Fassler third, ahead of Emanuele Pirro and Dindo Capello.



## F1 PREVIEW

# United States Grand Prix

## October 20-22



## AUSTIN

LENGTH 3.426 miles NUMBER OF LAPS 56

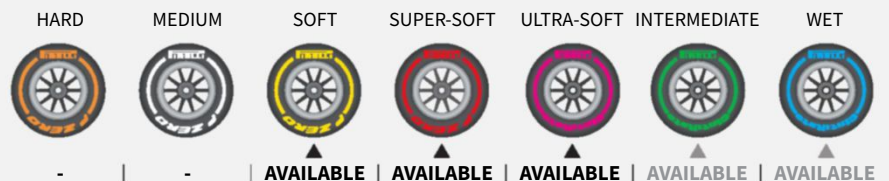
2016 POLE POSITION Lewis Hamilton 1m34.999s

POLE LAP RECORD Lewis Hamilton 1m34.999s (2016)

RACE LAP RECORD Sebastian Vettel 1m39.347s (2012)



### TYRE ALLOCATION



### UK START TIMES

#### LIVE ON SKY SPORTS F1 & CHANNEL 4

#### FRIDAY

FP1 1600 FP2 2000

#### SATURDAY

FP3 1100 QUALIFYING 2200

#### SUNDAY

RACE 2000

#### RADIO COVERAGE

BBC RADIO 5 LIVE 1900

### PREVIOUS WINNERS

Year	Driver	Team
2016	Lewis Hamilton	Mercedes
2015	Lewis Hamilton	Mercedes
2014	Lewis Hamilton	Mercedes
2013	Sebastian Vettel	Red Bull
2012	Lewis Hamilton	McLaren
2007	Lewis Hamilton	McLaren
2006	Michael Schumacher	Ferrari
2005	Michael Schumacher	Ferrari
2004	Michael Schumacher	Ferrari
2003	Michael Schumacher	Ferrari

### THEMES TO WATCH

#### HAMILTON CHAMP?...

If Lewis Hamilton wins at Austin, with Vettel, who trails him by 59 points, finishing sixth or lower, the Mercedes driver will win his fourth world title.

#### ...AND MERC'S TITLE?

Ferrari trails Mercedes by 145 points and must outscore its rival by 17 to extend the constructors' title fight to the next round at Mexico City.

#### EYES ON TORO ROSSO

Brendon Hartley will make his F1 debut with Toro Rosso while Daniil Kvyat returns after two races out. Both are fighting for a full-time seat in 2018.



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# Secrets of success

The reasons why some new grand prix venues flourish while an equal number fail remain frustratingly hard to pin down

By Dieter Rencken, Special Contributor

[@RacingLines](#)

**ASKED HOW FORMULA ONE MANAGEMENT, THE** sport's commercial rights holder, intended filling the conspicuously large number of 'white' (empty) seats at Suzuka in the future, Ross Brawn, MD of FOM's sporting operations, opined: "We need a local driver..."

While there is no denying that the presence of a local driver could aid a race promoter's cause, a home-grown hero is hardly a guarantee of sellouts, as Germany proves during 'even' years, when the country that invented the motor car gets to stage its *Grosser Preis* at the legendary Hockenheimring.

Despite being situated a little over an hour's drive from reigning champion Mercedes-Benz's HQ in Stuttgart and its AMG subsidiary in Affalterbach (and three hours from BMW's Munich base), able to punt three German drivers, one of whom is four-time champion Sebastian Vettel – plus having a call on reigning world champion Nico Rosberg – the circuit battles to half-fill its stands, even on alternate years.

Canada perennially managed to fill its stands even when fans had no driver on the grid, while thousands of Mexicans packed Austin in homage to Sergio

Perez, but stayed firmly south of the border once the country joined the calendar. Hovering in the middle is Spain, which experiences booms or (almost) busts, depending upon the odds facing

Fernando Alonso, while Carlos Sainz hardly rates a look-in.

Spa-Francorchamps this year and last was a sea of orange in honour of Max Verstappen, but the Dutch are ardent patriots who follow national heroes in whatever sport they excel, and the circuit in the Ardennes lies within 50 miles of the country's most southerly border. True local hero Stoffel Vandoorne, though, hardly caused a spike in ticket sales.

Silverstone manages to attract record crowds mainly through the lure of Lewis Hamilton – and Jenson Button before him – but the fact is that Britons love motor racing, particularly F1, and would likely flock to the first venue to stage a world championship grand prix even in the absence of a home-grown champion. Crowds would be down, yes, but not desperately so.

By contrast, Finland delivered three world champions (and five F1 winners), yet the closest the country comes to a grand prix is Rally Finland, euphemistically dubbed the 'Gravel Grand Prix' on account of the WRC event's spectacularly high speeds. Occasionally Finnish folk mention a street race – usually for categories other than F1 – but just as quickly such talk fades.

All of which brings Brawn's comments and the recent

dismissals of city centre grands prix by both Amsterdam and Rotterdam councils into focus, notwithstanding Verstappen's popularity. If anything, an Amsterdam spokesperson tweeted, any Dutch Grand Prix should be held at Zandvoort and not in [old] city centres. Whether the 'circuit in the dunes' is able – or wishes – to get its F1 act together is another question.

Simultaneously, though, Copenhagen's city fathers are said to be seriously considering a street grand prix off the back of Kevin Magnussen's popularity, and are said to have submitted a proposal. That question marks continue to hang over the Dane's tenure at Haas F1, despite internal assurances that all is well, does not seem to overly concern the Copenhagenians.

Who knows, the race may sink or prove to be a roaring success – whether or not Magnussen has a long F1 career. For over the past decade the split is fifty-fifty: of 10 newcomers to the calendar, five have flunked. This statistic applies equally to street circuits and permanent venues, inner city or rural.

To further prove there is no rhyme or reason to success, consider this: one street race in particular (Singapore)

proved an outstanding success despite having no local driver to fete; another, Valencia, failed spectacularly, Alonso's then-successes notwithstanding. In a further twist, New Jersey's much-vaunted harbour

event was canned after being confirmed by the FIA.

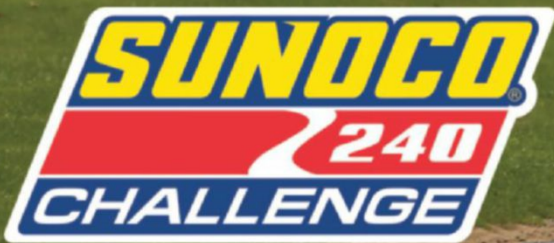
Folk argue that Singapore's success is largely down to its night-time setting, but would an 8pm start have saved Valencia? Why would it? In desperation the promoters moved the event from the heat of August to June's more moderate climate, yet still crowd numbers tanked – despite the city's Mediterranean location, a surplus of hotels in the area, and affordable flight links to most major European cities.

On the permanent-circuit front the statistics are equally baffling: Turkey's grand prix, held within Istanbul's borders (population 15 million), was a goner within seven years despite being held on a superb circuit and FOM taking over the event's promotions, while Austin's race, staged 15 miles from the city (population two million), pulls 100,000 crowds despite there being little US commercial interest in F1.

All of which proves that there simply is no magic bullet. Yes, research can inform decisions, surveys are able to pinpoint areas of interest, but ultimately the success of whatever venue F1 heads to next will be as much about suck-it-and-see as scientific. Hanoi, anyone? 🍷

**“Turkey’s grand prix was a goner despite being held on a superb circuit”**

# Parfitt Jnr ends 2017 on a high!



## Rick Parfitt Jnr wins the 2018 Sunoco 240 Challenge!

Massive congratulations to Rick Parfitt Jnr who is the confirmed winner of the 2017 season Sunoco 240 Challenge. Rick partnered with last year's Sunoco Whelen Challenge winner Seb Morris and beat 146 racers in British GT, Radical, Mini Challenge, GT Cup, LMP3 Cup and Britcar Endurance. Rick will now race a GT4 race car in the BMW Endurance Challenge at Daytona in January. Included are all flights, hotels, the Roar Before the Rolex 24 test and the 4-hour endurance race, the day before the Rolex 24 At Daytona.



## Hall of fame – Sunoco 240 Challenge



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# FEEDBACK

## Keeping it simple is key to F1 future

Keeping the manufacturers in the sport is said to be of paramount importance to Formula 1, so let them have the hybrid engines and electronic gizmos for energy recovery and braking, clutch and gear changes (although I firmly believe that the drivers should change gear, not the electronics), but simplify the cars' bodywork, get rid of those ugly, complicated and very expensive front and rear wings, all the appendages that spring out all over the bodywork.

Have a standard single-element front and rear wing that all teams use with simplified bodywork and let the engineers use the underside of the car to gain downforce, as this would be more relevant to the manufacturers and may benefit road cars. Hopefully the cars might be able to follow closely and overtake without artificial manipulation such as DRS.

**Roy Bing**  
Byemail



Force India's Monaco front wing. Ditch the crazy complexity, say readers Bing and Davey

Nigel's column did highlight one aspect of the period: weren't the cars great looking.

**Neil Davey**  
Newport, South Wales

### Life's limitations

Jenson Button's autobiography *Life to the Limit* and Graham Hill's *Life at the Limit* may be very similar in title, but not in life. With one F1 title versus two F1 titles and wins at the Indy 500 and Le Mans, their limits don't compare.

**Andrew Andersz**  
Byemail

*To be fair, Jenson may not be planning to head off to Indianapolis any time soon, but he's not done with racing just yet — ed*

### Ferrari in a fix

Difficult to believe that Ferrari didn't have time to change a spark plug before the race at Suzuka. These power units must be very complex!

**Alan Thompson**  
Byemail

### Battle of the Brits

So George Russell can't wait to take on Lando Norris in F2 next year (Pit+Paddock, October 12). Think there may be more than a few fans who feel the same way. I'm already imagining them going head-to-head in F1...

**Frances Stewart**  
London SE12

### Downside of downforce

Nigel Roebuck (October 12) rightly raises the subject of downforce and the deleterious effect on racing, in Formula 1 in particular. It is interesting that the arguments against downforce and, for the constructors the ever-increasing plethora of expensive aerodynamics, have remained essentially the same as the late 1960s.

Of course, we all know that regardless of the views of fans and articles by knowledgeable journalists such as Nigel, F1 will continue down the path of ever-increasing costs and keep developing complex aerodynamic solutions to gain microseconds of laptime to the detriment of racing.

Would the constructors really make large numbers of highly skilled technicians and engineers redundant? No need to shout, we all know the answer to that question!

The photographs accompanying


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**Autosport editorial**  
Autosport Media UK Ltd  
1 Eton Street  
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# HOW PORSCHE CAN RETURN TO F1

Reports of Porsche's interest in F1 sparked much excitement, but how serious is it and what form would a return take?

By Edd Straw, Digital Content Manager

 @eddstrawF1





ARTISTS' IMPRESSION  
BY DEAN & EMMA WRIGHT

Porsche's Lutz Meschke met with F1 bosses at Monza last month to discuss new engine rules, launching much speculation



**S**o, Porsche is going to be back in Formula 1 in 2021? Well, not quite, and perhaps not even by a long shot. Yet. But it is a possibility, and the positive thing for the German manufacturer is that, should it decide to return, there is no shortage of potential partners to make it possible. But it's far from certain to happen, both from the perspective of Porsche internally and the kind of F1 that it would come into. So where exactly is Porsche's thinking now?

Publicly, of course, it's saying little, precisely because there is very little to say. Last month, Lutz Meschke, deputy chairman of Porsche's executive board and member of the board for finances and IT, met with F1's bosses at Monza. With the Porsche LMP1 programme coming to an end this year, and the launch of a Formula E works team for the 2019-20 season, Meschke made it clear that an F1 programme is being looked at.

"F1 could be one of the right places," said Meschke. "As you know, Formula E is very important for us now, and F1 is always a good topic to think about. And I think we are in quite good discussions regarding the new engine."

A few weeks later, and you had various stories doing the rounds about Red Bull being bought by Porsche to become a full-blown works team for 2021, along with suggestions of McLaren-Porsches on the grid. Both of these scenarios are vastly premature, and the chances of them happening are still varying levels of small.

But no matter how positive McLaren is about its Renault engine deal, no matter how much senior figures talk up the fact that it has parity with the Enstone-based factory squad, it is categorically not the works team. This was the team that ditched the market-leading engine package in Mercedes to link up with Honda so it could become just that and, while the idea of finding a new works partner is being brushed off, team boss Zak Brown would not be doing his job if he were not looking into finding one for 2021. But the lessons of the Honda relationship will be learned, and McLaren won't be so rash in linking up with an original equipment manufacturer (OEM) as a works partner just for the sake of it.

"First of all, we'll be a works team," says Brown. "I don't think there is a difference between what's in the back of the Renault, the Red Bull and going to be in the McLaren. My biggest concern is over lack of budget restraint by the two guys [Mercedes and Ferrari] leading the championship now,





so that's what the sport needs to address as opposed to the difference between a works and a customer engine because I don't believe there is one. At least in the world of Renault."

But being a works operation isn't just about getting the best bits out of the parts bin. It's about having a two-way relationship to optimise the integration of the chassis and the engine, and it would be perverse for Renault to take McLaren's requests over the requirements of its own team.

"Yeah, Eric [Boullier, McLaren racing director] is very confident with his relationship and history with Renault that we won't be compromised," says Brown when the limitations in co-engineering are put to him. "I think Renault wants to see us win races, as Red Bull has done."

But you only have to spend a few minutes listening to key figures at Mercedes talking about the advantages of the close collaboration between its engine facility in Brixworth and the race team in Brackley to realise the potential benefits. Put it this way: the only situation in which a true works team wishes it wasn't is when it's in the situation McLaren was in with Honda.

But while 'McLaren-Porsche' may sound good, there is a flaw that makes such an alliance almost impossible. McLaren is a road-car manufacturer, and one of its key market rivals is Porsche. As Brown said when asked whether discussions were held over a Ferrari deal: "Given we are in the automotive business, it would be hard to have a McLaren-Ferrari."

So, McLaren is a potential partner of the right standing for Porsche. But as a wider company, it's desperately fanciful. Red Bull doesn't have quite the same problem. Doubly so with the possibility that it could lose its Renault supply deal with only Honda as an alternative. Inevitably, team principal Christian Horner downplayed any Porsche interest when asked about a comment he made to Sky Sports F1 in Singapore.

"I was asked a question about Porsche coming into Formula 1 and I answered that very clearly — that we have an existing relationship with an OEM that doesn't make Formula 1 engines and, obviously, that will continue," he said.

There's also been talk of Aston Martin becoming an engine supplier, or possibly merely an engine badger — especially >>



Porsche is pulling out of LMP1 category



Horner: "So Zak, who's getting the Porsche?"



Can McLaren really have parity with Renault?

## "F1 could be one of the right places for Porsche"



# “Porsche is a performance brand and F1 is an ideal marketing platform”



DEAN & EMMA WRIGHT

given the fact that the company will be Red Bull's title sponsor from next year. Aston is one very live iron in the fire for Red Bull, but Porsche would definitely be of interest. Again, if there's any chance of a grandee marque like Porsche coming in, it would be remiss of a team not to court them to see if something were possible, even if the clashes may be insurmountable.

But this is looking at things from completely the wrong perspective. The question is not *how* Porsche is going to come into F1, but *if* it will. There are two interpretations of the change of engine regulations, currently mooted for 2021 to be a turbo V6 with simplified energy-recovery systems. While that's potentially cheaper and simpler to produce, there will be less carryover of technology from the LMP1 engine programme. As Porsche's interest in F1 is understood to pre-date the resolution to change the engine formula, there's no guarantee that this will appeal as much as Meschke's comment suggests.

Even more troubling, as Brown references, is the whole financial landscape of F1. Cost-cutting is still on the agenda, but yet to be delivered. There's talk of a more equitable share of revenues, but that is yet to manifest itself. So, Porsche will be unsure of what kind of financial commitment it will need to



McLaren's road cars, raced in GT3, could scupper Porsche deal

make, just as potential partner teams are on shaky ground. And engine programmes need a good lead time, so the clock is already running on this putative 2021 entry.

There's a general move towards downplaying the need for road relevance in F1 today. Porsche is a company with a long history of using its racing programmes to develop the road breed, which perhaps explains why it is far more closely associated with sportscar racing. But if that road relevance is not needed, then the impetus can only be for marketing reasons.

On the one hand, Porsche is a premium performance brand



PORSCHE IN FORMULA 1



THE EARLY DAYS

A Porsche first contested a world championship grand prix in the F1 class using beefed-up F2 designs before moving on to its own bespoke cars. The Porsche 804 of 1962 was as good as it got, Dan Gurney winning the French and Solitude GPs. Porsche quit F1 at the end of the year because of costs, although a privateer car appeared as late as 1964.

THE GLORY YEARS

Without a satisfactory engine on the market to make the switch to turbo power, Ron Dennis persuaded TAG to fund a custom-built Porsche unit. Introduced late in 1983, the TAG-badged engine set new standards for chassis integration and took 25 wins from 1984-87. But by '87, the engine had been superseded and McLaren landed a Honda deal for '88.

THE FINAL CHAPTER

Porsche did work on a normally aspirated V12 engine that could have gone to McLaren, had the team not done its Honda deal for 1988. In the words of then-McLaren chief designer Steve Nichols it was "essentially two of the turbo engines stuck together". The engine did eventually appear in F1 in the back of a Footwork for the first six races of '91, a disastrous liaison.

and, as such, F1 could be argued to be the ideal marketing platform for it. But it's also established that reputation with only a perfunctory involvement in F1 as a works team, peaking with a victory for Dan Gurney in the 1962 French Grand Prix. And its real success in F1 wasn't even under its own name, with TAG financing the development, build and operation of the Porsche V6 turbos that won 25 grands prix, and three drivers' and two constructors' crowns with McLaren from 1983-87. The less said about the quality of the normally aspirated 3.5-litre Porsche V12 that powered Footwork in 1991 the better (see page 24)...

A glance at Porsche's European sales figures for the first seven months of 2017 also paints a different picture. Of the 46,000 cars sold – an increase of 10% from the previous year in difficult market conditions – two thirds were the Panamera, Cayenne and Macan. So, the majority of what it's selling are bulky saloons and SUVs. The 911 makes up about 20% and the Boxster 10% – so even if F1 was felt to be a valid marketing platform, you have to ask if it's marketing to the right people.

While there is a cost attached, it could be argued that the Formula E programme would dovetail well with F1. One is the green technology development bed, while the other

is the high-profile performance series with the big names and races. Provided, of course, Porsche is willing to commit to a nine-figure annual budget for an engine programme alone.

These are the kinds of questions Porsche will have to answer if it is to decide to enter F1. And remember, it has not actually come into F1 cold of its own volition since the early 1960s – the TAG Porsche was independently financed and the '91 engine used that technology as its basis. So, this would represent the significant reversal of a policy that has stood for half a century.

Perhaps the best way to look at Porsche's interest is as the perfect test case for F1. If Formula One Group gets the new direction right, gets the costs under control and makes an unarguable case for manufacturers to join, then why wouldn't Porsche do it? But if it can't, why should Porsche bother with a category it hasn't properly entered on its own dollar since the days before aerofoils were in use on grand prix cars?

So, don't get overexcited: Porsche will wait and see. If F1 can change itself then it is possible that a project will be green-lighted, and then there are plenty of directions for Porsche to take. If not, it'll be another manufacturer that feels it doesn't need F1, or that F1 hasn't changed enough to draw it in. ❧

If Porsche does return to F1, it has lots of options to choose from – sponsorship, technical support, engine supply or even its own works team





SCHLEGEIMILCH

# PORSCHE'S NOT VERY FANCY FOOTWORK

If Porsche returns to Formula 1, it will hope not to repeat the failings of the overweight, underpowered, unreliable V12 of 1991

By Adam Cooper, Special Contributor

[@adamcooperF1](https://twitter.com/adamcooperF1)

**S**hould the post-2020 Formula 1 technical rules take a shape that proves sufficiently attractive, there's a good chance that a Porsche engine will be on the F1 grid in 2021, after a break of exactly 30 years. The company has won in its own right as well as building the TAG-badged engines that powered McLaren to serial success in the 1980s. But its most recent effort in 1991, with an uncompetitive and badly flawed V12, lasted less than half the season and proved so catastrophic that only now is Porsche taking a serious look at grand prix racing once more.

The 3512 was Weissach engine wizard Hans Mezger's response to F1's switch from turbo to normally aspirated power. Porsche had originally entertained hopes of persuading McLaren to use it, and the team was given a briefing in 1987. "One of the

Porsche engineers had this briefcase, and he took out this single drawing, which was the general layout of the engine," recalls former McLaren man Steve Nichols. "He started unfolding and unfolding. I looked at this thing and thought 'how bizarre'. It was like they'd taken two of our little V6 engines, and stuck them together. I came out of the meeting and said to Ron Dennis, 'Sign the Honda contract! It just looked like it had no future...'"

Porsche disagreed, and over the next couple of years it looked for a new partner. The man with overall responsibility was Ulrich Bez, at that time executive vice-president of R&D.

"Hans Mezger was one of the 'Popes' of F1 engine design," Bez recalls. "I just simply trusted in his knowhow, capability and capacity when he said he had a great idea for an engine which could compete in F1. So, I looked for financing, because this was a time when Porsche was not as profitable as it is today. We didn't have the money to do it ourselves."





Alboreto managed to qualify for first round of 1991...



...but neither car made the cut for the second



Caffi's Monaco shunt left the car in pieces

LAT IMAGES

Onyx came close to signing up before walking away, and Bez turned instead to Arrows boss Jackie Oliver, coincidentally a factory Porsche driver back in the 917 sportscar era. He had recently pulled off a coup by selling his team to Japanese entrepreneur Wataru Ohashi, while staying on to run it under its new Footwork name.

"They approached me after the teams they wanted didn't want to do it," Oliver recalls. "We had two choices. There was the new small Ford HB V8, or the Porsche. I told Ohashi of those two options, and he said, 'Porsche!' I said, 'It costs more money.' 'It doesn't matter...' Stars came into his eyes..."

"I came back from Japan with the money and Ohashi's enthusiasm, and we'd got into the contract before I'd even gone to Weissach to ask Hans Mezger what the engine was like.

"There was nothing to see. All I could see was Mezger being pushed to meet the date in the contract that wasn't feasible."

Concerned, Oliver astutely managed to add an annex to the original contract headed 'Engineering Goals', which included five clauses setting out the expected performance — initial overall power (750bhp-plus), the shape of the power curve, fuel consumption, maximum weight (pegged at 150kg) and anticipated future power figures. As 1990 went on, and more information gradually emerged from Weissach, Oliver and his chief designer Alan Jenkins realised that they were in trouble with the basics. When they finally got their hands on it the weight came as a shock — it was way above the 150kg stipulated in the extended contract.

Everyone put on a brave face when the 3512 was officially unveiled at Ohashi's home race at Suzuka in October. In November, at Oliver's instigation, Jenkins wrote to Mezger outlining his concerns, gently suggesting that with Footwork's help Porsche should already start from scratch on a second-generation 1992 engine. The letter got short shrift from Mezger. Later, Jenkins would resort to borrowing a Cosworth DFR from Brian Hart and having it weighed in front of Porsche's engineers at a Paul Ricard test.

The team started 1991 with a modified A11C chassis, originally designed by Ross Brawn in '89. Testing proved disastrous — the V12 was not only gutless, it was hopelessly unreliable, beset with a fundamental oil-scavenging issue. Drivers Michele Alboreto and Alex Caffi were left floundering. Alboreto somehow qualified in Phoenix, only to retire early.

"I took the responsibility, because I was head of engineering," says Bez. "On the other side if I would have questioned Hans Mezger's capability at the very beginning, and said, 'This is not going to go anywhere,' who would have believed me? He was a hero, so we protected him, not blaming him."

The new FA12 chassis was readied for Imola, but matters weren't helped when Alboreto had a huge testing accident when the front wing failed. Caffi then crashed in practice in Monaco, breaking the unloved engine clean off the back of the tub. Alboreto and the injured Caffi's replacement Stefan Johansson struggled through two more dire weekends in Canada and Mexico, where the oil issue proved especially problematic through the banked last corner.

Jenkins tried address the problem with the help of engineer Wolfgang Hatz, and they were forced to hide in the factory at the official end of the Weissach working day, dodging the

## "They were forced to hide in the factory, dodging security"

security guards, so they could work on a rig. The F1 project came to a grinding halt shortly after a test where Footwork ran an old A11B with a DFR — and it went considerably quicker than the Porsche went on the same day.

"It was a demonstration to embarrass Porsche and say, 'Look, we're in trouble with this,'" says Oliver. "I think on reflection it was probably a bit too aggressive. I would have liked Porsche to have a second bite at the cherry, but I don't think they wanted to. I don't think there was any road back for them."

Porsche had even sent someone to Osaka to meet Ohashi, tell him that his team was the problem, and suggest that he take his money and the engine to Jordan. Ohashi stuck to his guns and reported the conversation to Oliver, pointedly asking him to pass on a 'no thanks' message to the management. The Footwork/Porsche relationship had completely broken down.

"I went with my lawyers to Weissach to talk about breach of the contract," says Oliver. "And not complying with the terms of the annex, with the idea of getting a moratorium on the payments until such time as the engine was sorted out. That meeting didn't go very well, and they said, 'You're in breach of contract, and we're putting an end to the arrangement with Footwork because of you, Mr Oliver.'"

For the remainder of 1991 Footwork raced the FA12 with DFR power. Porsche canned the 3512 and subsequently accepted it hadn't delivered on the contract, as Oliver recalls: "That little annex got Ohashi all his money back and saved me from bankruptcy. All of those five criteria were not met." ❄



# Sutton and Subaru are sensational

It was only the second season in the BTCC for the youngster and the Team BMR-run Levorg, but that didn't stop them taking the title

By Matt James

🐦 @MattJMNews





**A**sh Sutton set a modern-day record in the British Touring Car Championship on his way to the title. It's an accolade that the Team BMR Subaru Levorg driver will reflect on with mixed emotions.

Since the series switched to three races per day in 2004, no driver had managed to claim the crown after having a completely pointless meeting. Sutton's cause was helped by the fact that the big dent in his campaign came at the start but, to win the title, he would have to make up a 48-point deficit. That shows the size of the task he faced, but he rolled his sleeves up. "I always believed I could win the championship," explained Sutton. "I knew it would be hard. After leaving Brands, it became a vertical task. But I kept the belief."

Sutton has a habit of delivering what he says he will. When he stepped into the Renault UK Clio Cup, a series that often takes a learning year before success, he declared that he would only be in it for one season. He won it at his first attempt.

In 2016, he joined the BTCC with Triple Eight MG and said that he wanted the rookie honours and a race win. He did both. Coming into 2017, he thought there was no reason he couldn't fight for the crown. So it proved.

Sutton said that his tough start was partly down to him learning the tricks of rear-wheel drive, but there were bigger issues. A rule tweak for 2017 evened out the centre of gravity across

**“I knew it would be hard. But I kept the belief”**

all engines. That was a blow for the Subaru and its boxer-style engine. The concept of the car was devised because of the weight-distribution strengths it would offer, but that was taken away. It would have to carry extra weight further up in the engine bay.

It took the Team BMR engineers a while to get their heads around the new dynamics the alterations brought, and privately the team also felt it was lacking in the turbo-boost department (although, after a public spat in 2016, the staff kept those thoughts within the garage). As ever in the BTCC, the boost permitted by the series' technical chiefs would be a nagging background issue all season. >>



It wasn't until Oulton Park in May that Sutton got his campaign going and, by that stage, Subaru had been granted more boost. The team had also ironed out the handling issues to a degree where the car was responding.

"From Oulton, I had a car underneath me that I could work with," explains Sutton. "I was able to ask it questions and it was giving the answers I wanted. I was also learning about rear-wheel-drive racing [it was Sutton's first season in a rear-motivated BTCC car]. To begin with, I found that I was wrong-footing myself when it came to overtaking, but by the second round at Donington Park I had learned those lessons."

It also took a talking-to by the team to calm Sutton down. Technical director Carl Faux said he could see the speed in the team's new charge, but he needed to take one step back to take two forwards. It reiterated the team's belief in him.

The key strength of the car was its ability to carry the success ballast applied, including winning with 75kg aboard at Snetterton – a legacy, Sutton said, of the test work done while carrying the maximum ballast. That raised eyebrows up and down the pitlane and there were private mumblings about boost *again*.

A run of six wins over five meetings banked Sutton's title success, and set him up to go into the finale at Brands 10 points clear. There was a wobble in Kent when he tumbled to 12th in the penultimate race as his rival Colin Turkington took a sensational win in his WSR BMW 125i M Sport to cling to his title hopes. Sutton, in his first showdown, looked rattled.

In the end, an innocuous tap on the back of Turkington's car proved to have massive consequences and put him out of the last race, allowing Sutton to claim his maiden title triumph.

One of the subplots was what was going on in the other side of the BMR garage. While James Cole, who took a stylish win at Rockingham, and Josh >>



Knockhill was one of five successive rounds at which Sutton won a race

**Brands Indy**  
**R1 Tom Ingram**  
**R2 Gordon Shedden**  
**R3 Andrew Jordan**  
 In a repeat of the 2016 proceedings, Ingram wins the opening race of the season in his Avensis. Runner-up Shedden goes on to win race two and ends the weekend leading the points, while Jordan resists hard-charging team-mate Colin Turkington – on the back foot after colliding with Matt Neal at the start of race one – to win on his first weekend with WSR.

**Donington Park**  
**R1 Aiden Moffat**  
**R2 Tom Ingram**  
**R3 Colin Turkington**  
 Ingram cements his status as an underdog title contender by becoming the first repeat winner of 2017, and jumps to the head of the standings, in part thanks to Shedden's disqualification from the race-three win. That hands Turkington a first victory of the year, while Moffat is also a winner. Sutton gets his campaign going with a pair of podiums.

**Thruxton**  
**R1 Matt Neal**  
**R2 Rob Collard**  
**R3 Colin Turkington**  
 On a weekend of landmarks, Neal grabs his first pole in almost five years and duly converts that into a 60th BTCC win in race one. That also breaks a BMW stranglehold, but Collard advances first from 10th and then sixth on a restart to win a truncated second race, while Turkington later claims the 100th success for a BMW in the series.

**Oulton Park**  
**1 Andrew Jordan**  
**2 Ash Sutton**  
**3 Gordon Shedden**  
 Disaster strikes for early points leader Ingram, who manages just a solitary point. Neal grabs a second successive pole, but is beaten by Jordan to the race-one spoils. Sutton then dominates race two after powering past Jordan along Clay Hill, before Shedden solidifies his new spot at the top of the standings by leading a Honda one-two.

**Croft**  
**R1 Ash Sutton**  
**R2 Colin Turkington**  
**R3 Mat Jackson**  
 Qualifying is marred by a horrific accident that hospitalises three drivers. A day later the Sutton juggernaut strikes again with victory, but with Turkington hot on his heels. The WSR man gets revenge in race two, reversing the places, while Jackson breaks the RWD stranglehold in his Ford Focus by fending off Sutton in race three.

**Snetterton**  
**R1 Ash Sutton**  
**R2 Ash Sutton**  
**R3 Gordon Shedden**  
 After a seven-week break, Sutton becomes the first driver to win two races in one weekend. He scores his first after getting the better of Jack Goff, before cantering to a fourth victory of 2017 in race two. Shedden keeps himself in title contention with the race-three win, but only after Jordan's BMW conks out with an electrical issue.





Sutton bounced back from this Brands opening-round disaster



Neal, with Shedden, took 60th BTCC win of his career at Thruxton

### Knockhill

- R1 Jason Plato
- R2 Ash Sutton
- R3 Tom Ingram

Plato converts pole into his first (and only) victory of the year. An attempted swap with Sutton to give his team-mate an extra point for leading fails, but Sutton gets the job done in race two and wins. While the BMWs of Collard and Turkington are close, they are always just out of reach. Ingram ends a torrid run of form by winning the third race.

### Rockingham

- R1 James Cole
- R2 Ash Sutton
- R3 Andrew Jordan

Sutton's BMR team-mate Cole steals the spotlight away from the title battle with a monster pole lap and then takes a maiden win – bettering his previous best of fifth. Sutton makes headlines of his own, though, beating title rival Turkington in all three races (with another win to boot) to leave with the points lead. Jordan collects his third win of the year.

### Silverstone

- R1 Tom Ingram
- R2 Jack Goff
- R3 Matt Neal

Turkington has the upper hand over Sutton, until the latter muscles by for third in race two. The positions are soon reversed and Sutton is sent to the back for race three – although he outscores Turkington after the BMW is eliminated in a clash. Guest Rob Huff almost pulls off a shock win, but succumbs to Neal. Ingram and Goff are the other winners.

### Brands GP

- R1 Aiden Moffat
- R2 Colin Turkington
- R3 Rob Austin

Sutton comes close to wrapping up the crown in race one as Turkington struggles in greasy conditions. But Turkington claims a stunning race-two win to send the title to a decider, but his hopes are ended early in race three when contact breaks his suspension. Moffat wins race one, while Austin becomes the season's 13th winner in the finale.



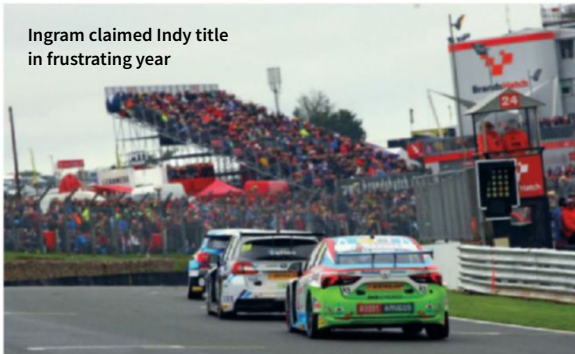
Ingram celebrates with Speedworks boss Christian Dick

ALL PICS: EBREVILAT



## INGRAM'S INDY JOY

Ingram claimed Indy title in frustrating year



IN THE OPENING ROUND OF THE 2016 CHAMPIONSHIP, TOM Ingram took the first win of the year and reigning champion Gordon Shedden followed him over the line. It was exactly the same script this year, but then the story took a different turn.

Ingram's year fell apart after that opening win last year, but this time around he held his nerve. He followed it with another podium and then a second win during meeting two aboard his Speedworks Motorsport Toyota Avensis at Donington Park.

"In 2016, we were just gunning for race wins – perhaps we didn't realise how good we were," explains Ingram, who won the 2017 Independents' Trophy at a canter. "This year, I didn't change the way I drove, but the goals were different. We knew we had race-winning pace, now we had to prove we could put together a championship."

For a while, it looked like it could be a fairytale shot at the overall crown, but then came Oulton Park and Croft, which yielded just nine points. Two painful rounds of contact at Oulton were followed by two more in North Yorkshire.

The stuffing was knocked out of Ingram's overall challenge, although he was still clinging on to the Independents' lead.

**“One disaster can breed another, so we had to reset and get on with it”**

"Weekends like we had in the middle of the season can get you down," he says. "One disaster can breed another, so we had to reset and get on with it. We put it behind us."

Ingram clinched the Independents' crown at Brands Hatch in the penultimate race, and that left him free to fight for third in the overall table in the finale, which he managed.

Behind Jack Goff in the Indy rankings was Mat Jackson in his Motorbase Ford after what has to be a disappointing year. The team felt the car was regulated out of the game to begin with in terms of boost, but it got a leg-up from Oulton onwards. Despite that, there was only one victory for Jackson – at Croft – in an underperforming season.

Another that would have expected more was the Ciceley Racing crew of Adam Morgan. His Mercedes A-Class was on the pace to begin with, but a disastrous Oulton, where a shunt was followed by a fire, preceded mechanical problems at Croft. From there, the team lost its way and he slipped down the order to fourth in the Indy standings.

The 13th and final race winner of the season was Rob Austin, who had taken his Handy Motorsport Toyota Avensis to within two points of the Independents' Trophy lead at the halfway stage. But he was another driver who experienced a mid-season crisis, with contact (not all his own doing) and a mechanical failure meaning he earned just one top-15 finish in nine races. He has a new Alfa Romeo coming for 2018.



### DRIVERS' CHAMPIONSHIP

POS	DRIVER	TEAM	CAR	1	2	3	4
1	Ash Sutton (GB)	Team BMR	Subaru Levorg	16	R	21	13
2	Colin Turkington (GB)	WSR	BMW 125i M Sport	R	9	2	4
3	Tom Ingram (GB)	Speedworks Motorsport	Toyota Avensis	1	3	11	5
4	Gordon Shedden (GB)	Team Dynamics	Honda Civic Type R	2	1	7	7
5	Rob Collard (GB)	WSR	BMW 125i M Sport	7	2	6	6
6	Jack Goff (GB)	Eurotech Racing	Honda Civic Type R	4	12	8	12
7	Matt Neal (GB)	Team Dynamics	Honda Civic Type R	R	11	4	2
8	Mat Jackson (GB)	Motorbase Performance	Ford Focus	8	5	13	11
9	Andrew Jordan (GB)	WSR	BMW 125i M Sport	6	6	1	15
10	Adam Morgan (GB)	Ciceley Motorsport	Mercedes A-Class	3	4	5	8

**11** Rob Austin (Handy Motorsport Toyota Avensis) 174; **12** Jason Plato (Team BMR Subaru Levorg) 146; **13** Aiden Moffat (Laser Tools Racing Mercedes A-Class) 121; **14** Dave Newsham (BTC Norlin Racing Chevrolet Cruze) 108; **15** Tom Chilton (Power Maxed Racing Vauxhall Astra) 100; **16** James Cole (Team BMR Subaru Levorg) 79; **17** Michael Epps (Team Hard Volkswagen CC) 77; **18** Josh Cook (Team Parker Racing Ford Focus/Triple Eight MG6) 75; **19** Senna



Collard's season was temporarily ended by his Silverstone shunt



Price were not expected to match the phenomenon that was Sutton, two-time champion Jason Plato was. It simply didn't happen for him. There was a race-two accident into the pitwall at the Brands opener, which ruled him out for the weekend, and he thought that his repaired car wasn't quite the animal it should have been thereafter.

Plato struggled getting the car into the apex, and that affected his speed coming out of the corners. No matter what set-up he and engineer Paul Ridgway put on the Levorg, it didn't want to know. Plato was frustrated, but kept his counsel. There was the odd hint to a mystery problem with the chassis, but Team BMR is full of professionals who could not detect a definitive issue.

At Knockhill, there was a

liked to get through the problems.

"But when we did the test with both Ash and Jason in each other's cars [in the middle of the season], it was agreed there was a difference between the cars and it was clear. That test allowed us to improve both cars for both drivers – however, the differential change for Jason's car was only covering an imbalance that we couldn't cure with traditional engineering."

For Turkington, limping out of the finale with damage was the most painful of ways to throw in the title towel. He had just driven the race of his life to climb from 15th to claim an unlikely victory in the penultimate race.

That was probably a highlight of the year for Turkington, who was back 'home' after two seasons with Team BMR. The Northern Irishman's

## "When we did the test with Ash's and Jason's cars it was agreed there was a difference"

breakthrough when a new differential seemed to transform his car. The suspicion was that the old unit had been incorrectly labelled, and it was the crucial factor in changing the handling of the Levorg. It enabled the old Plato to return and he won in Scotland and took three further podiums over the course of the season. But, by that stage, he was already into a supporting role for Sutton's campaign and finished 12th in the points.

"The accident at Brands caused a tremendous amount of damage all the way through the car," says Faux. "From the point of impact at the front, through the chassis all the way to the rear suspension, there were so many components damaged, which meant it took more time than we would have

greatest successes have come alongside Dick Bennetts at WSR, and the combination, now with factory BMW backing, was formidable.

Since Bennetts switched to the two-litre turbo powerplant for his BMWs, they had been motivated by an engine that was designed as a naturally aspirated unit, with the turbo ancillaries bolted on. New for this season was the B48 engine, which was a bespoke turbocharged unit. There was renewed impetus, but that came to a crashing halt in round one at Brands, when Turkington was involved in a startline crash with Matt Neal's Team Dynamics Honda Civic.

Turkington has a habit of being a serial points collector, and he overcame that blip by winning at the next two >>

5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	PTS
3	3	6	8	6	3	1	4	1	2	2	1	1	R	2	1	4	2	1	5	5	4	11	3	12	3	<b>372</b>
5	1	7	6	1	29	13	5	2	1	6	7	2	3	3	3	3	6	3	6	4	3	22	15	1	R	<b>351</b>
1	5	4	3	2	R	R	26	8	R	16	8	10	6	6	8	1	R	9	8	1	2	4	2	6	4	<b>311</b>
6	EX	2	2	4	7	4	1	5	4	9	13	7	1	11	6	2	30	R	12	11	7	21	7	2	6	<b>309</b>
2	12	10	1	7	5	2	6	4	3	8	9	3	2	4	4	11	17	8	R	R	NS	NS	-	-	-	<b>256</b>
9	6	3	4	3	21	16	15	21	22	21	2	5	8	14	R	16	3	5	4	2	1	9	12	8	2	<b>245</b>
7	R	1	29	10	2	3	2	R	18	5	3	9	R	9	R	8	5	R	13	13	13	1	10	3	8	<b>243</b>
R	R	8	20	14	6	7	R	3	7	1	11	4	4	R	16	7	7	2	15	24	R	10	4	4	7	<b>210</b>
15	18	28	14	13	1	5	3	6	5	7	4	6	21	13	R	13	12	7	1	R	27	8	27	17	13	<b>203</b>
11	2	5	7	9	28	R	NS	R	15	12	R	19	R	8	R	17	8	6	2	3	6	6	R	19	9	<b>187</b>

Proctor (Power Maxed Racing Vauxhall Astra) 63; **20** Jake Hill (Team Hard Volkswagen CC) 63; **21** Chris Smiley (BTC Norlin Racing Chevrolet Cruze) 45; **22** Ollie Jackson (AmD Tuning Audi S3) 42; **23** Ant Whorton-Eales (AmD Tuning Audi S3) 34; **24** Matt Simpson (Team Dynamics Honda Civic Type R) 30; **25** Rob Huff (Power Maxed Racing Vauxhall Astra) 26; **26** Jeff Smith (Eurotech Racing Honda Civic Type R) 25; **27** Aron Taylor-Smith (Triple Eight MG6) 25; **28** Martin Depper (Motorbase Performance Ford Focus) 22; **29** Rory Butcher (Motorbase Performance Ford Focus) 20; **30** Brett Smith (Eurotech Racing Honda Civic Type R) 13; **31** Josh Price (Team BMR Subaru Levorg) 9; **32** Luke Davenport (Motorbase Performance Ford Focus) 6; **33** Daniel Lloyd (Triple Eight MG6) 6; **34** Stephen Jelley (Team Parker Racing Ford Focus) 2.



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meetings at Donington and Thruxton, although there was a misfire that was blighting his charge.

Turkington's problem was that at the tracks where he could usually hammer home his rear-wheel-drive advantage, he had Sutton as a constant shadow. There was no way to break free.

His season was also punctuated by that rarest of sights: a Turkington spin. He dropped it from the lead at Snetterton but recovered for seventh. Guess what? That handed the victory to Sutton...

That electrical glitch became a bugbear throughout the year and it reared its head in qualifying for the showdown at Brands too, giving the two-time champion an uphill task from 17th. His dejection after that final round showed how much it meant to him.

At least Turkington fared better than team-mate Rob Collard, who ended up fifth. He had trouble turning on the tyres for a single lap and only qualified in the top 10 twice. But his racecraft was such that it never mattered. He won at Thruxton and was in the points in every single race until the 22nd race at Rockingham, where the wheels came off his charge.

A crash there, and a bigger one at Silverstone (which ruled him out of Brands completely), meant he would only score eight points over the last nine races. Had he continued his strike rate from early in the campaign, he was on course for third in the points. But, in the last race, that position was taken by Tom Ingram's Speedworks Toyota Avensis (see page 40).

Just one victory shy of Turkington was 2013 champion Andrew Jordan, who claimed three trophies in his WSR BMW on his way to ninth in the points. He said that he had adapted to rear-wheel drive within a couple of tests, and that was true – he took a win at the opening round. By rights, he should have had four victories to show for his season but for a cruel electrical



failure at Snetterton.

Jordan worked with engineer John Waterman, who had guided Sam Tordoff to second place in last year's championship. "It was the consistency that was hard to find," says Jordan. "We would have a good weekend, but then we would be back in the pack at the next round. The championship was so competitive this year that if you qualified at the front, you could stay there, but it was hard to make it through the pack if not.

"I learned a great deal, and it's all in the data bank for next year. By the last round, I was driving so differently than at the start of the season – looking back, I honestly don't know how I won at the opening meeting."

Reigning champion Gordon Shedden also won at the opening weekend of the season in his Team Dynamics Honda Civic with its Neil Brown Engines motor, but there would only be two more victories for the Scotsman. He was kicked out of first place at the second meeting of the year at Donington for a ride-height infringement, but that was just the first of many frustrations.

## "The championship was so competitive, it was hard to make it through the pack"

The chassis is still the best on the grid and Shedden is still the championship's outright fastest driver. Both he and team-mate Matt Neal, who finished seventh in the points with two wins, were biting their lips over the latter period of the contest.

Their consistency meant that they were coming into each meeting with ballast on their cars – Shedden carried more across the season than anyone except champion Sutton. But their cars were breathless compared to their rivals. Both drivers said that their cars were relying on their chassis strengths to get results, hinting that they had their wings clipped in other areas that were outside of their control. Did someone say boost?

The Eurotech Racing Honda Civic Type R, fitted with the BTCC TOCA Swindon-derived engine, was evidence of the Team Dynamics cars' struggles. Once Jack Goff had figured out how to set up his new mount for 2017, he flew. He scored three poles over the latter half of the season and grabbed a second career victory at Silverstone, but it wasn't all down to the car: Goff, after a torrid season at WSR in 2016, gave a reminder of the class he has.

Team-mate Jeff Smith was on the pace too, taking pole for the opening round, but was forced to miss the latter part of the year after a frightening qualifying crash at Croft that left him and Motorbase Performance Ford Focus driver Luke Davenport in hospital with serious injuries. ❄

**Top:** Turkington battled hard all year, here winning at Croft. **Below:** Morgan's good early run went up in smoke at Oulton Park



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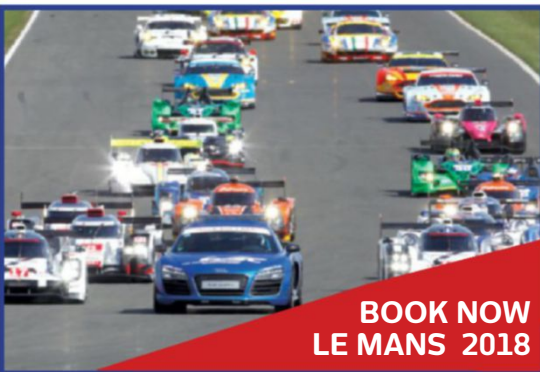
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## AUTOSPORT'S TOP 10 DRIVERS

**1 ASH SUTTON**

It was very hard to pick a weakness in Sutton's skills this year once he had got his head around how to drive the car, which only took one meeting. He didn't leave any result on the table throughout the season, qualified well, overtook cleanly and didn't make mistakes. The Subaru man was clearly rattled as the pressure ramped up with one race of the year to go, but this was his first time being involved in a BTCC showdown. The only criticism could be his determination to take results when he didn't need to, but that is just the sign of the pure racer inside him.

**2 TOM INGRAM**

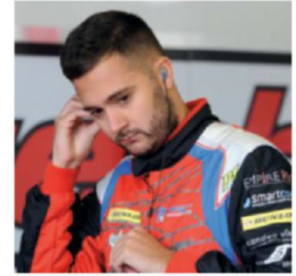
There was one criticism of Ingram's attack during the 2016 season, and that was his naivety in the heat of battle. He didn't quite know when to settle for a result. That changed this season, and he was sitting pretty at the top of the points standings after the third meeting of the season, but then disaster struck. There was contact at the next two rounds (not entirely his fault), which torpedoed his hopes. The Independents' Trophy was a fitting reward, though, and he rebounded for third in the overall points table. Solid progress was made.

**3 COLIN TURKINGTON**

Captain Calm was at it again, picking up the points when he could. When not on the ultimate pace, he collected nine podiums. Where Turkington would excel and hammer home his advantage was at exactly the same tracks that rival Sutton would be in his wheeltracks, so there was no room for manoeuvre for the BMW man. His win in the penultimate race of the season at Brands, just when the title was slipping from his grasp, was his best yet in the series but he was sidelined by damage in the final reckoning. His demeanour after defeat was a mark of the man.

**4 GORDON SHEDDEN**

Coming into 2017, Shedden had his sights on a third straight title. He was in the best car on the grid with a superb chassis and things started well. A win at Brands was followed by another triumph at Donington, but he was stripped of the trophy as the car was under the ride height. The second half of the year was just Shedden clinging on. He never said it outright, but the Team Dynamics car was giving away pace to others in a straight line. He bit his lip, but his title went begging after contact at Rockingham. It was a year of huge frustrations. Remained a class act.

**5 JACK GOFF**

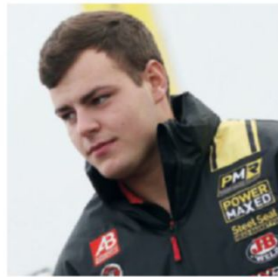
After the opening half of the year, Goff was on the cusp of becoming one of the disappointments of the season. The Eurotech Honda Civic Type R with the TOCA BTCC powerplant was one of the most potent out there but, Thruxton aside, it seemed like it had never really clicked in terms of race results as he was often muscled down the order. Then, Goff became the king of Saturdays with three poles and banked his second career win at the Silverstone round. He made second place in the Independents' Trophy his own after his late flourish.

**6 ROB COLLARD**

If you take into account Collard's inability to drag a qualifying lap out of the car, his championship position is remarkable. If you also consider that he non-scored in the last six races, it's even more impressive. He only lined up in the top 10 twice from the nine rounds he competed in, but he's able to rescue this with racecraft and rarely makes mistakes. A Silverstone crash ruled him out of the meeting and the following three rounds at Brands. His average points per meeting was 32, and, adding in that strike rate to the last two meetings, he would have finished third in the table.

**7 MATT NEAL**

Neal had a real Indian summer to his career this year. By rights, he should be at the front of the pack in what is the most sorted chassis on the BTCC grid. He is not on the ultimate pace of team-mate Shedden, but then again he joins every other driver on the grid in that regard. He took two poles (his first qualifying-topping performances for five years) and bagged two wins using his guile. A damaging Croft weekend really knocked the stuffing out of his title campaign and he played the team game after that. Still one of the most accomplished performers out there.

**8 SENNA PROCTOR**

This season was a huge jump for Proctor. He was straight out of the Renault UK Clio Cup, where he had finished eighth, and was driving a brand new car with a relatively young BTCC team. There was an awful lot to learn and the teenager coped manfully alongside proven race winner Tom Chilton. He took 15 wins in the rookie class, but his performances have to be judged on his pace against all other runners and there he shone. He became a regular threat to the top six over the latter meetings and raced superbly. Proctor is a driver with huge potential.

**9 ANDREW JORDAN**

Switching to the WSR team was always going to be a journey for Jordan, because he was switching to a rear-wheel-drive car for the first time. After testing, he said it wouldn't be a problem to drive it quickly and it wasn't. A win at the opening meeting showed that. But there was still a lot to learn in terms of set-up, and maybe that is what tripped him up. When he was in the sweet spot at Oulton and Snetterton (where he was cruelly robbed of a race-three win by electrical failure) he flew. If he can string more of that together next year, he will be a threat.

**10 ROB AUSTIN**

A second year using front-wheel drive should have brought real dividends, and it looked like it would at the start of the season. Austin was competitive everywhere and drove with intelligence as the team grew in experience. But a truly dreadful run across the summer yielded just one point from nine races due to a mixture of contact (not always his own fault) and mechanical woes. A case of what might have been, but his dominant victory at the final round at Brands was impressive. Handy Motorsport's plans to field an Alfa Romeo are exciting.



Championship podium. L-r: Eriksson, Norris, Gunther, Prema boss Rene Rosin and trophy presenter Tom Kristensen

## Norris crowned as his mai

**FORMULA 3 EUROPEAN CHAMPIONSHIP**  
**HOCKENHEIM (D)**  
**OCTOBER 15-16**  
**ROUND 10/10**

LANDO NORRIS ONLY PASSED HIS DRIVING test a couple of weeks ago, and he could have swapped his Dallara for a humble hatchback adorned with 'L' plates – with his instructor alongside – and still won the Formula 3 European Championship title in the first race last weekend at Hockenheim.

Norris's only rival Maximilian Gunther had qualified way down in 12th for a race the German needed to win, and even in that scenario a top-eight would do for Norris. Gunther got up to 10th in the race, but his required nine-car pile-up among the spaced-out field ahead predictably never came and Norris was deservedly crowned.

As Norris's Carlin team began its celebrations, the Hockenheim finale gratifyingly turned into an exhibition of the talent from the 17-year-old Glastonbury lad's main 2017 rivals. It was the superb Joel Eriksson who'd beaten him to the chequered flag in that first race, before Callum Ilott and then Gunther triumphed in timely fashion to leave a calling card to those from higher-level series seeking talent for '18.

Ilott was the fastest driver of the weekend,

topping free practice and then squeaking ahead of Norris with a superb last-lap effort in first qualifying to plant his Prema Powerteam machine on pole, while Norris ran off the road at the fast right-hander into the stadium in his bid to respond. With Carlin suffering an overall lack of grip across its cars in second qualifying – Norris was seventh fastest, with his quickest team-mate down in 11th – the Farnham team predictably put all its eggs in one basket and gave all its drivers four new tyres for the opening race, using up the remainder of their allocations for the weekend.

Norris failed to make the most of it at the start, dropping a position to third. "I didn't get a good start," he related. "There was not enough pre-load so the initial jump off the line... Well, I didn't really jump!" Eriksson, who like Ilott had two new Hankooks on his Motopark machine, speared into second place, then braved it out in a thrilling first-lap fight with Ilott to move into the lead. It culminated in Ilott retaliating into the Mercedes Arena, which in turn allowed Norris down his inside into the tight left-hander. A bump from Norris – who survived a stewards' investigation – sent Ilott down to fourth, as Ferdinand Habsburg jumped them both for second.

Norris took six laps to clear Carlin team-mate Habsburg, but couldn't get close enough to Eriksson, the McLaren Formula 1 protege only



# AT A GLANCE

## RACE 1

- 1 Eriksson Motopark
- 2 Norris Carlin
- 3 Habsburg Carlin

## RACE 2

- 1 Ilott Prema
- 2 Gunther Prema
- 3 Zhou Prema

## RACE 3

- 1 Gunther Prema
- 2 Eriksson Motopark
- 3 Zhou Prema



Ilott leads Gunther. Both won races



Eriksson beat Norris to the flag in race one

# n rivals star

moving within a second of the Swedish BMW junior on the final lap. “I did what I could to catch Joel but the pace was too similar,” he explained. In the wake of what had happened when the duo collided last time out at the Red Bull Ring, that was probably just as well for the Carlin team’s blood pressure...

Gunther had put his lack of pace in first qualifying down to “nothing huge – it’s always about details”. He’s had a pretty poor second half of the season, but he and Prema team-mate Ilott dominated second qualifying. This took place right after DTM free practice, and it seemed that the rubber on the track had a detrimental effect on overall grip across much of the field. Not for Prema though. The other effect was that the peak of the tyres was very narrow and relatively early, and Ilott maximised this to perfection with a stonking lap that put him over a quarter of a second clear. But on second-best times, deciding the race-three grid, he was pipped by Gunther, with Guan Yu Zhou completing a Prema 1-2-3.

With Prema not having great pace in the first race, and Ilott struggling on his way to fourth with damage to his car from the Norris clash, he had a change to the brakes for the subsequent clash. Gunther tried to slip past on the opening lap and the Prema trio stayed close through the first three laps while Ilott bedded in his

brakes, before unleashing his spectacular talent with a brilliant display to win by 11.3s.

Normally, F3 race winners say “I got a good start, I built a gap and then it was a case of managing the tyres”. This time was different. There may have been exhortations from the team to slow down, and Ilott did drop his pace by a tenth or two, but he completed 13 of the 20 flying laps quicker than the best anyone else managed, with his quickest half a second clear of his closest rival. To be fair, Gunther was struggling with a left-front tyre that was “destroyed” – he’d flat-spotted it trying to pass Ilott on lap one, and further lock-ups meant “my pace was nowhere compared to Callum”. Afterwards, Ilott quietly and cheekily quipped: “I just wanted to mentally destroy them.”

Zhou was also worried with his rears going off, allowing him to just hold off the charging Eriksson, who’d taken half the race to get the better of Jake Hughes in a great scrap for fourth. The Swede, just an all-round, proper bloke, had no problem with Hughes’s fierce defence, which prevented him snatching a podium from Zhou. “I have to give credit to Jake,” he said. “He drove very well defensively, which was obviously a shame for me but nothing to complain about – fair and square. You can tell he’s a good driver.”

That Prema 1-2-3 confirmed that the Euro F3

teams’ championship was heading to Italy for the seventh time. Eriksson pipped Gunther to the series runner-up spot, but the Austro-Bavarian Mercedes DTM junior got some consolation by winning the finale. Eriksson had to battle from fifth on the grid, but was second by lap three. With Gunther having saved two new tyres for this race – Eriksson was on all-old – it proved impossible to close the gap, and a full-course yellow for a Habsburg shunt cost him the best part of two seconds. Even so, Eriksson wasn’t too bothered about pushing for the win, knowing second was enough for the series runner-up slot.

From the front row, Ilott’s revs had dropped after his initial launch and he had to fight his way past Hughes for fifth. Ahead of them, Zhou spoke of a “really intense race for me” fending off the attacking Norris for third. “I had to be really good in the first and last sector, because he was quick on the straight [in the middle sector].” He accomplished that in style, even though Norris got pretty close as he challenged on the last lap.

Norris hadn’t even finished in the points in the middle race, running wide at the Spitzkehre hairpin while battling Eriksson on the opening lap and toiling on his worst set of tyres. But it didn’t matter. The ‘L’ plates – ‘L’ for ‘Lando’ – are now on that championship trophy.

MARCUS SIMMONS



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Rast took three wins on his way to the title

# Rast denies Ekstrom title at the last

**DTM**  
**HOCKENHEIM (D)**  
**OCTOBER 15-16**  
**ROUND 9/9**

RENE RAST BECAME A SURPRISED, deserving and elated rookie DTM champion for Audi last Sunday. But the back story was of a title that Mattias Ekstrom fumbled at the last, and that Jamie Green, and perhaps even Marco Wittmann, should have won.

That's not to suggest that Rast should not be feted for the stunning job he's done since joining the Team Rosberg line-up this season alongside Green. He had to overcome a points deficit to veteran Ekstrom, and did so in style by finishing a charging second to Wittmann in the finale.

Green had taken a stunning win in Saturday's opener, emerging from a harsh battle with early leader Timo Glock. As they battled on the sixth lap, contact sent Glock wide exiting the Mercedes Arena, but the ex-Formula 1 driver swung back onto the track still in the lead. Harshly, Green was reprimanded for this, and as it

was his fifth such warning of 2017 he was given a draconian 10-place grid penalty for the finale. So, although he got past Glock on the following lap and pulled away to win, narrowing the points gap to Ekstrom to nine, his task would be tough.

Ekstrom himself struggled with qualifying pace all weekend and this left him to fight to 11th position – out of the points – in the opener. The Swede also picked up a five-place grid penalty for his fourth reprimand of 2017, so a sixth place for Rast put him in the picture. The other man to go through to the finale with an outside title chance for an all-Audi battle was Mike Rockenfeller. The 2013 champion showed superb pace on a long run before his first pitstop and, when he rejoined on fresh tyres, he was armed with a war chest stocked full of DRS, using this to fight through to second place ahead of Glock.

With Wittmann out of the points after struggling for speed, and Mercedes' Lucas Auer finishing eighth, that ruled them out of the title battle, but Wittmann would fight back on Sunday.

Key to his win was Audi keeping all

four of its title contenders on track on almost-identical strategies until deep into the second half of the race. After being nerfed by Auer at Turn 1, Rast recovered from fifth and got onto the tails of poleman and early leader Tom Blomqvist and Wittmann.

Blomqvist lost time with a slow pitstop and would be torpedoed out of the race by Robert Wickens, while Wittmann's quicker early-stop strategy left Rast with too much to do.

Ekstrom drove into Green's rear end as they battled towards the back on lap one, and Green dropped to last. But the Brit had repassed Ekstrom by the time they made their late stops, and Rast's title would depend on the progress they made with their tyre advantage through the early stoppers. Green made it to a brilliant fifth, behind Rockenfeller and Gary Paffett, with Ekstrom eighth.

"Crossing the finish line I didn't know if I was champion," related Rast. "The first radio call I got was, 'You finished second'; and I was, 'OK, I didn't win the championship'; and I was quite upset. Then I heard screaming and I was in tears – the best day of my life!"

Wittmann ended the year just 19 points adrift – having lost 25 when his BMW was excluded from a Zandvoort victory because of insufficient fuel for a sample. Green, for his part, gifted Ekstrom a win at the Red Bull Ring when Audi thought it still had pressure from rival marques for the title (the 14-point swing would have easily overcome his six-point deficit to Rast). For them, DTM 2017 was a case of what might have been.

**MARCUS SIMMONS**

## AT A GLANCE

### RACE 1

- 1 Green Audi
- 2 Rockenfeller Audi
- 3 Glock BMW

### RACE 2

- 1 Wittmann BMW
- 2 Rast Audi
- 3 Rockenfeller Audi

➔ P45 RESULTS



Ekstrom missed out on scoring a third DTM title



# Dovizioso defeats Marquez in thriller

**MOTOGP**  
**MOTEGI (J)**  
**OCTOBER 16**  
**ROUND 15/18**

IF THIS YEAR'S MOTOGP TITLE HAD appeared to be edging towards Marc Marquez and Honda, a true wet-weather epic at Motegi last weekend once again blew open the race for the championship, thanks to a masterful last-gasp victory for Ducati's Andrea Dovizioso.

Although Motegi is owned by Honda, the point-and-squirt nature of the Japanese track has traditionally made it a happy hunting ground for Ducati, and it has a special significance for the Italian marque as the scene of Casey Stoner's title triumph in 2007 – its most recent.

Ten years on, Dovizioso staked his claim as Stoner's successor after coming out on top in a duel against Marquez in torrential conditions that will be remembered for many years to come.

At first, it seemed that Danilo Petrucci was set to take the maiden win that eluded him in similar circumstances at both Assen and Misano, as the Pramac Ducati rider escaped to an early two-second lead with the benefit of the extra-soft rear tyre. But Petrucci couldn't keep up the pace, and Marquez and Dovizioso, both on the harder option rear tyre, gradually reeled him in and the two title protagonists went past.

That set up a thrilling showdown between Marquez and Dovizioso, during which the pair exchanged the lead no fewer than seven times. The first of these came with five laps to go as Dovizioso outbraked Marquez at Turn 5 to take command, and by the end of the lap, had eked out a lead of 0.8s.

But three laps later Marquez was back on his tail, and muscled his way through at Turn 3 in a move he would later

apologise for on account of being overly aggressive. Three corners later, Dovizioso returned the favour with an equally daring pass. At Turn 9 Marquez was back through again, this time opening up a slight advantage on his foe, and by the start of the final lap the Honda man looked to have done just about enough.

But Marquez suffered a major wobble at Turn 8 to allow Dovizioso back into range, and the 31-year old took full advantage by getting the better of his rival on the brakes at Turn 11. In a repeat of the pair's dice for glory at the Red Bull Ring in August, Marquez had one final go at wresting back the position, diving to the inside at the final corner.

But with Austria still fresh in his memory, Dovizioso knew this was coming and duly took a wider line, allowing Marquez through but getting superior traction to beat his rival to the line by a scant 0.249 seconds for victory number five of a vintage 2017 campaign. A further 10s back was Petrucci, who cruised home to collect his fourth podium finish of the season once his rear tyre had given up the ghost.

If Motegi served to reignite Dovizioso's and Ducati's title ambitions, it well and truly extinguished the already-slim hopes of Maverick Vinales and Yamaha. Having fallen 26 points behind Marquez at Motorland Aragon, Vinales needed a big result to keep himself in realistic contention. But the chronic lack of rear traction that kept him off the podium at Misano in similarly miserable weather returned with a vengeance in Japan.

As a result, the pre-season title favourite was knocked out of Q1, matching his worst-ever MotoGP grid slot of 14th place. He then had a lacklustre run to ninth in the race.

Now 41 points down on Marquez and 30 shy of Dovizioso, Vinales remains in



Dovizioso's win reignited his championship charge

mathematical contention with three rounds left and 75 points still up for grabs, but he admitted Yamaha's failure to improve in the wet means his title hopes are "slipping away". Valentino Rossi fared marginally better than his team-mate in qualifying, although a bizarre slick-tyre gamble on a still-soaking track in Q2 consigned him to 12th place on the grid. Rossi had made little progress in the race when he crashed on lap six in a dramatic highside at Turn 7 that left him with "pain everywhere", but luckily he didn't inflict any further damage on the right leg he is recovering from breaking last month.

With the factory machines struggling, it was left to the satellite Tech3 squad to defend Yamaha honour on home turf, a challenge that Johann Zarco tackled with typical aplomb. Marquez had looked nailed on for pole, and was a second clear of the pack when he decided to ditch the wets and try out slicks for his second run. That allowed star rookie Zarco in the frame to snatch pole, his second of the year. But the Frenchman was unable to replicate that speed in the race, and soon found himself going backwards, albeit not without drawing the ire of Jorge Lorenzo with a typically aggressive move on the

An indifferent home performance has all but ended Yamaha's chances of claiming a second riders' title in three seasons







LAT IMAGES



Nozane impressed in practice

works Ducati rider early in the race.

After briefly settling into fourth place, Zarco was demoted by both works Suzuki riders – Andrea Iannone delivering the team’s best result of a troubled season with fourth ahead of team-mate Alex Rins, Lorenzo and Aleix Espargaro’s Aprilia – and ultimately came home in eighth place.

Special mention goes to Zarco’s team-mate for the weekend, 21-year-old rookie Kohta Nozane, who was drafted in to the Tech3 stable at short notice as Jonas Folger was forced to return home to Germany by an illness. Nozane completed his first day on the job with an impressive 13th fastest time in second

practice, immediately behind Vinales and Rossi, before a nasty crash in FP4 on Saturday left him with a minor hand injury. But he battled on, qualifying last and crashing out of the race on lap three.

While Nozane’s first ever MotoGP race ended in ignominy, Dovizioso’s 174th ended with his seventh and arguably greatest premier-class victory to date. Whether it proves the springboard to motorcycle racing’s greatest prize or a runner-up spot remains to be seen – but either way, he can continue to take pleasure in defying expectations and co-authoring an unforgettable chapter in MotoGP history.

**JAMIE KLEIN**



Petrucci is still chasing a maiden top-class win

**RESULTS** ROUND 15/18, MOTEGI (J), OCT 15 (24 LAPS – 71.597 MILES)

POS	RIDER	TEAM	TIME
1	Andrea Dovizioso (I)	Ducati	47m14.236s
2	Marc Marquez (E)	Honda	+0.249s
3	Daniilo Petrucci (I)	Pramac Ducati	+10.557s
4	Andrea Iannone (I)	Suzuki	+18.845s
5	Alex Rins (E)	Suzuki	+22.982s
6	Jorge Lorenzo (E)	Ducati	+24.464s
7	Aleix Espargaro (E)	Aprilia	+28.010s
8	Johann Zarco (F)	Tech3 Yamaha	+29.475s
9	Maverick Vinales (E)	Yamaha	+36.575s
10	Loris Baz (F)	Avintia Ducati	+48.506s
11	Pol Espargaro (E)	KTM	+56.357s
12	Katsuyuki Nakasuga (J)	Yamaha	+1m00.181s
13	Sam Lowes (GB)	Aprilia	+1m00.980s
14	Hector Barbera (E)	Avintia Ducati	+1m03.118s
15	Tito Rabat (E)	Marc VDS Honda	+1m03.514s
16	Scott Redding (GB)	Pramac Ducati	+1m04.162s
17	Bradley Smith (GB)	KTM	+1m06.271s
18	Hiroshi Aoyama (J)	Marc VDS Honda	+1m13.250s
R	Alvaro Bautista (E)	Aspar Ducati	21laps-accident
R	Dani Pedrosa (E)	Honda	20laps-rear tyre
R	Karel Abraham (CZ)	Aspar Ducati	19laps-accident
R	Cal Crutchlow (GB)	LCR Honda	14laps-accident
R	Valentino Rossi (I)	Yamaha	5laps-accident
R	Kohta Nozane (J)	Tech3 Yamaha	3laps-accident

**Winner’s average speed** 90.941mph

**Fastest lap** Dovizioso 1m56.568s, 92.131mph.

**QUALIFYING 2**

1 Zarco 1m53.469s; 2 Petrucci 1m53.787s; 3 Marquez 1m53.903s; 4 A Espargaro 1m53.947s; 5 Lorenzo 1m54.235s; 6 Pedrosa 1m54.342s; 7 Smith 1m54.872s; 8 P Espargaro 1m54.906s; 9 Dovizioso 1m55.064s; 10 Rins 1m55.483s; 11 Iannone 1m55.617s; 12 Rossi 1m57.786s.

**QUALIFYING 1**

1 P Espargaro 1m55.258s; 2 Smith 1m55.844s; 3 Baz 1m55.862s; 4 Vinales 1m55.916s; 5 Crutchlow 1m55.952s; 6 Bautista 1m56.292s; 7 Barbera 1m56.668s; 8 Lowes 1m56.771s; 9 Rabat 1m56.903s; 10 Abraham 1m57.144s; 11 Aoyama 1m57.157s; 12 Redding 1m57.787s; 13 Nakasuga 1m57.861s; 14 Nozane 2m01.730s.

**RIDERS’ CHAMPIONSHIP**

1 Marquez 244; 2 Dovizioso 233; 3 Vinales 203; 4 Pedrosa 170; 5 Rossi 168; 6 Zarco 125; 7 Lorenzo 116; 8 Petrucci 111; 9 Crutchlow 92; 10 Folger 84; 11 Bautista 70; 12 A Espargaro 62; 13 Miller 56; 14 Redding 56; 15 Iannone 50; 16 Baz 45; 17 P Espargaro 42; 18 Rins 38; 19 Rabat 29; 20 Abraham 28; 21 Barbera 25; 22 Pirro 18; 23 Smith 14; 24 Kallio 11; 25 Lowes 5; 26 Nakasuga 4; 27 Guintoli 1.

**MANUFACTURERS’ CHAMPIONSHIP**

1 Honda 294; 2 Ducati 273; 3 Yamaha 265; 4 Suzuki 77; 5 Aprilia 64; 6 KTM 51.



# HOW PRODUCTION REFLECTS MOETEFINDT QUALITY

**F**rom humble beginnings in the former East Germany, Moetefindt trailers has grown to establish itself as one of Europe's industry-leading manufacturers of bespoke-engineered trailers used by race teams, grocery sellers and everything in between.

With CEO Jens Moetefindt overseeing a revamp of its production facilities, the family-owned company has gone from strength to strength and served notice of its ambitions with the opening of a new state-of-the-art production plant in 2015.

Where previously manufacturing took place across several different locations, the decision to bring the entire process under one roof has consolidated the company's well-founded reputation for build quality and reflects the efficiency that characterises Moetefindt trailers on the road.

"Until 2004, Moetefindt was a company that only produced hand-made trailers," says Jens.

"We had a system of building a trailer where it

had to be taken out to another place for painting and then out again to apply the finishing touches like the lighting, electric winch and tarpaulin, but now we can complete a trailer from start to finish without it leaving the premises."

After the highest-quality materials are selected, cut and prepared, each trailer must undergo four stages of assembly before it can be signed off and painted. A project manager is assigned to ensure that the customer's individual requirements are met at every stage, from initial consultation to final product, and all with a forensic attention-to-detail.

The so-called 'one man, one trailer' solution provides an unrivalled level of accountability and guarantees a premier product worthy of the company's 35-year heritage.

"Each stage has one leader who looks after the production and has to tick every point he has done," continues Jens.

"It is documented who has done this, so 20 years later we exactly know who did that trailer and the quality controls are also ensured throughout the different production steps."

But that's not to say the production line has entirely replaced the work of skilled craftsmen – far from it. The individual touches that cause

a Moetefindt trailer to stand out from the crowd are always applied by hand, and the engineers are passionate about making the end product even more refined, optimising innovative new techniques to make trailers lighter, stiffer and easier to use.

"These people are proud of what they're doing, because they can stand next to the

**"NOW WE CAN COMPLETE A TRAILER FROM START TO FINISH WITHOUT IT LEAVING THE PREMISES"**

product and say, 'I built this, this was me'. Therefore the quality gets better because the people involve themselves in trying to develop it, and out of that the product has got better from year to year.

"When you see a Moetefindt trailer that is five years old, it is basically the same outer shape, but there are so many little improvements. It's something we can really be proud of."

  
Tailor-made trucks and trailers





FREDERIC LE FLOCH/HDPPI

# Guerrieri grabs wet win

**WORLD TOURING CAR CHAMPIONSHIP**  
**NINGBO (PRC)**  
**OCTOBER 15**  
**ROUND 7/10**

ONE SUBJECT DOMINATED THE build-up to the World Touring Car Championship's overdue return after a three-month break. It was the absence of pre-event championship leader Tiago Monteiro, who was forced out of the inaugural round at China's Ningbo circuit on medical grounds as he continues to recuperate after a high-speed testing crash at Barcelona last month.

Monteiro's points advantage over Volvo's Thed Bjork was hardly unassailable at 12 points pre-weekend, so the expectation – the inevitability – was that the Honda driver would forfeit his lead. But while that did indeed eventuate, even with the wildest of rain dances Monteiro could not have hoped for such little damage to be done to his hopes.

On a weekend of Argentinian rule, administered by Esteban Guerrieri and Nestor Girolami (with a little help from the weather), a Bjork no-score in race one was just what the doctor ordered for Monteiro. Bjork started the reversed-grid race eighth but, after three laps were completed behind the safety car, forfeited a place to Norbert Michelisz – the main focus of Honda's efforts in his team-mate's absence – and later came to blows with Mehdi Bennani, forcing both to pit.

In truth, though, that was a footnote in the opening race, for Guerrieri's drive in a sea of spray stood out. Visibly one of the more aggressive drivers in slippery conditions, he opportunistically got the better of Nicky Catsburg after the Dutchman was balked by John Filippi, before clearing the Corsican, who had

fallen back from reversed-grid polesitter Yann Ehlacher's Lada Vesta.

Guerrieri's route to the front was made easier by the intervention of a safety car that wiped out the Ehlacher's lead. The Campos Chevrolet driver showed no mercy by dispatching Ehlacher on the brakes for Turn 2 after lining up a move along the main straight on the restart, then cantered clear to a second series win.

Race two was, for want of a better expression, something of a damp squib. During the 90 minutes between races darker skies and heavier rain rolled in, so a second safety-car start was no surprise. Sadly, the dash off the grid was the most exciting part; with cars squirming in third gear along the straight and struggling to keep pace with the safety car, the main event was curtailed after three limp laps – a decision the majority of the field agreed with.

After brief confusion over the issuing of points, the result was declared and Volvo's polesitter Girolami was confirmed as a default first-time winner, after 'leading' more than the mandatory two laps to qualify for half points to be awarded.

With the nine and a half points for third, plus three from qualifying, Bjork's weekend haul was just enough to steer him clear of Monteiro in the championship. More significant was the form of Michelisz, who scored a fourth in race one – protected throughout by stand-in team-mate Gabriele Tarquini – plus 11.5 points for runner-up spot in the main event, which brought him to within two of Bjork's overall total.

Monteiro can be happy that he wasn't left behind – and he now has a week to prove his fitness, knowing the title is still well and truly on.

**JACK COZENS**

Once racing got under way in the first event, there was no stopping Guerrieri

## AT A GLANCE

### RACE 1

- 1 Guerrieri Chevrolet
- 2 Ehlacher Lada
- 3 Catsburg Volvo

### RACE 2

- 1 Girolami Volvo
- 2 Michelisz Honda
- 3 Bjork Volvo

**➔ P49 RESULTS**

## IN BRIEF

### MOTO2

Alex Marquez secured his third victory of the year at a sodden Motegi after passing local hero Takaaki Nakagami at two-thirds distance. The Japanese rider eventually faded to sixth, paving the way for Xavi Vierge to score his best-ever finish in second, ahead of rain specialist Hafizh Syahrin. Franco Morbidelli took eighth, and now holds a 19-point advantage over main title rival Thomas Luthi, who was 11th.

### MOTO3

Romano Fenati kept his faint title hopes alive with a superb wet-weather victory at Motegi. Joan Mir arrived needing only to finish second to wrap up the title with three rounds remaining, but could do no better than 17th in the tricky conditions. Meanwhile, Fenati raced to a resounding four-second win over Niccolò Antonelli, cutting his deficit to Mir in the points from 80 to 55 with 75 still up for grabs. Marco Bezzecchi finished third.

### NASCAR TRUCKS

Parker Kligerman scored a second NASCAR Trucks career win with a late move to take the lead at Talladega Superspeedway. Moments later, the race was put under caution on the final lap owing to a crash. Kligerman – also a part-time TV reporter for NBC Sports' NASCAR coverage – grabbed the lead from standings leader Christopher Bell, who held on to finish in second place.

### CALIFORNIA 8 HOURS

Kelvin van der Linde secured victory at Laguna Seca with Markus Winkelhock and Pierre Kaffer in a Magnus Racing Audi. Van der Linde passed the Land Motorsport Audi of Christopher Mies – who survived a clash with WRT Audi driver Robin Frijns – with 20 minutes of the race left to win the Intercontinental GT Challenge round. Mies, sharing with Christopher Haase and Connor de Phillippi, took second from the K-PAX McLaren of Alvaro Parente, Ben Barnicoat and Bryan Sellers.

### GERMAN CARRERA CUP

Second place behind Christian Engelhart in race one was enough for Dennis Olsen to be crowned at Hockenheim, as title rival Nick Yelloly took a drive-through penalty. Thomas Preining won a frantic four-car scrap in race two from Olsen, Engelhart and Yelloly.



# Keselowski dodges chaos to seal win

**NASCAR CUP**  
**TALLADEGA (USA)**  
**OCTOBER 15**  
**ROUND 31/36**

BRAD KESELOWSKI BOOKED HIS PLACE IN THE FINAL eight of the playoffs by winning at Talladega on his 300th NASCAR Cup Series start.

The Team Penske Ford driver had to dodge a series of crashes that brought out three red flags in the closing stages of the race, and Keselowski, who won the race's first stage, was languishing at the rear of the field with just 29 laps remaining after he was forced to pit for a new radio antenna while running fourth. His problems with his radio had hampered his efforts to win stage two.

The three crashes — the first of which was a massive shunt caused by contact between David Ragan and Martin Truex Jr — eliminated 16 cars including playoff contenders Kurt Busch, Kyle Busch, Matt Kenseth, Jimmie Johnson, Kevin Harvick and Ricky Stenhouse Jr. A clash between Joey Logano, Ryan Blaney and Trevor Bayne then stopped the race again, before Chase Elliott spinning Daniel Suarez around and taking out two others did likewise following just three more laps of clean racing.

That final interruption gave Keselowski the lead and he went on to beat Ryan Newman to the flag thanks to assistance from team-mate Logano during the three-lap shootout that ended the race. Polesitter Dale Earnhardt Jr, Newman and Denny Hamlin tailed Keselowski at the final restart and, while Newman and Hamlin worked in tandem to clear their rivals as Earnhardt and Keselowski split apart, Newman broke clear in his Childress Chevrolet. But, with help from Logano, Keselowski took the lead around the outside on the final lap to win. Bayne finished third ahead of Logano and Aric Almirola.

Truex, who suffered terminal damage in the 16-car crash, had already cemented his place in the round of eight of the playoffs with victory at Charlotte last weekend, and he continues to top the standings. With one race remaining in the round of 12, hopes of advancement for Kyle Busch, Stenhouse and Kenseth hang in the balance.

"That takes some stress off of me for next week," Keselowski said on his cool-down lap. "I survived. What a special day. We were able to come here and get it done."

## RESULTS

**1 Brad Keselowski (Ford Fusion)** 188 laps in 3h47m52s; **2 Ryan Newman** (Chevrolet SS) +0.210s; **3 Trevor Bayne** (Ford); **4 Joey Logano** (Ford); **5 Aric Almirola** (Ford); **6 Denny Hamlin** (Toyota Camry); **7 Dale Earnhardt Jr** (Chevy); **8 Kasey Kahne** (Chevy); **9 Gray Gaulding** (Toyota); **10 David Ragan** (Ford). **Points 1 Martin Truex Jr 3120**; **2 Keselowski 3101**; **3 Kyle Larson 3096**; **4 Kevin Harvick 3089**; **5 Hamlin 3088**; **6 Chase Elliott 3087**; **7 Ryan Blaney 3076**; **8 Jimmie Johnson 3074**; **9 Kyle Busch 3067**; **10 Matt Kenseth 3066**; **11 Ricky Stenhouse Jr 3052**; **12 Jamie McMurray 3045**.

# RESULTS

## FORMULA 3 EUROPEAN CHAMPIONSHIP

**ROUND 10/10, HOCKENHEIM (D), OCTOBER 14-15 RACE 1 (23 LAPS - 65.369 MILES)**

1	<b>Joel Eriksson</b> (S) <i>Motopark</i> · Dallara-Volkswagen F315	<b>35m45.712s</b>
2	<b>Lando Norris</b> (GB) <i>Carlin</i> · Dallara-Volkswagen F317	+0.725s
3	<b>Ferdinand Habsburg</b> (A) <i>Carlin</i> · Dallara-Volkswagen F316	+3.988s
4	<b>Callum Iltott</b> (GB) <i>Prema Powerteam</i> · Dallara-Mercedes F314	+9.036s
5	<b>Jehan Daruvala</b> (IND) <i>Carlin</i> · Dallara-Volkswagen F315	+12.520s
6	<b>Nikita Mazepin</b> (RUS) <i>Hitech GP</i> · Dallara-Mercedes F316	+15.639s
7	<b>Pedro Piquet</b> (BR) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F316	+17.218s
8	<b>Ralf Aron</b> (EST) <i>Hitech GP</i> · Dallara-Mercedes F316	+17.815s
9	<b>Tadasuke Makino</b> (J) <i>Hitech GP</i> · Dallara-Mercedes F317	+19.436s
10	<b>Maximilian Gunther</b> (D) <i>Prema Powerteam</i> · Dallara-Mercedes F316	+25.250s
11	<b>Jake Hughes</b> (GB) <i>Hitech GP</i> · Dallara-Mercedes F315	+28.740s
12	<b>Mick Schumacher</b> (D) <i>Prema Powerteam</i> · Dallara-Mercedes F317	+30.928s
13	<b>Guan Yu Zhou</b> (PRC) <i>Prema Powerteam</i> · Dallara-Mercedes F315	+31.647s
14	<b>Harrison Newey</b> (GB) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F312	+32.448s
15	<b>Joey Mawson</b> (AUS) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F316	+35.521s
16	<b>Felipe Drugovich</b> (BR) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F317	+36.441s
17	<b>David Beckmann</b> (D) <i>Motopark</i> · Dallara-Volkswagen F316	+37.271s
18	<b>Marino Sato</b> (J) <i>Motopark</i> · Dallara-Volkswagen F314	+38.405s
19	<b>Devlin DeFrancesco</b> (CDN) <i>Carlin</i> · Dallara-Volkswagen F312	+42.363s
20	<b>Keyvan Andres Soori</b> (D) <i>Motopark</i> · Dallara-Volkswagen F317	+44.579s
21	<b>Juri Vips</b> (EST) <i>Motopark</i> · Dallara-Volkswagen F315	+45.207s

**Winner's average speed** 109.674mph. **Fastest lap** Norris 1m32.635s, 110.452mph.

## QUALIFYING 1

**1 Iltott 1m31.646s**; **2 Norris** 1m31.805s; **3 Eriksson** 1m31.811s; **4 Daruvala** 1m31.853s; **5 Habsburg** 1m31.914s; **6 Makino** 1m31.915s; **7 Piquet** 1m31.930s; **8 Hughes** 1m31.935s; **9 Mazepin** 1m31.989s; **10 Zhou** 1m32.015s; **11 Aron** 1m32.034s; **12 Gunther** 1m32.075s; **13 Schumacher** 1m32.206s; **14 Drugovich** 1m32.230s; **15 Mawson** 1m32.262s; **16 Newey** 1m32.281s; **17 Beckmann** 1m32.527s; **18 DeFrancesco** 1m32.597s; **19 Andres Soori** 1m32.603s; **20 Sato** 1m32.993s; **21 Vips** 1m33.275s.

## RACE 2 (21 LAPS - 59.685 MILES)

**1 Iltott 32m41.110s**; **2 Gunther** +11.339s; **3 Zhou** +14.174s; **4 Eriksson** +14.707s; **5 Hughes** +23.183s; **6 Mazepin** +23.977s; **7 Piquet** +25.279s; **8 Daruvala** +26.941s; **9 Makino** +27.527s; **10 Aron** +27.716s; **11 Norris** +30.617s; **12 Vips** +34.218s; **13 Beckmann** +36.201s; **14 Newey** +38.520s; **15 Mawson** +41.843s; **16 Drugovich** +43.957s; **17 DeFrancesco** +44.532s; **18 Schumacher** +46.041s; **19 Sato** +47.272s; **20 Habsburg** +1m29.606s; **R Andres Soori** 10 laps-accident damage.

**Winner's average speed** 109.563mph. **Fastest lap** Iltott 1m32.694s, 110.381mph.

## QUALIFYING 2

**1 Iltott 1m31.685s**; **2 Gunther** 1m31.956s; **3 Zhou** 1m31.967s; **4 Hughes** 1m32.083s; **5 Piquet** 1m32.090s; **6 Eriksson** 1m32.135s; **7 Norris** 1m32.163s; **8 Makino** 1m32.203s; **9 Mazepin** 1m32.215s; **10 Aron** 1m32.246s; **11 Daruvala** 1m32.299s; **12 Mawson** 1m32.335s; **13 Habsburg** 1m32.455s; **14 Schumacher** 1m32.469s; **15 Beckmann** 1m32.513s; **16 Andres Soori** 1m32.732s; **17 Vips** 1m32.774s; **18 Drugovich** 1m32.804s; **19 Sato** 1m32.854s; **20 Newey** 1m32.899s; **21 DeFrancesco** 1m32.928s.

## RACE 3 (22 LAPS - 62.527 MILES)

**1 Gunther 35m31.488s**; **2 Eriksson** +3.585s; **3 Zhou** +14.264s; **4 Norris** +14.780s; **5 Iltott** +16.085s; **6 Piquet** +23.872s; **7 Mazepin** +24.718s; **8 Hughes** +24.918s; **9 Mawson** +25.559s; **10 Beckmann** +27.603s; **11 Makino** +28.848s; **12 Vips** +33.283s; **13 Andres Soori** +37.314s; **14 DeFrancesco** +38.017s; **15 Drugovich** +40.005s; **16 Sato** +45.525s; **17 Newey** +50.708s; **18 Schumacher** +1m02.738s; **19 Aron** +1m30.006s; **20 Daruvala** -1 lap; **R Habsburg** 5 laps-accident.

**Winner's average speed** 105.606mph. **Fastest lap** Gunther 1m32.271s, 110.887mph.



Norris claimed nine wins in his title campaign

## GRID FOR RACE 3

**1 Gunther**; **2 Iltott**; **3 Zhou**; **4 Hughes**; **5 Eriksson**; **6 Norris**; **7 Makino**; **8 Mazepin**; **9 Piquet**; **10 Aron**; **11 Mawson**; **12 Schumacher**; **13 Daruvala**; **14 Beckmann**; **15 Habsburg**; **16 Andres Soori**; **17 Newey**; **18 Sato**; **19 Drugovich**; **20 Vips**; **21 DeFrancesco**.

## CHAMPIONSHIP

**1 Norris 441**; **2 Eriksson 388**; **3 Gunther 383**; **4 Iltott 344**; **5 Hughes 207**; **6 Daruvala 191**; **7 Habsburg 186**; **8 Zhou 149**; **9 Aron 123**; **10 Mazepin 108**.



# ROUND - UP

## DTM

### ROUND 9/9, HOCKENHEIM (D), OCTOBER 14-15 RACE 1 (36 LAPS - 102.317 MILES)

1	<b>Jamie Green</b> (GB) Team Rosberg · Audi RS5	<b>56m52.478s</b>
2	<b>Mike Rockenfeller</b> (D) Team Phoenix · Audi RS5	+3.939s
3	<b>Timo Glock</b> (D) RMR · BMW M4	+5.666s
4	<b>Maxime Martin</b> (B) RBM · BMW M4	+10.448s
5	<b>Edoardo Mortara</b> (I) HWA · Mercedes C63	+12.962s
6	<b>Rene Rast</b> (D) Team Rosberg · Audi RS5	+14.752s
7	<b>Robert Wickens</b> (CDN) HWA · Mercedes C63	+16.196s
8	<b>Lucas Auer</b> (A) HWA · Mercedes C63	+23.633s
9	<b>Gary Paffett</b> (GB) HWA · Mercedes C63	+24.615s
10	<b>Bruno Spengler</b> (CDN) RBM · BMW M4	+25.027s
11	<b>Mattias Ekstrom</b> (S) Team Abt · Audi RS5	+25.764s
12	<b>Nico Muller</b> (CH) Team Abt · Audi RS5	+26.371s
13	<b>Marco Wittmann</b> (D) RMG · BMW M4	+27.426s
14	<b>Paul di Resta</b> (GB) HWA · Mercedes C63	+29.288s
15	<b>Tom Blomqvist</b> (GB) RMR · BMW M4	+30.867s
16	<b>Maro Engel</b> (D) HWA · Mercedes C63	+35.288s
17	<b>Augusto Farfus</b> (BR) RMG · BMW M4	+37.358s
18	<b>Loic Duval</b> (F) Team Phoenix · Audi RS5	+42.024s

Winner's average speed 107.940mph. Fastest lap Rockenfeller 1m32.819s, 110.233mph.

### QUALIFYING 1

1 Glock 1m30.648s; 2 Martin 1m30.685s; 3 Green 1m30.770s; 4 Rast 1m30.803s; 5 Mortara 1m30.806s; 6 Wickens 1m30.836s; 7 Rockenfeller 1m30.839s; 8 Wittmann 1m30.850s; 9 Muller 1m30.935s; 10 Ekstrom 1m30.956s; 11 Paffett 1m30.958s; 12 Spengler 1m30.979s; 13 di Resta 1m31.026s; 14 Farfus 1m31.037s; 15 Auer 1m31.088s; 16 Blomqvist 1m31.125s; 17 Engel 1m31.390s; 18 Duval 1m31.515s.

### RACE 2 (36 LAPS - 102.317 MILES)

1 Wittmann 56m47.699s; 2 Rast +3.143s; 3 Rockenfeller +6.280s; 4 Paffett +15.844s; 5 Green +17.835s; 6 Martin +19.372s; 7 Farfus +20.386s; 8 Ekstrom +21.229s; 9 Mortara +22.902s; 10 Auer +29.260s; 11 Muller +30.428s; 12 Glock +33.274s; 13 Engel +41.344s; 14 Spengler +41.591s; 15 Duval +42.972s; 16 di Resta +1m35.770s; 17 Wickens 29 laps-accident damage; R Blomqvist 26 laps-accident damage.

Winner's average speed 108.091mph. Fastest lap Green 1m32.456s, 110.666mph.

### QUALIFYING 2

1 Blomqvist 1m30.491s; 2 Rast 1m30.555s; 3 Wittmann 1m30.564s; 4 Auer 1m30.579s; 5 Wickens 1m30.656s; 6 Martin 1m30.672s; 7 Rockenfeller 1m30.721s; 8 Farfus 1m30.739s; 9 Paffett 1m30.799s; 10 Glock 1m30.848s; 11 Muller 1m30.859s; 12 Spengler 1m30.987s; 13 Mortara 1m31.015s; 14 Ekstrom 1m30.761s\*; 15 Green 1m30.590s\*; 16 Engel 1m31.162s; 17 Duval 1m31.461s; 18 di Resta no time. \* = grid penalty.

### CHAMPIONSHIP

1 Rast 179; 2 Ekstrom 176; 3 Green 173; 4 Rockenfeller 167; 5 Wittmann 160; 6 Auer 136; 7 Glock 133; 8 Martin 132; 9 Wickens 119; 10 Paffett 102.



## WTCC

### ROUND 7/10, NINGBO (PRC), OCTOBER 15 RACE 1 (15 LAPS - 37.375 MILES)

1	<b>Esteban Guerrieri</b> (RA) Campos Racing · Chevrolet RML Cruze TC1	<b>33m29.509s</b>
2	<b>Yann Ehrlacher</b> (F) RC Motorsport · Lada Vesta WTCC	+2.893s
3	<b>Nicky Catsburg</b> (NL) Polestar Cyan Racing · Volvo S60 Polestar	+11.671s
4	<b>Norbert Michelisz</b> (H) Honda Racing Team JAS · Honda Civic WTCC	+17.409s
5	<b>Gabriele Tarquini</b> (I) Honda Racing Team JAS · Honda Civic WTCC	+17.840s
6	<b>John Filippi</b> (F) Sebastien Loeb Racing · Citroen C-Elysee WTCC	+23.760s
7	<b>Kevin Gleason</b> (USA) RC Motorsport · Lada Vesta WTCC	+24.522s
8	<b>Daniel Nagy</b> (H) Zengo Motorsport · Honda Civic WTCC	+24.946s
9	<b>Ryo Michigami</b> (J) Honda Racing Team JAS · Honda Civic WTCC	+26.334s
10	<b>Filipe de Souza</b> (PRC) RC Motorsport · Lada Vesta WTCC	+27.243s
11	<b>Zsolt David Szabo</b> (H) Zengo Motorsport · Honda Civic WTCC	+39.340s
12	<b>Tom Coronel</b> (NL) ROAL Motorsport · Chevrolet RML Cruze TC1	13 laps-DNF
R	<b>Thed Bjork</b> (S) Polestar Cyan Racing · Volvo S60 Polestar	10 laps-accident damage
R	<b>Mehdi Bannani</b> (MA) Sebastien Loeb Racing · Citroen C-Elysee WTCC	7 laps-suspension
R	<b>Tom Chilton</b> (GB) Sebastien Loeb Racing · Citroen C-Elysee WTCC	6 laps-accident
R	<b>Rob Huff</b> (GB) Munnich Motorsport · Citroen C-Elysee WTCC	6 laps-accident
R	<b>Nestor Girolami</b> (RA) Polestar Cyan Racing · Volvo S60 Polestar	5 laps-technical

Winner's average speed 66.957mph. Fastest lap Guerrieri 2m03.753s, 72.484mph.

### GRID FOR RACE 1

1 Ehrlacher; 2 Filippi; 3 Catsburg; 4 Guerrieri; 5 Chilton; 6 Tarquini; 7 Huff; 8 Bjork; 9 Michelisz; 10 Girolami; 11 Gleason; 12 Bannani; 13 Coronel; 14 Nagy; 15 de Souza; 16 Michigami; 17 Szabo.

### RACE 2 (2 LAPS - 4.983 MILES)

1 Girolami 4m59.154s; 2 Michelisz +0.851s; 3 Bjork +2.537s; 4 Tarquini +3.347s; 5 Chilton +4.562s; 6 Guerrieri +6.691s; 7 Catsburg +8.113s; 8 Filippi +9.722s; 9 Michigami +11.250s; 10 Gleason +12.118s; 11 Ehrlacher +13.656s; 12 Coronel +16.721s; 13 Nagy +17.666s; 14 de Souza +18.403s; 15 Szabo +19.793s; 16 Bannani +43.848s; 17 Huff 1 lap-steering rack.

Winner's average speed 59.969mph. Fastest lap Szabo 2m25.107s, 61.817mph.

### QUALIFYING

Q3 1 Girolami 1m58.049s; 2 Michelisz 1m58.369s; 3 Bjork 1m58.536s; 4 Huff 1m58.857s; 5 Tarquini 2m01.040s.

Q2 Tarquini 1m58.485s; Girolami 1m58.508s; Michelisz 1m58.578s; Bjork 1m58.662s; Huff 1m58.694s; 6 Chilton 1m59.460s; 7 Guerrieri 1m59.896s; 8 Catsburg 2m00.025s; 9 Filippi 2m00.265s; 10 Ehrlacher 2m00.641s; 11 Michigami 2m02.171s; 12 Gleason no time.

Q1 Bjork 1m58.243s; Girolami 1m58.595s; Huff 1m58.761s; Michelisz 1m58.794s; Tarquini 1m58.855s; Chilton 1m59.037s; Ehrlacher 1m59.361s; Guerrieri 1m59.593s; Catsburg 1m59.620s; Gleason 1m59.890s; Filippi 2m00.377s; Michigami 2m00.398s; 13 Bannani 2m00.590s; 14 Coronel 2m00.604s; 15 Nagy 2m02.565s; 16 de Souza 2m02.980s; 17 Szabo no time.

### CHAMPIONSHIP

1 Bjork 200.5; 2 Monteiro 200; 3 Michelisz 198.5; 4 Catsburg 177.5; 5 Bannani 164; 6 Chilton 153.5; 7 Guerrieri 143; 8 Huff 137; 9 Girolami 88; 10 Ehrlacher 63.



# Toyota in the land of the plunging gloom

Kazuki Nakajima and Sebastien Buemi were leading when the race was stopped and not restarted. Despite controversy, the win was deserved

By Gary Watkins, Special Contributor

🐦 @gazzasportscars



**T**oyota turned up at Fuji with the avowed intent to score a one-two on home ground. The local manufacturer pulled off the desired result with Sebastien Buemi and Kazuki Nakajima leading the way. The Japanese driver reckoned there was an element of luck to it, but also said they deserved it. He was bang on the money there, because the TS050 HYBRID was the fastest car over the course of a shortened race affected by rain and fog.

The inclement weather turned the Fuji

6 Hours on Sunday into a stop-start affair that was twice red-flagged, the second time for good after four and a half hours of its intended duration. It was also interrupted by no fewer than seven pukka safety cars (including the two to start and restart the race) and one of the virtual variety. This played into Toyota's hands as it strived to claim a first World Endurance Championship victory since Spa in May, and keep the race for the drivers' title mathematically open going into the penultimate round at Shanghai next month.

Toyota opted for a different specification of Michelin wet-weather rubber last weekend to Porsche, choosing

**Winning Toyota moved to the front early on and later led behind the safety car...**

to race on the deeper-grooved tyre. Not only did that give the TS050 the edge over the German manufacturer's 919 Hybrid when the conditions were at their wettest, but the more-heavily-treaded rubber heated up quicker than the Porsche's tyres. This gave the Japanese cars an advantage at the multiple restarts that peppered this race.

"Whenever there was a restart we struggled to warm up the tyres, but once we got going we just got quicker and quicker," said Neel Jani from the #1 Porsche crew that led the German manufacturer's challenge together with Andre Lotterer and Nick Tandy. "We were hoping that the race would be resumed





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because we would have had a shot at it.”

Had the track conditions continued to improve, then Jani was probably right. If not, then it is unlikely the Porsche would have had that shot.

When the track was at its wettest, after the race was restarted for the first time, the TS050 had the edge on pace. Nakajima took over the lead when Earl Bamber brought the #2 Porsche into the pits for its first stop as the race went green after one lap behind the safety car. Jose Maria Lopez was running second in the Toyota he shared with Kamui Kobayashi and Mike Conway, while Jani was third in other 919.

Nakajima's pace took him away from >>



...before Nakajima was declared winner



**“I had no rear grip.  
It was just a case of  
trying to bring it home ”**



Lopez, who was handicapped by windscreen-wiper failure. The leading Toyota also increased the gap to Jani from around 32 seconds to nearly 50 before the next safety car.

Between the solo full-course yellow of the race and the final safety car that led into the red flag, Jani was a match for the Toyotas ahead of him. He was able to close onto Conway's tail, while the pair edged ever so slightly towards Nakajima.

The track may have been drying, but the low cloud that had reduced visibility and precipitated the first stoppage wasn't. That resulted in red flag number two, shortly after the race had passed the 70% duration required for full points to be awarded. The cars sat on the grid for over an hour before it was announced that the race would restart for a 10-minute dash to the flag up to the six-hour mark. Five or so minutes after that, with the conditions closing in again, the race was abandoned once and for all.

There was always going to be an element of luck to a victory in a shortened endurance race held in such dreadful conditions. And for Toyota it came when it aborted a pitstop for the leading car, as late as the final corner, as the final red flags came out.

Nakajima had been on track for nearly an hour and a half without stopping. Fuel was clearly required for the #8 Toyota, into which Anthony Davidson was about to climb for the first time, but the question was whether it could have made the finish had the race been restarted.

Toyota was insistent that 10 more minutes of running was possible. "There were still 10 minutes of fuel left in the car," said Toyota Motorsport GmbH technical director Pascal Vasselon. "Even if the race restarted we could have finished [without refuelling]."

The conspiracy theorists had a field day when the decision was taken to cancel the second restart just four minutes before it was due. Toyota, of course, has yet to confirm its participation in the WEC next year and a victory for the home manufacturer was timely.

But Toyota's claims were entirely plausible. When the red flag came the fourth-place Porsche was in the pits. It had completed approximately one hour and 50 minutes on its previous tankful courtesy of the wet conditions and the multiple yellows.

There was also a scare for the #7 Toyota. The telemetry was indicating a right-rear puncture at the end, but



Toyota got the result it needed on its home ground at Fuji

when the tyres were checked after the cars stopped on the start-finish line the pressures were found to be correct. That's not to say, of course, that Toyota wouldn't have felt compelled to bring the car in had the race continued.

The #2 Porsche driven by championship leaders Bamber, Timo Bernhard and Brendon Hartley had a disappointing Fuji once Bamber came into the pits straight after the initial half-hour stoppage in the second hour.

Not pitting Bamber was a strategic call in case the race was not restarted



Porsches were in the mix when conditions weren't so bad



PORSCHE

in some kind of repeat of the 2013 Fuji 6 Hours. That one stretched to just 16 laps behind the safety car.

But the tactic ultimately backfired because the Kiwi had to stop at the end of the first restarted lap, just as the race was going green. That meant Bernhard resumed nearly a minute behind the leader. And from there it went from bad to worse for the champions elect.

Bernhard struggled and was put a lap down by Nakajima a further 15 laps into the race. "I just couldn't switch on the tyres – I had no rear grip," said the German. "I went across the run-off a couple of times and then it was just a case of trying to bring it home."

Bernhard and his team-mates only needed to finish ahead of Buemi and Nakajima to seal the drivers' crown, though the significance of Toyota's victory wasn't really about keeping the title open. It brought to an end a run of disappointment dating back to the Le Mans 24 Hours in June.

"In the end we were a little bit lucky that the red flag came when it did, but I think we deserved the victory, because we had good pace," said Nakajima. "We said before the race that we wanted a one-two and somehow we managed it." »

## EARLY FINISH HELPS REBELLION

REBELLION LED BY FAR THE MOST LAPS ON Sunday as it wrapped up a second LMP2 victory of the season with its #31 ORECA-Gibson 07.

But the Anglo-Swiss team didn't have the fastest car for the conditions and drivers Bruno Senna, Nicolas Prost and Julien Canal, who didn't actually get to climb behind the wheel on race day, reckoned there was an element of luck to their win in the foreshortened event.

The Signatech Alpine squad did have the fastest car, but ended up second with Nicolas Lapierre, Andre Negrao and Gustavo Menezes (who also didn't get to drive). They were convinced that they would have gone on to take their second win of the season had the race not been red-flagged, and run to its full duration.

The winning Rebellion (below) would have needed to spend more time in the pits over the remainder of the race than the chasing Alpine-badged ORECA. And with Negrao closing on Prost in the laps before the safety car that led into the final red, the French team's insistence that it should – and would – have won was entirely believable.

Lapierre had charged through from what the team admitted was a disappointing fourth on the grid, after dropping briefly to fifth, to move into second behind Senna inside 20 laps. Negrao briefly put the car into the lead for the first time in the fourth hour before stopping under the safety car. But its pit strategy ultimately meant it wasn't leading at the all-important time when the race reached its premature conclusion.

"Alpine was flying out there," said Senna. "They had the fastest car and we had the

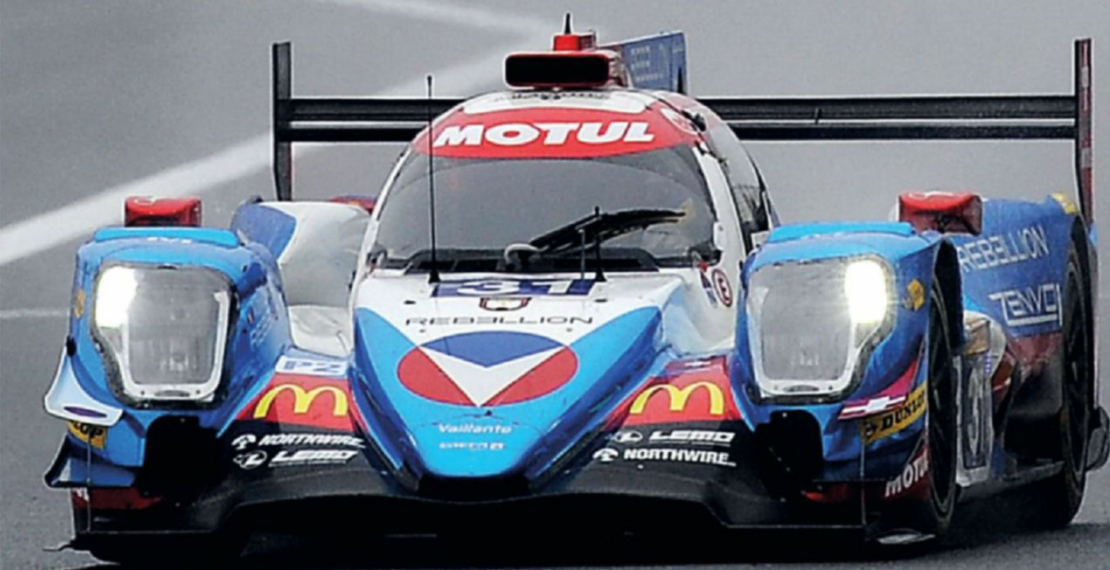
second fastest. We were lucky, but that can happen when the race turns into a bit of a lottery like it did today."

"It's infuriating to see the win escape our grasp, despite being the fastest on track," said Signatech boss Philippe Sinault. "The engineers did a fantastic job and the car was quickest in these tricky conditions."

Third place went to the championship-leading Jackie Chan DC Racing ORECA, which like the cars ahead of it only managed to cycle two of its drivers, Oliver Jarvis and Ho-Pin Tung, through the cockpit – silver-rated Thomas Laurent remaining on the sidelines. Third, reckoned Jarvis, was as good as it was going to get for a car that he admitted was "fairly average" in the conditions.

The TDS Racing squad claimed fourth, as the first team home to have used all three of its drivers in Francois Perrodo, Emmanuel Collard and Matthieu Vaxiviere. That made the French squad something of a moral winner, it reckoned.

That the top three finishers didn't use all their drivers was not without controversy, even though WEC rules allow for it under a force-majeure clause inserted in the rules following the 2013 Fuji debacle. The debate was fuelled by the exclusion of the second of the Rebellion entries because Mathias Beche hadn't completed the necessary duration in the car after taking over from Nelson Piquet Jr, and silver driver David Heinemeier Hansson didn't drive at all. The fact that the car had been crashed by Beche and wasn't running at the finish – though was initially classified – made the exclusion meaningless. It did, however, add to the controversy.



LAT IMAGES





## GTE: Calado and Ferrari fight back

FERRARI DRIVERS ALESSANDRO PIER Guidi and James Calado claimed a second GTE Pro victory of the season in circumstances not dissimilar to their first win at the Nurburgring back in July. This time, though, they left it late, Calado sealing the victory with a dozen laps to go.

The best of the factory Ferrari 488 GTEs run by AF Corse had the speed, but it very nearly didn't have the luck. Another poor qualifying for Pier Guidi and Calado didn't help – they ended up only seventh – and nor did the bad timing of the third safety car. That forced both of the AF Ferraris to make so-called emergency pitstops to take on five seconds worth of fuel when the pits were closed, and then return almost immediately for a proper service.

Calado took over at this point and

found himself down in fourth, but he was able to battle past team-mate Davide Rigon and then move up to second when Porsche driver Kevin Estre lost time in an incident with Andy Priaulx's lapped Ganassi Ford GT and, finally, overtake Frederic Makowiecki in the Porsche 911 RSR that had been started by Richard Lietz.

"We were quick today; the only point that the Porsche was quicker was when the rain was really torrential," said new father Calado. "After it dried out a bit, the conditions were perfect for us."

Porsche was confident that Estre and team-mate Michael Christensen would have been able to win but for the controversial clash with Priaulx at Turn 10. The car's aerodynamics were damaged in the incident and there was no way back from third.

**Calado and Pier Guidi left their Oyster cards at home, so they had to take the Ferrari**

The second Ferrari missed out on a podium because it had to make an additional pitstop near the end so that Sam Bird could take over from Rigon in order to achieve the minimum driving time. But fifth position was still enough for them to move ahead of Priaulx and team-mate Harry Tincknell in the points table along with the drivers of the first two cars home.

It was a disastrous weekend for the long-time championship leaders. Tincknell had run second through the first portion of the race, but Priaulx missed a red light at the end of the pitlane when he rejoined as the race went green. A one-minute stop-go dropped the car to the back of the field, though Priaulx was up seventh at the time of the incident with Estre.

The clash damaged a rear tyre, which then let go as the Ford driver hit the brakes for Turn 1. The car backed into the barriers and was then briefly beached in the gravel before Priaulx could get back to the pits for repairs.

The Ford ended up finishing behind all the GTE Am cars, which put it outside the top 10 and meant Priaulx and Tincknell collected only half a point for a race finish.

The AF-run Spirit of Race Ferrari shared by Francesco Castellacci, Thomas Flohr and Miguel Molina took GTE Am honours. The Clearwater Ferrari had led for much of the way in the hands of Keita Sawa and Mok Weng Sun, but a slow stop left Matt Griffin behind Molina when it mattered. 🏆



Disaster for Priaulx and Tincknell, who now trail in points



**RESULTS ROUND 7/9, FUJI (J), OCTOBER 15 113 LAPS – 320.391 MILES**

POS	DRIVERS	TEAM	CAR	CLASS	TIME
1	Sebastien Buemi (CH) Kazuki Nakajima (J) Anthony Davidson (GB)*	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	4h24m50.950s
2	Kamui Kobayashi (J) Mike Conway (GB) Jose Maria Lopez (RA)	Toyota Gazoo Racing	Toyota TS050 HYBRID	LMP1	+1.498s
3	Andre Lotterer (D) Neel Jani (CH) Nick Tandy (GB)	Porsche LMP Team	Porsche 919 Hybrid	LMP1	+2.272s
4	Earl Bamber (NZ) Timo Bernhard (D) Brendon Hartley (NZ)	Porsche LMP Team	Porsche 919 Hybrid	LMP1	-1 lap
5	Bruno Senna (BR) Nicolas Prost (F) Julien Canal (F)*	Vaillante Rebellion	ORECA-Gibson 07	LMP2	-3 laps
6	Nicolas Lapierre (F) Andre Negrozo (BR) Gustavo Menezes (USA)*	Signatech Alpine Matmut	ORECA-Gibson 07	LMP2	-3 laps
7	Oliver Jarvis (GB) Ho-Pin Tung (PRC) Thomas Laurent (F)*	Jackie Chan DC Racing (Jota)	ORECA-Gibson 07	LMP2	-3 laps
8	Francois Perrodo (F) Matthieu Vaxiviere (F) Emmanuel Collard (F)	TDS Racing	ORECA-Gibson 07	LMP2	-3 laps
9	Ben Hanley (GB) Jean-Eric Vergne (F) Matt Rao (GB)*	CEFC Manor TRS Racing	ORECA-Gibson 07	LMP2	-3 laps
10	James Rossiter (GB) Roman Rusinov (RUS) Pierre Thiriet (F)	G-Drive Racing (TDS)	ORECA-Gibson 07	LMP2	-3 laps
11	Alessandro Pier Guidi (I) James Calado (GB)	AF Corse	Ferrari 488 GTE	GTE Pro	-4 laps
12	Richard Lietz (A) Frederic Makowiecki (F)	Porsche GT Team	Porsche 911 RSR	GTE Pro	-4 laps
13	Simon Trummer (CH) Vitaly Petrov (RUS) Roberto Gonzalez (MEX)*	CEFC Manor TRS Racing	ORECA-Gibson 07	LMP2	-4 laps
14	Michael Christensen (DK) Kevin Estre (F)	Porsche GT Team	Porsche 911 RSR	GTE Pro	-4 laps
15	Stefan Mucke (D) Olivier Pla (F)	Ford Chip Ganassi Team UK	Ford GT	GTE Pro	-4 laps
16	Sam Bird (GB) Davide Rigon (I)	AF Corse	Ferrari 488 GTE	GTE Pro	-4 laps
17	Jonny Adam (GB) Darren Turner (GB)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Pro	-4 laps
18	Marco Sorensen (DK) Nicki Thiim (DK)	Aston Martin Racing (Prodrive)	Aston Martin Vantage GTE	GTE Pro	-5 laps
19	Francesco Castellacci (I) Thomas Flohr (CH) Miguel Molina (E)	Spirit of Race (AF Corse)	Ferrari 488 GTE	GTE Am	-6 laps
20	Keita Sawa (J) Mok Weng Sun (MAL) Matt Griffin (IRL)	Clearwater Racing	Ferrari 488 GTE	GTE Am	-6 laps
21	Christian Ried (D) Marvin Dienst (D) Matteo Cairoli (I)*	Dempsey-Proton Racing	Porsche 911 RSR	GTE Am	-6 laps
22	Mike Hedlund (USA) Nick Foster (AUS) Ben Barker (GB)*	Gulf Racing	Porsche 911 RSR	GTE Am	-7 laps
23	Mathias Lauda (A) Paul Dalla Lana (CDN) Pedro Lamy (P)	Aston Martin Racing	Aston Martin Vantage GTE	GTE Am	-8 laps
24	Harry Tincknell (GB) Andy Priaulx (GB)	Ford Chip Ganassi Team UK	Ford GT	GTE Pro	-17 laps
R	Nelson Piquet Jr (BR) Mathias Beche (CH) David Heinemeier Hansson (DK)*	Vaillante Rebellion	ORECA-Gibson 07	LMP2	85 laps-excluded
R	Alex Brundle (GB) David Cheng (USA)* Tristan Gommendy (F)*	Jackie Chan DC Racing (Jota)	ORECA-Gibson 07	LMP2	52 laps-electrics

In each car, first-named driver started race. \*Did not drive in race.

**Winner's average speed** 72.582mph.

**Fastest lap** Bamber 1m37.702s, 104.472mph.

**LMP2** Lapierre 1m45.588s, 96.669mph. **GTE Pro** Lietz 1m48.313s, 94.237mph. **GTE Am** Castellacci 1m51.069s, 91.899mph.

**QUALIFYING**

**1** Hartley/Bamber 1m35.160s; **2** Tandy/Lotterer 1m35.231s; **3** Nakajima/Buemi 1m35.355s; **4** Kobayashi/Lopez 1m36.630s; **5** Piquet/Heinemeier Hansson 1m44.196s; **6** Senna/Canal 1m44.925s; **7** Tung/Laurent 1m45.078s; **8** Negrozo/Lapierre 1m45.927s; **9** Brundle/Cheng 1m46.109s; **10** Rossiter/Thiriet 1m46.205s; **11** Petrov/Gonzalez 1m47.354s; **12** Rao/Vergne 1m47.411s; **13** Makowiecki/Lietz 1m47.577s; **14** Perrodo/Vaxiviere 1m47.989s; **15** Tincknell/Priaulx 1m48.018s; **16** Mucke/Pla 1m48.139s; **17** Bird/Rigon 1m48.195s; **18** Estre/Christensen 1m48.265s; **19** Sorensen/Thiim 1m48.578s; **20** Calado/Pier Guidi 1m48.702s; **21** Adam/Turner 1m49.125s; **22** Griffin/Mok 1m49.408s; **23** Cairoli/Ried 1m49.734s; **24** Lamy/Dalla Lana 1m49.784s; **25** Barker/Hedlund 1m49.866s; **26** Castellacci/Flohr 1m50.797s. **Fastest in each class** **LMP1** Tandy 1m35.068s; **LMP2** Piquet 1m43.330s; **GTE Pro** Makowiecki 1m47.573s; **GTE Am** Cairoli 1m48.557s.

**CHAMPIONSHIP**

**LMP drivers** **1** Hartley/Bamber/Bernhard **172**; **2** Nakajima/Buemi 133; **3** Davidson 118; **4** Lotterer/Jani/Tandy 98; **5** Conway/Kobayashi 78.5; **6** Jarvis/Laurent/Tung 70.5.

**LMP manufacturers** **1** Porsche **270**; **2** Toyota 211.5.

**LMP2 drivers** **1** Tung/Laurent/Jarvis **145**; **2** Senna/Canal 135; **3** Menezes 120; **4** Prost 117.

**GTE drivers** **1** Pier Guidi/Calado **120**; **2** Makowiecki/Lietz 115; **3** Rigon 105.5; **4** Bird 105; **5** Priaulx/Tincknell 102.5; **6** Sorensen/Thiim 87.

**GTE manufacturers** **1** Ferrari **238**; **2** Porsche **191**; **3** Aston Martin 176; **4** Ford 175.5.

**GTE Am drivers** **1** Dienst/Cairoli/Ried **141**; **2** Dalla Lana/Lamy/Lauda 140; **3** Mok/Sawa/Griffin 135; **4** Castellacci/Flohr 94.



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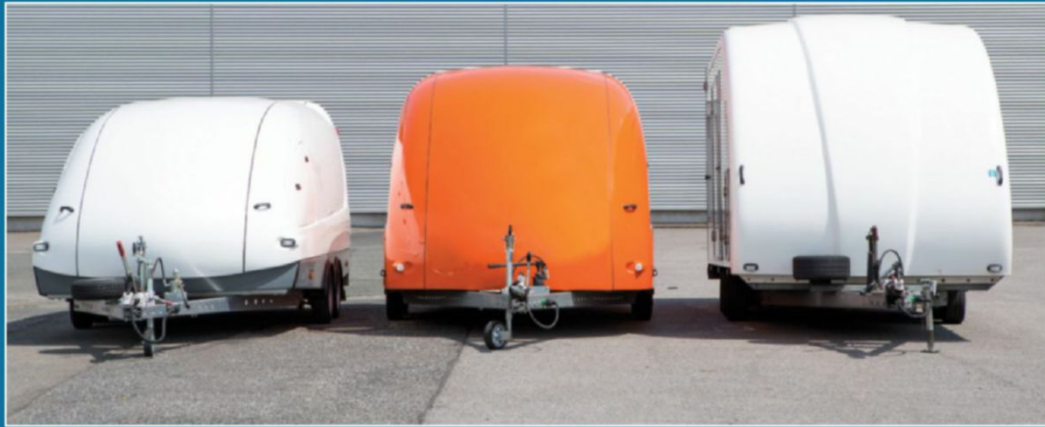
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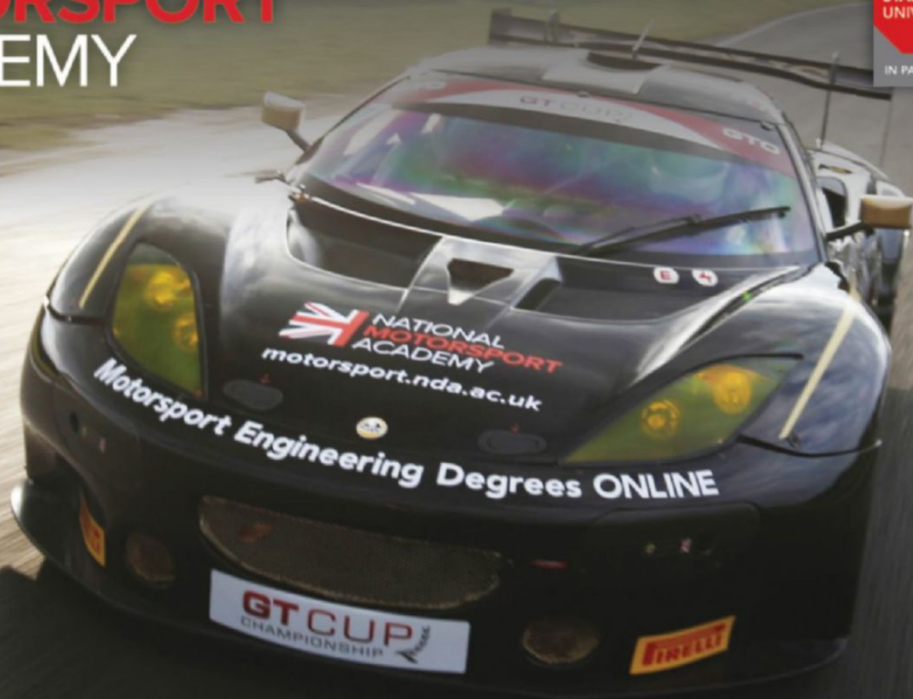
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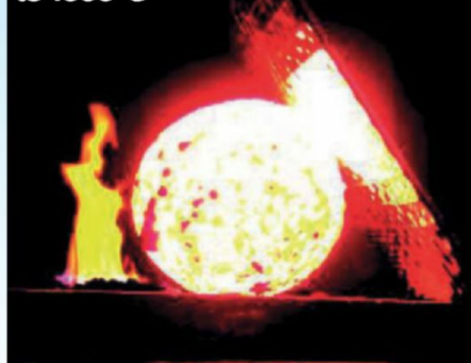
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## HR101017 – COMPOSITE LAMINATORS

### About Us

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- A good understanding of the unique challenges in running a competitive F1 Aerodynamics department
- Experience of effective management of engineering design and / or manufacturing groups and the ability to demonstrate strong leadership
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Whilst experience in an identical role is not a requirement, you should be able to demonstrate expertise in a similar area and the ability to grow into this important role in our team.

CLOSING DATE FOR APPLICATIONS – SUNDAY 29<sup>TH</sup> OCTOBER 2017







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BRDC BRITISH F3 AND BRITISH F4

## British F3 and F4 Winter Series cancelled

THE PROPOSED JOINT BRDC BRITISH Formula 3 and British Formula 4 Winter Series at the Algarve Circuit has been shelved owing to licensing issues with British F4, Autosport has learned.

The organisers of British F4 told teams last week that the Portuguese event could not happen. A statement sent to participants read: "The MSA [British motorsport's governing body] have reviewed the proposal and informed us that no 15-year-olds may take part in an overseas event such as this outside the F4 championship. Without 15-year-olds, we do not believe that the Winter Series is viable for any of us to do."

Drivers in some other countries are allowed to compete in foreign events under the age of 16, but the MSA blue book states that drivers cannot compete in an event that isn't part of a championship. The event as a whole could go ahead, but British drivers

under 16 would be unable to compete.

Oscar Piastri (Australia) and Logan Sargeant (USA), who were second and third in this year's British F4 standings, competed successfully last winter in the United Arab Emirates F4 Championship as 15-year-olds because no such rules apply in their respective ASNs.

Carlin team boss Trevor Carlin, who along with Fortec Motorsport and Double R Racing has teams in both British F3 and British F4, was furious about the development. "It's typical nonsensical bureaucracy getting in the way of motor racing," said Carlin, who had three drivers for each of the two series. "That's half a million quid that would have come in to the British motorsport industry."

An MSA spokesperson said: "This is a matter not only for the event promoter and the MSA but also the Portuguese ASN and the FIA. If the proposed event

The event was scheduled to take place at the Algarve Circuit, but ran into licensing issues

was to go ahead, the clear and established regulations mean that those MSA Competition Licence holders aged under 16 would not be able to compete. To clarify, the MSA's only involvement to date has been to highlight regulatory issues during informal discussions with the promoter of British F4."

Giles Butterfield of MotorSport Vision, organiser of BRDC F3, said that an F3 winter series could still go ahead, although it won't be at Algarve.

"The project only ever stacked up as a joint venture," said Butterfield. "The licensing frustrations that seem to have affected F4 also impact on us. It's disappointing and frustrating."

"We're going to see what the teams want to do and what there is an appetite for. The Portimao or overseas idea was a response to what the teams wanted. If there's an appetite for something else we'll consider it. It's too early to say yet."

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This year's champion Eastwood was the last Carrera Cup Junior

EBREY/LAT

PORSCHE CARRERA CUP GB

# Porsche Junior contenders revealed

THE FIVE FINALISTS IN WITH A CHANCE OF becoming the Porsche Carrera Cup GB Junior driver for the next two years have been selected.

The final five drivers in contention are Jamie Caroline, Dan Harper, George Gamble, Dean Macdonald and Esmee Hawkey.

Porsche received a record number of applications from drivers seeking to emulate Charlie Eastwood, who was selected in 2015 and this year won the Carrera Cup GB championship. The applicants were whittled down to 12, then after interviews five were picked to take part in assessments at Silverstone in November. The winner will receive £85,000 towards their budget each year over the next two seasons, and will benefit from a wide range of support from Porsche.

Three of the five have competed in other British Touring Car support categories this season.

Caroline, 18, broke a number of records on the way to the British Formula 4 crown, while Harper, 16, was a title contender in Ginetta Junior. Gamble, 21, won the 2014 Ginetta GT5 Challenge and was a race winner in the GT4 Supercup this year.

Macdonald, 16, raced a McLaren 570S in British GT4, while Hawkey, 19, completed a part-season in a Porsche Cayman GT4 Clubsport in the GT Cup after breaking her leg in the middle of the year.

"It's cool to be in the final and it would be good for my sponsors to stay on the TOCA package," said Caroline, who added that the chance to improve his training with staff from the Porsche Human Performance Centre would be a key benefit: "Who

wouldn't want to race for Porsche? It's been in motorsport for 60 or 70 years and it would be mega to have the title of a Porsche driver."

Harper added: "It's a privilege to be in the final. I never thought when I was a young boy living in Northern Ireland I would have the chance to show Porsche what I can do. It's a massive opportunity and I need to make the most of it."

Gamble, who returned to racing this season after two years on the sidelines, said his GT4 Ginetta experience should help.

"We've looked at the Porsche pyramid and what that involves, and it's proven in recent years it works and that appeals to me a lot," he said. "I see the Carrera Cup Junior programme as a way towards that."



MAZDA MX-5 SUPERCUP

## Mixed reaction to TCR support bill switch

NEWS THAT THE BRITISH RACING and Sports Car Club's Mazda MX-5 Supercup will join the TCR UK support package next year has drawn a mixed reaction from within the Mazda paddock.

Talk centred on the fact that the Supercup and its sister MX-5 championship for the Mk1 model – in which many Supercup competitors also compete – will now have to split.

Tom Roche, whose Blendini team runs cars in both series, questioned the logistical

implications of the move.

"It's twice the weekends away, it's twice the cost of everything," he told Autosport.

"It's going to make people and teams choose one or the other. The format [as it is] is great, having the three races every weekend, and everyone in the Mk1 and Mk3 series are friends.

"There's a lot of negatives to going on a big package. You're going to be first out in the morning and last out at night; you're going to be in the field

in the middle of nowhere in the paddock; and if a race is going to get cancelled, it's going to be yours."

Newly crowned Supercup champion Luke Herbert confirmed he plans to remain in the series, and welcomed the move.

"It will be a good step up for the Mk3s," he said. "We've proven we've got a good championship, good drivers and competitive cars.

"It'll provide some exciting racing and it will be a stepping stone to TCR. I think it will attract people for next year."





Harper-Ellam beat 49 other contenders

READ

**RADICAL SR1 CUP**

# Harper-Ellam wins Radical prize

EX-FORMULA JEDI RACER RYAN HARPER-Ellam will compete in next year's Radical SR1 Cup free of charge after being named as the winner of the firm's inaugural SR1 Shootout contest.

The 19-year old from Brackley will get to handle one of the Generation 2 SR1 cars, run by the factory team, for the full campaign. His prize is worth over £45,000.

Harper-Ellam had been a frontrunner in the Formula Jedi class in his second season

in 2015, but was forced out by an engine failure. Budget constraints kept him on the sidelines this season.

Harper-Ellam beat 49 other finalists in a two-day assessment at Rockingham last week to land the prize. Drivers were tested over a range of tasks, including simulator, fitness, media, skid pan and timed laps by a panel of judges, including Radical's Alex Mortimer and driver coach Bradley Ellis.

**IN BRIEF**



WALKER

**OULTON CURFEW PETITION REJECTED**

Owners of the Oulton Park Circuit (above) have quashed a petition by marshals calling for a later curfew. The document asked for four late running days including a 24-hour race, but circuit owner MotorSport Vision says it has no interest in running events after 1830.

**PEN RIGHTS THE WRONGS FOR JORDAN**

Mike Jordan's hands-on skills proved useful in the HRDC Touring Greats at Donington Park last Sunday when he repaired his car with a pen. The self-built Austin GT40 Speedwell he shares with son Andrew lost power on the second lap and forced Jordan to pull over. A pen borrowed from a marshal and a wedge of paper allowed Jordan to fix the problem, albeit at the loss of three laps. His son went on to set the fastest lap as the car finished 22nd.

**COMBE GT DRIVER HALL ESCAPES ROLL**

Castle Combe GT regular Steve Hall was sent to hospital after a spectacular roll last weekend in his Audi TT Silhouette. Hall was racing with Tony Bennett when a touch with a backmarker put Bennett into contact with Hall on the exit of Old Paddock. Hall's car then dug into the grass and rolled. Medical crews attended and Hall was taken to hospital by ambulance for precautionary checks, although it is believed he escaped with bruising.

**RATTENBURY'S DOUBLE PLAN THWARTED**

Jake Rattenbury came close to winning two titles in one day on Saturday. Rattenbury sealed the GT Cup GTC title at Donington Park before flying by helicopter to Oulton Park to race in the Fun Cup. His team were in contention, but a fourth-place finish wasn't enough to clinch the title.

**MOTORBASE BUYS VW GOLF TCR CARS**

Motorbase Performance has taken delivery of two TCR machines and is evaluating programmes for next season. The team, which runs in British Touring Cars and has previously won the British GT Championship, has bought two VW Golf GTI TCR cars (below) and began testing when Michael Caine shook them down at Brands Hatch earlier this week. Team boss David Bartrum said that he would now consider where to field the cars in 2018.



**RENAULT UK CLIO CUP JUNIOR**

# Dyrdal to race in Clio Cup Junior finale

JUNIOR SALOON CAR champion Will Dyrdal will contest the final round of the Renault UK Clio Cup Junior series next month.

Dyrdal will compete in the

November 18-19 Brands Hatch event with the Westbourne team as it enters the category for the first time.

"It's going to be really exciting," said Dyrdal. "Friday

practice is going to be the first time in the car. After winning the [JSCC] championship at Brands Hatch, Richard [Colburn, team boss] from Westbourne offered me a drive in the last round of the Clios.

"It's great to have the team's faith to trust me in their car. I'll be thrown in at the deep end - a left-hand-drive car is totally different."

Dyrdal says the experience will be useful ahead of a possible move into the senior Clio series next year, if he can secure the sponsorship.

He will also have a test in a Pickup truck at Rockingham next month as part of his prize for winning the JSCC crown.



Dyrdal won the Junior Saloon Car title last month

WALKER

**BRITISH FORMULA 4**

# Doohan completes Arden F4 test

THE SON OF MOTORCYCLE RACING LEGEND Mick Doohan has had his first test in a British Formula 4 car as he gears up for his first season in car racing in 2018 as a Red Bull junior.

Karting graduate Jack Doohan, who will not celebrate his 15th birthday until January, tested at Snetterton last week with the Arden team with which he will race.

Doohan is mentored by Dave Boyce, a long-time guru of the karting and junior single-seater scenes.

"I think Jack will be good," said Boyce. "It depends on who stays in British F4 but, judging by his pace and how quickly he's developed, he can do a good job. It's all about him getting the mileage in at the moment and not going off."

Doohan, who will be joined by fellow Red Bull junior Dennis Hauger at Arden, said: "To drive for a team as respected and successful as Arden is something I could have only dreamed of at the start of 2017 when I arrived in Europe."



Spa pilot race attracted a 21-car entry

J. BLOXHAM

**FORMULA FORD**

## PROTESTS OVER COMBE TRACK-LIMIT PENALTIES

LEADING FIGURES FROM the Castle Combe Formula Ford Championship took part in a protest before the traditional end-of-season Carnival event on Saturday, after the championship-deciding race was blighted by track-limits penalties.

The top four on the road – Michael Moyers, Luke Cooper, Roger Orgee and Michael Eastwell – were all hit with time penalties for exceeding track limits. Officials then declared fifth-placed finisher Nathan Ward the actual race winner. The result cost Moyers victory, and with it second place in the Castle Combe championship.

In response, several drivers undid their seat belts and stood beside their cars on the dummy grid for the Carnival as a protest.

“The track limits have been a complete joke,” said Moyers. “Some people are being done, others aren’t. We want changes to be made.”

Moyers’s team boss Kevin Mills added: “They [Castle Combe] have brought in a new clerk of the course for the last round of the championship when there are championship positions to be finalised.”

Responding to the protest, club director Steve Weston said: “As a club we will have a debrief on this event and the season as a whole, and then we can make a proper assessment and comment.”

**MASTERS ENDURANCE LEGENDS**

# New ‘historic’ LMP and GT series to Silverstone Classic

THE NEW MASTERS ENDURANCE LEGENDS SERIES will support the Silverstone Classic with a twilight race in 2018, while Autosport understands that the series could also visit Brands Hatch.

For the Silverstone Classic, due to be held across July 20-22, sports-prototypes and GT cars from as recently as 1995-2011 featured in the series will take the prime race slot previously allocated to Group C cars of the 1980s. Only 13 cars turned out for the Group C event last time, and the Le Mans Classic, which takes place two weeks earlier, made an increased entry in 2018 unlikely.

“It’s a really exciting new addition, providing a new dimension and new era, thus further broadening what we celebrate at the Classic,” said event promoter Nick Wigley.

“The LMP cars look absolutely phenomenal and are very different to everything else we have on track.”

The Masters Endurance Legends series had a

successful pilot race supporting the Spa 6 Hours in September, attracting a varied 21-car entry.

“The Silverstone Classic is a fantastic event, full of beautiful cars and so well organised, so to have a slot there and in the twilight is just perfect,” said series director Nicolas Minassian, a runner-up at Le Mans himself in 2008. “It will reflect endurance racing at its best. This is a great first date for us at Masters Endurance Legends.”

The Silverstone race is the first 2018 date of an expected five-event calendar, the other specifics of which are yet to be confirmed. It’s likely two will be 30-minute races, while the others are expected to run to 45.

While the Silverstone Classic is the first to be confirmed, the series is also expected to visit the Grand Prix Masters meeting at Brands Hatch, and a return to Spa is also likely to form part of the billing.

**FORMULA FORD 1600**

## Williams: Festival is mine to lose

BRITISH RACING AND SPORTS Car Club Formula Ford 1600 National champion Luke Williams believes the Formula Ford Festival at Brands Hatch is his to lose this weekend.

Williams stormed to the National crown aboard his Firman RFR16 this year after taking seven wins, and goes into the prestigious event as one of the favourites. “I think

the Festival is more important [than the national title], it’s a big event to win,” said Williams, who took two wins at Brands Hatch at the beginning of the year. “If it’s dry it’s going to be mine to lose. In those conditions we have the pace.”

Also in action during the weekend at Brands Hatch will be the Historic Formula Ford Festival as well as Formula

Ford Masters, which will be dubbed the Masters 50th anniversary race to celebrate 50 years since Formula Ford racing began on the very same circuit.

The BMW Compact Cup, BRSCC Porsche Championship, Irish Supercars and Sports 2000 Championship are the other categories that will be in action over the weekend.



BOURNE





# Silverstone showdown to split HFF's top trio

By Marcus Pye, the voice of club racing

[@autosport](#)

**AT THE CLIMAX OF A SENSATIONAL 50TH ANNIVERSARY** season for Formula Ford's earliest cars, the top three competitors from a Pre-'72 set of unprecedented depth will slug it out for the title over two races on Sunday at this weekend's Historic Sports Car Club championship finals event at Silverstone. At least 90 drivers will have taken part over 14 races at eight meetings in the final reckoning, making HFF the best-supported discipline on the domestic calendar.

The fight is between Michael O'Brien, Richard Tarling and Callum Grant, who between them have won 10 of the 12 points races to date. Having scored in every round – and not finished lower than fourth – O'Brien has most points on the board, 225, but that very consistency hurts him most as each combatant is obliged to discard two scores. The Speedsport Merlyn pilot must drop two 14s, whereas rivals Tarling and Grant failed to finish Croft's second race, thus discount a zero and eight points (for an eighth place) apiece.

Tarling, 38, has enjoyed a phenomenal first tilt at HFF gold. The 1999 Formula Palmer Audi champion has won six times – the last twice at Snetterton, by tiny margins – in his Jamun and notionally leads by five points if his two worst scores are subtracted now. Ironically, his eight came at Cadwell Park when, chasing overheating issues, he switched to Peter Alexander's Macon. In endeavouring to stay out front, and reinvigorate the fortunes of a marque that last won the title in Darren Burke's 2010 'yellow-wash', it almost backfired when the chassis cracked, yet Tarling refocused and bounced back. He's won four on the trot now in the David Morgan-tended T2, thus confidence runs high.

For reigning champion Grant, also top dog in 2012, the odds are longer. The Boltonian is the only competitor beside Tarling to have won multiple rounds, although his total of three (from the first four), in the faithful Merlyn prepared at dad Nigel's garage in Manchester's Swinton district, is matched over the year by O'Brien if you tally the non-championship feature races at the Silverstone Classic in July.

While there are dozens of permutations, two wins this weekend would take Tarling's net score (after deductions) to 252, O'Brien's to 247 and Grant's 243. But, with 25 points for a win and 20 for second, should O'Brien win on Saturday with Tarling second, the pair would go into Sunday's decider on 222 each minus stoppages. This is a possibility they are all aware of. The difference in that scenario would be that O'Brien could only add points with a top-three finish to erase his remaining 14, with Tarling needing a top-seven place to trump him. A tasty battle awaits.

Behind them is 2013 champ Sam Mitchell, winner of the first Brands Hatch round of FF's birthday celebrations (part-season player Cameron Jackson, who struck anniversary gold the following day, is back this weekend in a Neil Fowler Motorsport Lola). Mitchell can keep whatever he scores having missed Snetterton, although fellow Merlyn racers Benn Tilley and, mathematically, Max Bartell could overhaul him for fourth.

With an intriguing Canadian import March 709 set to make the 'evo' model's UK debut and take the year's marque roster to 22, Historic Formula Ford is booming, and aspirational as one of the last bastions of affordable and essentially amateur single-seater racing. 🏁



## COVE TO DEBUT DRYBROUGH'S MARCH THIS WEEKEND

Dental surgeons Ross Drybrough and Tony Cove will go head to head in Historic Formula Fords at Silverstone this weekend as March's unusual US-market 709 model (pictured) makes its UK racing debut close to its original Bicester birthplace.

"Tony lives in Canada, but we've been friends since dental school," explained Scottish implant specialist Drybrough.

"He's been racing Formula Fords out there and in the USA for more than a decade; I caught the FFord bug when I visited in 2014, then won my class at last year's VARAC Mosport event in Tony's Canadian-built Ferret.

"Tony spotted an advert for 709-1 there, thus I became the proud owner of one of just two. I've spoken to Wayne Mitchell, who imported it to California [in 1970], recommissioned the chassis, rebuilt the gearbox, fitted a new Neil Bold engine and tested it.

"Tony will debut the March in the HSCC championship finals; I'm in my regular Merlyn [Mk20AS]."

**DONINGTON PARK**  
BRSCC OCTOBER 14-15

# Herbert champion as Roche loses out

LUKE HERBERT DUG DEEP TO SECURE the Mazda MX-5 Supercup title in the second race at Donington last weekend. Having finished behind Jack Harding in race one, Herbert just needed to track championship rival Tom Roche to clinch the crown with a race to spare.

As Harding led again, Liam Murphy and Jon Greensmith pressured Herbert, and when Greensmith passed at Coppice it allowed a whole train – including Roche – to follow through. Herbert dropped to seventh, but kept his cool as Roche backed the pack up in a bid to encourage more cars between the pair. When the chequered flag was shown a lap early, they were only split by Ben Short, which left Herbert the champion and Roche falling agonisingly short for the second year running.

Harding completed a dominant hat-trick in race three, winning by six seconds from Murphy and Greensmith, as Herbert cruised to sixth.

Form driver Josh Gollin celebrated his own hat-trick in the Fiestas, taking the opening race with a sublime move from third to first. Jamie Going passed leader Simon Horrobin into Roberts and checked his momentum, allowing Gollin to pull alongside. Realising Going was also in range as he braked late to complete the move, Gollin switched to the inside and slithered past into Redgate.

Going pressured Gollin throughout race two, while race three was twice red-flagged. The first, for a crash that left Lee Dendy-Sadler's car on its side, was a reprieve for Gollin, who had himself spun on oil at the Old Hairpin. Gollin won the

complete restart from his brother Nat, who benefited from a clash between Going and Horrobin. Nathan Edwards completed the podium after an engine blow-up for Class C champion David Nye brought an early halt.

Class D runner Jamie White overcame a multitude of problems – including brake trouble and a water leak that required an engine change – to keep his nose clean and clinch the overall title with two thirds and a fourth in class.

For Oliver Allwood, wins proved to be like London buses in the MX-5 Mk1 races. He'd been waiting for one since October last year, then two came along at once. Each time Allwood beat Sam Smith into second, taking the first comfortably after breaking clear of the chasing pack, then thankful for a red flag relieving the pressure in race two.

Josh Jackson and Mike Comber joined the pair in a race-three breakaway. Smith hit the front on the penultimate lap, only for both him and Allwood to run wide on fluid at Redgate on the final tour. Jackson seized the win by cutting



Bourke was crowned Alfa champion despite an eventful weekend in a borrowed car



underneath from a wider entry.

Long-time series points leader Will Blackwell-Chambers did enough to secure the championship crown with top-six finishes in the opening two races, then carved his way to 11th from a pitlane start – to avoid first-corner trouble – in the third. B-race victories went to Simon Woods, Paul Tucker and Paul Maguire.

The Alfa Romeo title was settled in Andrew Bourke's favour when Tom Hill tried an ambitious move inside Simon Cresswell and Dave Messenger at McLeans in the second race. All three went into the gravel, and Hill and Cresswell were stuck there. Outgoing champion Hill and Bourke had both battled dramas in race one. Hill lost fourth gear, limping home eighth in class, while Bourke – in a borrowed car after a big accident at Mallory Park – made contact with backmarker Vince Proto's Fiat Punto at the Old Hairpin on the final lap, picking up a puncture and dropping to fifth in class. At the head of the field, Barry McMahon powered to

## RESULTS

### MAZDA MX-5 SUPERCUP (15 LAPS) 1 Jack

**Harding;** 2 Luke Herbert +2.248s; 3 Tom Roche; 4 Ben Short; 5 James Blake-Baldwin; 6 Jon Greensmith. **Fastest lap** Richard Breland 1m21.995s (86.89mph). **Pole** Harding.

### Starters 36. RACE 2 (14 LAPS) 1 Harding;

2 Liam Murphy +2.523s; 3 Greensmith; 4 Blake-Baldwin; 5 Roche; 6 Short. **FL** Murphy 1m21.775s (87.12mph). **P** Harding. **S** 36.

### RACE 3 (15 LAPS) 1 Harding;

2 Murphy +6.149s; 3 Greensmith; 4 Roche; 5 Blake-Baldwin; 6 Herbert. **FL** Breland 1m22.522s (86.33mph). **P** Harding. **S** 36.

### FIESTAS (15 LAPS) 1 Josh Gollin (ST);

2 Jamie Going (ST) +0.012s; 3 Simon Horrobin (ST); 4 Lee Dendy-Sadler (ST); 5 Lewis Kent (ST); 6 Josh Watkins (ST). **Class winners** Dan Rose (Zetec S); Mark Court (Si); Derek Robinson (Zetec).

**FL** Going 1m22.682s (86.16mph). **P** Dendy-Sadler. **S** 32. **RACE 2 (15 LAPS) 1 J Gollin;** 2 Going +0.710s; 3 Horrobin; 4 Dendy-Sadler; 5 David Nye (ST); 6 Kent. **CW** John Cooper (Zetec S); Court; Robinson. **FL** Going 1m22.819s (86.02mph). **P** J Gollin. **S** 32.

**RACE 3 (5 LAPS) 1 J Gollin;** 2 Nat Gollin (ST) +5.856s; 3 Nathan Edwards (ST); 4 Kent; 5 Nick Sanderson (ST); 6 Watkins. **CW** Rose; Court; Robinson. **FL** J Gollin 1m23.058s (85.77mph). **P** J Gollin. **S** 30.

### MAZDA MX-5 CHAMPIONSHIP – GROUP A (11 LAPS) 1 Oliver Allwood;

2 Sam Smith +5.952s; 3 James Harris; 4 Josh Jackson; 5 Brian Trott; 6 Will Blackwell-Chambers. **FL** Allwood 1m25.579s (83.25mph). **P** Allwood. **S** 35.

**RACE 2 (10 LAPS) 1 Allwood;** 2 Smith +0.647s; 3 Jackson; 4 Blackwell-Chambers; 5 Martin Tolley; 6 Charlie Burge. **FL** Harris 1m25.041s (83.77mph). **P** Allwood. **S** 31. **RACE 3 (14 LAPS)**

**1 Jackson;** 2 Allwood +0.298s; 3 Smith; 4 Mike Comber; 5 Patrick Lay; 6 Tolley. **FL** Comber 1m25.357s (83.46mph). **P** Allwood. **S** 30.

**GROUP B (14 LAPS) 1 Simon Woods;** 2 Matt Pickford +0.291s; 3 Adrian Burge; 4 Michael Fisk; 5 Anthony Hutchins; 6 Russ Lindsay. **FL** Jack Warry 1m27.440s (81.48mph). **P** Woods. **S** 35.

**RACE 2 (14 LAPS) 1 Paul Tucker;** 2 William Stephenson +4.619s; 3 Andrew Caird; 4 Lindsay; 5 Jason Taylor; 6 Nick le Doyen. **FL** Stephenson 1m27.087s (81.81mph). **P** Tucker. **S** 33.

**RACE 3 (12 LAPS) 1 Paul Maguire;** 2 Michael Close +1.384s; 3 Warry; 4 Christopher Stapleton; 5 Jon Pethick; 6 Stuart Brittle. **FL** Stephen Foden 1m26.607s (82.26mph). **P** Maguire. **S** 28.

**ALFA ROMEOS (16 LAPS) 1 Barry McMahon (156);** 2 Graham Seager (GTV) +9.301s; 3 Roger McMahon (156); 4 Paul Webster (156 GTA); 5 Ron Davidson (164); 6 Chris McFie (Fiat Punto). **CW** Webster; McFie; Andy Hancock (156).

**FL** B McMahon 1m14.773s (95.28mph).

### P B McMahon. S 19. RACE 2 (12 LAPS)

**1 B McMahon;** 2 R McMahon +18.250s; 3 Seager; 4 Webster; 5 McFie; 6 Davidson. **CW** Webster; McFie; Hancock. **FL** B McMahon 1m16.943s (92.59mph). **P** B McMahon. **S** 17.

### FIESTA JUNIORS (14 LAPS) 1 Nick Reeve;

2 Jack Davidson +0.787s; 3 Matthew Greenwood; 4 Jamie-Lea Hawley; 5 James Waite; 6 Josh Steed. **FL** Reeve 1m25.557s (83.27mph).

### P Josh Hislop. S 12. RACE 2 (9 LAPS) 1 Reeve;

2 Davidson +0.997s; 3 James Hillery; 4 Scott Cansdale; 5 Steed; 6 Magnus Kriklywi.

### FL Reeve 1m24.212s (84.60mph). P Reeve. S 9.

### HRDC COOMBS HERITAGE (20 LAPS) 1 John

**Young (Jaguar Mk1);** 2 Richard Dorlin (Jaguar Mk2) +36.037s; 3 Tom Barclay (Jaguar Mk1); 4 Tom Lenthal (Jaguar Mk1); 5 Guy Harman (Jaguar Mk1); 6 Graham Love (Jaguar Mk7). **CW** Dorlin. **FL** Young 1m28.048s (80.91mph).



Harding (43) leads the field at Donington on his way to a perfect weekend



WALKER

double success in his 156, with brother Roger and Graham Seager (GTV) sharing the other podium places.

A tail-happy Nick Reeve won both Fiesta Junior races but it wasn't enough to prevent Jack Davidson lifting the title. The Scot's cautious approach yielded two second places, while Matthew Greenwood scored a maiden podium in the opener.

John Young claimed two victories in the HRDC races in his Jaguar Mk1. He scythed through the Coombs Heritage field from a pitlane start caused by a late oil-cooler change, profiting when early pacesetters Grant Williams and Richard Butterfield were forced to retire their Jags by a loose wheel and an oil leak respectively.

Young then took a convincing win in the Touring Greats, followed home by Chrissy Palmer's Austin A40. Peter Chambers eased his Lotus Cortina to victory in the Allstars race after early challenger Charles Rainford pitted his Marcos for an oil-pressure check.

MARK PAULSON

P Young. S 14.

**HRDC TOURING GREATS (30 LAPS) 1 John Young (Jaguar Mk1);** 2 Chrissy Palmer (Austin A40 Speedwell) +46.716s; 3 James Colburn/Adam Morgan (Austin A35 Speedwell); 4 Nick Naismith/Harry Naismith (Austin A95 Westminster); 5 Tom Lenthal/Dan Turner (Jaguar Mk1); 6 John Yea/Chris Ryan (Austin A40 Speedwell).

**CW** Palmer; Marc Gordon (Lotus Elite); Frank Slevin/Paul Mullin (Alfa Romeo Giulia Ti); Ding Boston (Riley 1.5 OUMF); Nick Powell (Austin A35 Academy).

**FL** Andrew Jordan (Austin GT40 Speedwell) 1m27.244s (81.66mph). P Young. S 33.

**HRDC ALLSTARS (18 LAPS) 1 Peter Chambers (Ford Lotus Cortina Mk1);** 2 Larry Tucker (Ford Shelby Mustang 350R) +29.021s; 3 Chris Clarkson (Ford Falcon Sprint); 4 Frank Slevin (Ford Falcon Sprint); 5 Nick Paddy (Mini Cooper S); 6 James Dorlin (Morris Mini Cooper S). **CW** Tucker; Paddy; Nick Powell (Austin A35 Academy). **FL** Chambers 1m26.229s (82.62mph).

P Chambers. S 36.

## SILVERSTONE BRSCC OCTOBER 14-15

# Evans victorious in last-lap title battle

A SEASON OF CLASSIC CATERHAM racing came to a close at Silverstone, where six drivers were crowned on track after some of the most memorable races on the International layout in recent memory.

The Supersport category was the closest, and the most thrilling, since three of the drivers on the grid were separated by only one point on dropped scores. Championship leader Timothy Dickens strengthened that lead with race-one victory after a long battle with title rivals Mike Evans and Henry Heaton. Although all three drivers led, the excitement came in the championship-deciding race, during which the lead changed up to twice a lap.

Whenever Evans led across the line, Dickens would pass him at Abbey, only to be demoted down the Hangar Straight. This brought Heaton and Ian Payne into play, and they ran one-two before Evans overtook both at once at Abbey again.

Entering the last lap it was a still a four-car battle, but ultimately it was Evans who triumphed, followed closely by Dickens, Payne and Heaton.

"Any of us three on that last lap could've won the championship," declared Supersport champion Evans. "I'm so lucky it was me. A gap opened up [at Abbey] and I just thought: 'Now or never. Do or die.'"

Peter Walters won his title in the first Roadsport race by beating Jay McCormack by the tiniest of margins. He had qualified a fraction ahead of the Irishman, who took revenge in the second race by 0.097 seconds.

The Seven 420R title battle was over before it had even begun, as Danny Winstanley opted against competing to avoid incurring penalty points. This left Lee Wiggins to take a double victory in his swansong BRSCC Caterhams weekend.

Another driver to tactically withdraw was Lee Bristow, who held off Chris Rankin in the first Seven 310R race and skipped the second, assuring himself the title. Rankin won the second race.

The Academy races epitomised friendly rivalry, where Daniel French won the Green Group championship, with James Murphy taking an overdue first win. Andy Morgan was White Group champion after a seventh-place finish, with Tom Grensinger the victor.

In the mixed-grid Academy Autumn Trophy, Tom Allen beat both Academy champions to win the first race. Graham Macdonald overcame Murphy in the second.

Rob Watts couldn't deny Russ Olivant the Seven 270R title despite two muted performances by Olivant, who was overly cautious on his way to 10th place in the first race. That left him needing to finish at least seventh in the second encounter to become champion if Watts won it.

Watts took the lead, while Olivant spun his way down to 15th. Andrew Perry was too fast for Watts, though, then race-one winner Alex Jordan came through to demote Watts to third. Olivant sealed the title in 11th.

In non-Caterham racing, Mike Jenvey ended the first OSS race early after his engine blew up. Replacing it with a newly built motor enabled him to win the last race and secure the championship.

Simon Hill and Paul Blackburn (both VW Golf GTI Mk5) were victorious in the two Production GTI encounters, while Chris Webb was crowned Mk2 champion.

Renault Clio drivers Nick Gwinnett and Tony Hunter won the two Track Attack Autumn Trophy races.

ELLIOT WOOD

➔ P75 FULL RESULTS



Champ Evans leads Dickens in Supersport thriller

READ



**CASTLE COMBE**  
CCRC OCTOBER 14

# Penalties, protests and red flags at Combe

JOSH FISHER ELECTED TO START at the back of the field for the championship-deciding Formula Ford contest at Castle Combe, as finishing the race would be sufficient to seal a second title to follow his 2008 crown.

That decision kept him clear of a titanic dice for the race lead between championship protagonist Michael Moyers, Luke Cooper, Michael Eastwell and reigning double champion Roger Orgee. Cooper had multiple attempts to steal the lead, but ultimately they were to no avail, while Orgee would successfully overthrow his Kevin Mills Racing team-mate Eastwell for third.

But it was fifth-placed finisher Nathan Ward (Spectrum) who was declared the winner after the top four were all hit with track-limits penalties. Orgee's Ray was ultimately elevated to second despite

a five-second penalty, while Moyers (Spectrum) fell to the bottom step of the rostrum with a 15s demotion, and Cooper (Swift) to fourth and Eastwell (Spectrum) to eighth with similar penalties.

As a result of the controversy, multiple drivers staged a standing protest on the dummy grid before the Formula Ford Carnival event. That race became a single-lap shootout after a late safety car was required when Stephen Masters exited the road at Tower. Moyers and Eastwell had led race-long and pulled out a sufficient gap on the restart to be untroubled as they crossed the line, Moyers winning the Carnival for the second time to add to his 2015 success.

Mark Sumpter was in prime position to take the Porsche Club GB Championship in the second race, having dominated the opener, before

**Fisher won Formula Ford title after starting from the back of the grid**

an uncharacteristic error – a spin to the infield at Quarry – on the seventh lap handed Craig Wilkins the race lead and Mark McAleer the championship advantage. Second for McAleer, with Sumpter only able to finish fifth, ensured that McAleer took the title 10 years after first winning the series. His son Jake took a pair of Class 2 successes and that division's 2017 crown in his Boxster.

The GT title fight was between Mitsubishi Lancer driver Bradley John in Class A and Ilsa Cox in her Class D SEAT Leon Cupra. Barry Squibb's Mitsubishi led from pole as John fought from sixth on the grid – he needed to win the race outright and his class to steal the crown. The race was red-flagged after eight laps following a spectacular roll for Steve Hall's Audi TT Silhouette at the exit of Old Paddock. As medical crews attended

## RESULTS

**FORMULA FORD (14 LAPS) 1 Nathan Ward (Spectrum 011c);** 2 Roger Orgee (Ray GR17) +4.208s; 3 Michael Moyers (Spectrum 011c); 4 Luke Cooper (Swift SC16); 5 David Vivian (Swift SC92); 6 Jason Cooper (Swift SC16). **Class winners** J Cooper; Paul Barnes (Swift SC92); Steve Bracegirdle (Van Diemen RF89). **Fastest lap** Moyers 1m10.554s (94.39mph). **Pole** Moyers. **Starters** 17.

**FORMULA FORD CARNIVAL (12 LAPS) 1 Moyers;** 2 Michael Eastwell (Spectrum) +0.470s; 3 Orgee; 4 L Cooper; 5 Vivian; 6 J Cooper. **CW** Barnes; Bracegirdle. **FL** Moyers 1m10.599s (94.33mph). **P** Moyers. **S** 15.

**PORSCHE CLUB (21 LAPS) 1 Mark Sumpter (996 C2);** 2 Craig Wilkins (996 C2) +2.090s; 3 Mark McAleer (996 C2); 4 Mike Price

(996 C2); 5 Peter Erceg (996 C2); 6 Richard Higgins (996 C2). **CW** Jake McAleer (Boxster). **FL** Wilkins 1m11.554s (93.07mph). **P** Sumpter. **S** 12. **RACE 2 (17 LAPS) 1 Wilkins;** 2 M McAleer +5.936s; 3 Peter Morris (996 C2); 4 Higgins; 5 Sumpter; 6 Price. **CW** J McAleer. **FL** M McAleer 1m11.533s (93.10mph). **P** Sumpter. **S** 12.

**GT (5 LAPS) 1 Dale Gent (Subaru Impreza);** 2 Bradley John (Mitsubishi Lancer) +5.674s; 3 Steve Putt (Mazda RX-7); 4 Tony Bennett (Caterham R300); 5 Ilsa Cox (SEAT Leon Cupra); 6 Bob Higgins (Ginetta G55). **CW** Cox; Lucky Khera (BMW M3). **FL** Gent 1m08.893s (96.67mph). **P** Barry Squibb (Mitsubishi Lancer E9). **S** 25.

**SALOONS (15 LAPS) 1 Gary Prebble (SEAT Leon Cupra);** 2 Will di Claudio (Peugeot 106 GTI) +1.009s; 3 Oliver Cook (Renault Megane);

4 Mark Wyatt (Vauxhall Astra); 5 Bill Brockbank (SEAT Ibiza); 6 Ayrton Anderson (Citroen Saxo). **CW** di Claudio; Wyatt; Michael Good (Vauxhall Corsa). **FL** Prebble 1m13.876s (90.15mph). **P** Prebble. **S** 27.

**HOT HATCH (14 LAPS) 1 Will di Claudio (Peugeot 106 GTI);** 2 Josh Harvey (Honda Civic) +10.366s; 3 Mark Wyatt (Vauxhall Astra); 4 Matthew Bawtree (Honda Integra); 5 Christopher Rawlings (Peugeot 106 GTI); 6 Tony Cooper (Peugeot 106 GTI). **CW** Harvey; Bawtree; Mark Sutton (MG ZR). **FL** Wyatt 1m14.540s (89.34mph). **P** Wyatt. **S** 19.

**MONOPOSTO (BOTH 14 LAPS) 1 Jeremy Timms (Dallara F301);** 2 Jason Timms (Dallara F301) +1.877s; 3 Neil Harrison (Dallara F302); 4 Dean Warren (Speads RM04); 5 Terry Clark (Formula Vauxhall Lotus); 6 Ewen Sergison (Swift SC99Z). **CW** Harrison; Warren; Clark;

Sergison; James Gordon-Colebrooke (Mygale); Will Cox (Van Diemen FVJ). **FL** Jeremy Timms 1m02.895s (105.89mph). **P** Jeremy Timms. **S** 21. **RACE 2 1 Jeremy Timms;** 2 Harrison +46.367s; 3 Sergison; 4 Chris Kite (Dallara); 5 Clark; 6 Gordon-Colebrooke. **CW** Harrison; Sergison; Clark; Gordon-Colebrooke; Dave Wheel (Jedi Mk4); Cox. **FL** Jeremy Timms 1m02.878s (105.91mph). **P** Jason Timms. **S** 19.

**SPORTS VS SALOONS (9 LAPS) 1 Dale Gent (Subaru Impreza);** 2 Tony Bennett (Caterham R300) +6.282s; 3 Steve Putt (Mazda RX-7); 4 Lucky Khera (BMW M3 E46); 5 Jamie Sturges (SEAT Leon Eurocup); 6 Richard Higgins (Ginetta G55). **CW** Josh Harvey (Honda Civic); Ian Knight (VW Golf); Michael Good (Vauxhall Corsa). **FL** Gent 1m10.033s (95.09mph). **P** Gent. **S** 21.





Ilsa Cox took the GT crown in a dramatic race

JONES



Sumpter missed out on title with race-two error

JONES

to Hall, who was taken to hospital for precautionary checks, Squibb was pushed off the circuit with head-gasket failure. This left Dale Gent clear on the restart to claim victory in his Subaru Impreza. While John reached the podium, he lost out to Cox, who finished fifth and top of her class. Cox adds the GT crown to her Saloons championship success from 1997.

SEAT driver Gary Prebble was powerless to stop Mitsubishi man Simon Thornton-Norris claiming back-to-back Saloons championships, despite securing pole position and the race win. Thornton-Norris fell from second to eighth on the last lap, the result of an error at Tower and 30s track-limits penalty.

Will di Claudio ended the first lap of the Hot Hatch finale with his Peugeot 106 a brilliant 3.5s ahead of Chris Southcott's 205. Craig Tomkinson claimed second position from Southcott with a forceful but fair move into Old Paddock in the early stages, but then suffered with transmission problems that forced his Vauxhall Nova out. Southcott then dropped out with a broken driveshaft. Josh Harvey (Honda Civic), winner at the August Bank Holiday meeting, was promoted to second, albeit over 10s behind, ahead of Mark Wyatt's Astra.

Jeremy Timms was unstoppable in his bike-engined F3 Dallara, taking a brace of Monoposto wins and beating his own lap record from 2015 in both races by more than 2.5s.

In the fading light, the final race of the Combe season was a Sports vs Saloons amalgamation. Dale Gent made his a perfect day, taking the victory to add to his earlier GTs success, as Lucky Khera was classified fourth but actually crossed the line backwards and ended his season in the startline barriers after losing control of his BMW M3.

LEE BONHAM

## OULTON PARK BRSCC OCTOBER 14

# Fun Cup Clutton for punishment

REIGNING CHAMPION JPR UVIO successfully held on to its Fun Cup title at the Oulton Park finale, with DespatchBay.com taking a sensational maiden series win in what was the highlight of the day in Cheshire.

JPR UVio was one of three teams in contention for the title, along with Track Torque 2Rent Dominos and Team Trooper Iron Maiden, but due to the series' random qualifying rules all three started towards the back of the grid.

All of the title hopefuls stayed clear of trouble and made steady progress towards the front, despite a stop-start opening hour punctuated with safety cars. At just over half distance, DespatchBay.com was beginning to build up a lead as the title protagonists traded places behind. Running fourth, JPR UVio gambled on the undercut and was first of the frontrunners to stop at two-thirds race distance. The move paid off as it soon moved up to second behind new leaders Team Trooper Iron Maiden.

DespatchBay.com faded badly as the final hour began and briefly dropped to fifth, but a car swap to put Marcus Clutton in for the final stint paid off, and it quickly regained time on the leaders.



DespatchBay scored first Fun Cup win

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### RESULTS

**FUN CUP (102 LAPS) 1 DespatchBay.com (Andy Bicknell/Marcus Clutton);** 2 JPR UVio (Graham Roberts/Farquini Deott) +1.057s; 3 Track Torque 2Rent Dominos (Henry Dawes/Chris Hart); 4 Team Trooper Iron Maiden (Paul Wighton/Harry Mailer/Jake Rattenbury/Anthony Reid); 5 Racelogic (Julian Thomas/David Denyer/Jon Tomlinson); 6 Track Focused (Sean Cooper/Michael McCollum/Neil Smith). **Fastest lap** Clutton 2m00.470s (80.44mph). **Pole** DespatchBay.com. **Starters** 30. **F1000 (10 LAPS) 1 Michael Watton;** 2 Dan Clowes +12.106s; 3 Robert Sayell; 4 Paul Butcher; 5 Adam

Walker; 6 Daniel Levy. **FL** Watton 1m36.466s (100.46mph). **P** Watton. **S 12. RACE 2 (9 LAPS) 1 Sayell;** 2 Clowes +0.145s; 3 Walker; 4 Levy; 5 Butcher; 6 Robert Bailey. **FL** Clowes 1m38.387s (98.50mph). **P** Bailey. **S 10. NORTHERN FORMULA FORD 1600 (9 LAPS) 1 Joshua Smith (Van Diemen JL13);** 2 Luciano Carvalho (Van Diemen RF05) +0.870s; 3 David McArthur (Van Diemen LA10); 4 Tom McArthur (Van Diemen LA10); 5 Rory Smith (Van Diemen JL15K); 6 Matthew Chisholm (Van Diemen RF00). **Class winners** Jaap Blijleven (Reynard 88FF); Will Pringle (Vector MG95); Bruce Evans (Reynard 84FF); Ian Wood (Royale RP33). **FL** T McArthur 1m49.749s (88.30mph). **P** Carvalho. **S 24.**

**RACE 2 (6 LAPS) 1 J Smith;** 2 D McArthur +0.343s; 3 T McArthur; 4 Carvalho; 5 R Smith; 6 Neil McArthur (Van Diemen LA10). **CW** Blijleven; Evans; George McDonald (Swift SC92F); Wood. **FL** D McArthur 1m50.690s (87.55mph). **P** J Smith. **S 24. XR CHALLENGE (BOTH 12 LAPS - FOSTERS CIRCUIT) 1 Justin Roberts (XR2);** 2 Greg Speight (XR2) +0.737s; 3 Mark Robinson (XR2); 4 Michael Blackburn (XR3i); 5 Mark Noble (Si); 6 Steve Poole (XR2). **CW** Blackburn; Noble. **FL** Blackburn 1m14.443s (79.98mph). **P** Robinson. **S 18. RACE 2 1 Speight;** 2 Robinson +0.496s; 3 Blackburn; 4 Roberts; 5 Poole; 6 Noble. **CW** Blackburn; Noble. **FL** Robinson 1m14.944s (79.45mph). **P** Roberts. **S 17.**

A frenetic sprint broke out in the closing stages, with the leading cars running four-wide on the pit straight and separated by just 0.234s with 12 minutes to go. DespatchBay.com regained the lead with just six laps remaining, leaving JPR UVio and Team Track Torque 2Rent Dominos to fight over second place.

A tense wheel-to-wheel battle ensued, but it was JPR UVio that clinched second place to win the championship, leading Team Track Torque 2Rent Dominos over the line by just a second.

It was also a day to remember for Michael Watton, who secured the F1000 crown with a dominant victory in race one. Watton's seven-race winning streak looked to be in danger when he was awarded a time penalty for a jumped start, but from there on his pace was red-hot and he took the flag 22s clear of Dan Clowes. There was joy for former champion Rob Sayell, who took a deserved race-two victory in his final F1000 outing. Sayell held off Clowes for the entire race, with just 0.145s separating them over the line. Newly crowned champion Watton was eliminated after a lap-one coming together with Paul Butcher.

Joshua Smith claimed an impressive brace of wins to finish the season as FF1600 Northern champion. Smith was frustrated not to take pole in his Van Diemen JL13, but made amends in the race with a narrow victory over title rival Luciano Carvalho (RF05). Tom McArthur caught the eye with a strong fourth place after a mechanical issue forced him to start from the back.

A lengthy safety-car period cut short the action in race two, but it was Smith again who narrowly took the flag, soaking up pressure in the closing laps from brothers Tom and David McArthur, with Carvalho missing out on the podium in fourth.

In the Ford XR Challenge, Justin Roberts picked up a fortuitous win in race one after a late coming together between Mark Robinson and Michael Blackburn. Greg Speight pipped Blackburn to win the second race but, with a pair of third-place finishes, Robinson ends the season as series champion.

ROB WATTS



**SNETTERTON**  
MSVR OCTOBER 14-15

## Davidson GT Cup champion despite DNF

GRAHAM DAVIDSON REBOUNDED from his first DNF of the year to wrap up the overall GT Cup title in the season finale at Snetterton.

Already crowned GTO champion, the Scot's McLaren MP4/12C was never challenged in race one, which finished behind the safety car owing to an oil spill.

It all went wrong in the second race, when Davidson lost an 11-second lead after oil from Jeff Wyatt's BMW caused a red flag, and then a wishbone failure following the restart handed victory to Bonamy Grimes in his GTC Ferrari 488 Challenge. Meanwhile, another maximum score for Ginetta G55-mounted GTA champion Dominic Paul left Davidson sweating while waiting for a replacement ahead of the final stanza.

Normal service was resumed for race three, thanks to a special delivery from Woking. Davidson qualified on pole and dominated from the outset, in a fitting final outing for the venerable MP4-12C.

"The target at the start of the year was to have a season like this," said Davidson. "Today was spot on, a great way to end the racing season."

Jake Rattenbury skipped race two to contest the Fun Cup at Oulton Park, but still collected the GTC title with two class wins in his Lamborghini Huracan. Neil Huggins claimed the GTB crown with class victory aboard his Lamborghini Gallardo in race three.

The final round of the Radical Challenge produced three different winners, as Oliver Barker clinched the title in the absence of main challenger Jack Lang. Outgoing



GT Cup stalwart Richard Chamberlain waves the flag as Davidson wins race three

champion Steve Burgess left it late to defeat Barker in race one, passing his fast-starting rival at Riches on the final lap. Barker made amends by keeping Burgess at bay for the duration of race two.

New champion Barker had the pace to win the longer third race, but a 20s success penalty at the mandatory pitstops put him at the tail of a four-car battle for victory. Jack Manchester narrowly held off Kristian Jeffrey and Dominik Jackson, as early leader Burgess was forced out by a left-rear-upright failure.

Matt Hammond wrapped up the Mini Challenge Cooper Pro title, but the weekend belonged to Sam Weller, who scored an impressive hat-trick. All the action in the first two races happened behind double poleman Weller.

Jess Hawkins kept her slim title hopes alive by muscling past Hammond and Martin Poole to take second in the opener. But she couldn't breach Poole's defences in race two and had to settle for third.

Weller was in the thick of the action for race three, moving from fifth to first inside three laps and defending from

Poole as his tyres dropped off. Poole almost got alongside heading into Murrays on the final tour, but Weller held on.

Aaron Reeve stood on the top step three times in the Mini Challenge Open division, but lost his race one victory to a five-second penalty for punting series returnee Jono Davis wide at Murrays. There was nothing controversial about Reeve's race-two victory, as he jumped Davis at the start and stayed there to the flag. He had to grind hard for his race three win though, as newly crowned champion Ben Dimmack put up a stern defence until he lost third gear with two laps remaining.

Ryan Savage was denied a Lotus Cup double by a fuel-injection problem a couple of laps from the finish in the opening race. Exige driver Simon Atkinson sealed the title with second behind David McNulty. Adapting quickly to an unfamiliar Exige, Savage rebounded from his race-one heartbreak to close the season with a 28s victory over Atkinson ahead of a planned break from racing to get his commercial pilot's licence.

In the Elise Trophy, William Stacey took the crown in fine style by dominating race two. Stacey had pushed Craig Denman all the way in a gripping first duel, but found himself out front in the final when Denman was caught out in an opening-lap skirmish. The Welshman charged back to take second ahead of Jason McNulty, who also completed the race-one podium.

Karl Cattliff won both BMW M3-dominated Racing Saloon outings, but the outcome might have been different had race two been just one lap longer. After a penultimate-lap pass on Roger Kneebone, who finished a distant second in race one, Darren Stamp rapidly caught Cattliff and was latched to his bumper across the line.

Will Davison twice prevailed in battles with pole-starter David Graves to win the two Production BMW races. Phil Lynch saved his best til last with his first podium of the year in race two.

JAMES NEWBOLD





## RESULTS

### GT CUP (12 LAPS) 1 Graham

Davidson (McLaren MP4/12C GT3); 2 Nigel Hudson (Aston Martin Vantage GT3) +1.160s; 3 Jake Rattenbury (Lamborghini Huracan); 4 Bonamy Grimes (Ferrari 488 Challenge); 5 Tom Webb (BMW M3 E46 GTR); 6 Dominic Paul (Ginetta G55 GT4). **Class winners** Rattenbury; Webb; Paul. **Fastest lap** Davidson 1m52.261s (95.20mph).

**Pole** Davidson. **Starters** 21. **RACE 2 (8 LAPS) 1 Grimes**; 2 Webb +3.542s; 3 Neil Huggins (Lamborghini Gallardo Super Trofeo LP570); 4 Michael Igoe (Porsche 991 GT3); 5 Warren Gilbert (Marcos Mantis); 6 Will Burns (Ginetta G55 GT4). **CW** Webb; Burns. **FL** Grimes 1m56.248s (91.94mph). **P** Davidson. **S 18. RACE 3 (26 LAPS) 1 Davidson**; 2 Rattenbury +46.755s; 3 Gareth Downing (Lotus Evora GTE); 4 Grimes/Johnny Mowlem; 5 Huggins; 6 Mike Sellar/Rob Gaffney (Porsche 991 GT3). **CW** Rattenbury; Huggins; Mike Newbould/Burns. **FL** Davidson 1m51.770s (95.62mph). **P** Davidson. **S 16.**

### RADICAL CHALLENGE (8 LAPS)

**1 Steve Burgess**; 2 Oliver Barker +1.137s; 3 Kristian Jeffrey; 4 Dominik Jackson; 5 Jack Manchester; 6 Richard Baxter. **CW** Peter Tyler. **FL** Burgess 1m50.862s (96.40mph). **P** Burgess. **S 22.**

**RACE 2 (11 LAPS) 1 Barker**; 2 Burgess +2.340s; 3 Manchester; 4 Jeffrey; 5 Baxter; 6 Mark Richards. **CW** James Barwell. **FL** Burgess 1m50.709s (96.54mph). **P** Barker. **S 22. RACE 3 (21 LAPS) 1 Manchester**; 2 Jeffrey +1.224s; 3 Jackson; 4 Barker; 5 Baxter; 6 Jerome de Sadeleer. **CW** Brian Harvey/Tom Harvey. **FL** Barker 1m51.011s (96.27mph). **P** Burgess. **S 21.**

### MINI CHALLENGE COOPER PRO/AM

(ALL 7 LAPS) **1 Sam Weller**; 2 Jessica Hawkins +3.939s; 3 Martin Poole; 4 Matt Hammond; 5 Richard Newman; 6 Simon Walton. **CW** Ethan Pitt; Stuart McLaren. **FL** Hawkins 2m20.129s (76.27mph). **P** Weller. **S 20. RACE 2 1 Weller**; 2 Poole +4.768s; 3 Hawkins; 4 Hammond; 5 Pitt; 6 Walton. **CW** Pitt; McLaren. **FL** Hammond 2m20.434s (76.10mph). **P** Weller. **S 20. RACE 3 1 Weller**; 2 Poole +0.241s; 3 Hammond; 4 Hawkins; 5 Pitt; 6 Walton. **CW** Pitt;

McLaren. **FL** Poole 2m20.375s

(76.13mph). **P** Pitt. **S 19.**

### MINI CHALLENGE OPEN (ALL 7 LAPS)

**1 Jono Davis**; 2 Aaron Reeve +0.923s; 3 Ben Dimmack; 4 Rob Austin; 5 Neal Clarke; 6 Chloe Hewitt. **CW** Reeve. **FL** Reeve 2m14.412s (79.51mph). **P** Davis. **S 9. RACE 2 1 Reeve**; 2 Dimmack +4.254s; 3 Davis; 4 Austin; 5 Clarke; 6 Hewitt. **CW** Davis. **FL** Reeve 2m12.909s (80.41mph). **P** Davis. **S 10. RACE 3 1 Reeve**; 2 Dimmack +5.723s; 3 Clarke; 4 Hewitt; 5 Tim Bill; 6 Andy Montgomery. **CW** Clarke. **FL** Reeve 2m13.146s (80.27mph). **P** Davis. **S 9.**

### LOTUS CUP & ELISE TROPHY (13

LAPS) **1 David McNulty (Lotus Exige V6 Cup R)**; 2 Simon Atkinson (Exige V6 Cup R) +2.517s; 3 Bob Drummond (Exige V6 Cup R); 4 Andrew Wright (Exige V6 Cup R); 5 David Alexander (2-Eleven); 6 Craig Denman (Elise 111R). **CW** Denman. **FL** Ryan Savage (Exige) 2m03.392s (86.61mph). **P** Savage. **S 32. RACE 2 (15 LAPS) 1 Savage**; 2 Atkinson +28.040s; 3 McNulty; 4 Wright; 5 Alexander; 6 Drummond. **CW** Stacey. **FL** Savage 2m03.486s (86.55mph). **P** Savage. **S 29.**

### RACING SALOONS (BOTH 7 LAPS)

**1 Karl Cattliff (BMW E36 M3)**; 2 Roger Kneebone (E36 M3) +8.386s; 3 Darren Stamp (E36 M3); 4 Stuart Voyce (E36 M3); 5 Andy Baylie (VW Golf GTi); 6 John Willcocks (BMW E30 M3). **CW** Willcocks; Oliver Davies (Toyota Starlet); Chris Boon (Jaguar XJS); Karl Graves (BMW 120 D); Steve Allen (Honda Civic); Callum Noble (BMW 320i). **FL** Cattliff 2m11.127s (81.50mph). **P** Nigel Innes (BMW E36 M3). **S 29. RACE 2 1 Cattliff**; 2 Stamp +0.251s; 3 Kneebone; 4 Baylie; 5 Davies; 6 Willcocks. **CW** Davies; Willcocks; Boon; Graves; Allen; Noble. **FL** Cattliff 2m11.011s (81.58mph). **P** Cattliff. **S 24.**

### PRODUCTION BMW CHAMPIONSHIP

(BOTH 7 LAPS) **1 Will Davison (E30)**; 2 David Graves (320i) +3.884s; 3 Owen Darch (320i); 4 Andy Strong (E30 320i); 5 Rob Cooper (320i); 6 Phil Lynch (E30 320i). **FL** Davison 2m23.283s (74.59mph). **P** Graves. **S 18. RACE 2 1 Davison**; 2 Graves +4.096s; 3 Lynch; 4 Strong; 5 Darch; 6 Cooper. **FL** Davison 2m23.459s (74.50mph). **P** Graves. **S 18.**



## Hughes – she's the Mightiest

FOUR TITLES WERE DECIDED at a thrilling and action-packed Pembrey BARC meeting, including the Mighty Mini series.

Damien Harrington arrived in South Wales 41 points behind Alice Hughes and, although both admitted to having little experience of the 1.4-mile layout, Harrington led home Hughes in the opener, giving the London racer hope of closing the gap.

But Harrington ground to a halt on the formation lap of race two, and his absence handed Hughes the championship. She also retired from the race with a failure, and elected to skip the finale. Daniel Heywood was the benefactor of the retirements in the second race, and was only denied another win in the finale by Mick Grover.

In the concurrent Super Mighty Mini class, Scott Kendall beat Adrian Tuckley in the standings. The Northampton racer had no answer to Kendall's dominance. Comfortable victories in races one and three for Kendall sandwiched a terrific battle between the duo in the second race, where they were only separated once by more than a second, as they hit the front from a reversed grid.

Slipstreaming down the main straight, Tuckley tried up the inside at Hatchets hairpin, but was unable to make the move stick, and a further mistake on the final lap meant the gap of 7.6s flattered Kendall. It was enough for him to clinch the title.

Division 1 and 2 honours of the British Truck Racing championship were both up for grabs, with Ryan Smith and Mika Mäkinen respectively primed to win. Smith (MAN TGA) only needed to outscore Shane Brereton (MAN TGX) by six points to be sure of his crown, and started promisingly by converting pole in the opener,

despite a five-second penalty for exceeding track limits.

The second race destroyed Brereton's chances, as he received a 20s penalty for overspeeding, while Smith came home second to Mat Summerfield (MAN TGS).

Smith and Brereton finished one-two in the third race, before a crash in the fourth and final race between Brereton and Ray Coleman (MAN TG) forced an abandonment due to the curfew.

Mäkinen won the Division 2 opener, and was seventh in the second after being called in for a 'smoke penalty', allowing Paul McCumisky (Volvo FM12) to take a surprise win. Race three was abandoned after Luke Garrett crashed into the barriers at the Crossing, causing a lengthy delay before Mäkinen ended the weekend with victory in race four.

Peugeot 106 pilot Tyrone Luffarelli was guaranteed the Welsh Sports and Saloons championship, as Chris Everill took a brace of wins in his Ginetta G50. The second race was abandoned after a frightening crash for Martin Davies's Ford Sierra Cosworth at Honda on the seventh lap. Running in third place just behind the leaders, entering the fast right, Davies rotated backwards towards the grass bank and flipped over. He was able to climb out and was taken to hospital as a precaution.

An official Renault-sanctioned championship returned to Pembrey for the first time since 2010 with the Junior Clio Cup's third round. Jack Young comfortably won the opening race before Max Marzorati overcame a "second-race voodoo" to end a run of winning the first race at both Snetterton and Brands Hatch, before finishing seventh in the second.

JAKE NICHOL

➔ P75 FULL RESULTS



Barker sealed the Radical Challenge title at Snetterton

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# RESULTS ROUND-UP

## SILVERSTONE BRSCC

**CATERHAM SUPERSPORT (BOTH 23 LAPS)** 1 Timothy Dickens; 2 Mike Evans +0.280s; 3 Henry Heaton; 4 Christian Szaruta; 5 Ian Payne; 6 Dan Gore. **Fastest lap** Evans 1m16.009s (87.66mph). **Pole** Heaton. **Starters** 23. **RACE 2 (14 LAPS)** 1 Evans; 2 Dickens +0.224s; 3 Payne; 4 Heaton; 5 Szaruta; 6 Alistair Weaver. **FL** Evans 1m16.096s (87.56mph). **P** Dickens. **S** 23.

**CATERHAM ROADSPORT (16 LAPS)** 1 Pete Walters; 2 Jay McCormack +0.247s; 3 Tom John; 4 David Ridley; 5 Caroline Everett; 6 Michael O'Reilly. **FL** McCormack 1m18.135s (85.27mph). **P** Walters. **S** 32.

**RACE 2 (14 LAPS)** 1 McCormack; 2 Walters +0.097s; 3 Anthony Taylor; 4 John; 5 Tim Child; 6 Paul Vernon. **FL** McCormack 1m18.629s (84.74mph). **P** Walters. **S** 31.

**CATERHAM SEVEN 420R (BOTH 25 LAPS)** 1 Lee Wiggins; 2 Elliott Norris +0.510s; 3 Stephen Nuttall; 4 Jack Brown; 5 Jack Sales; 6 William Smith. **FL** Nuttall 1m12.673s (91.68mph). **P** Wiggins. **S** 23. **RACE 2 (11 LAPS)** 1 Wiggins; 2 Smith +0.250s; 3 Sales; 4 Brown; 5 Juan Gonzalez; 6 Matt Dyer. **FL** Sales 1m12.803s (91.52mph). **P** Wiggins. **S** 22.

**CATERHAM SEVEN 310R (24 LAPS)** 1 Lee Bristow; 2 Chris Rankin +0.492s; 3 Nathan Bell; 4 Richard Lambert; 5 Alexander Koeberle; 6 Daniel Quintero. **FL** Rankin 1m16.221s (87.41mph). **P** Rankin. **S** 24. **RACE 2 (23 LAPS)** 1 Rankin; 2 James Houston +4.506s; 3 Lambert; 4 Koeberle; 5 Quintero; 6 Bell. **FL** Harry Landy 1m15.800s (87.90mph). **P** Bristow. **S** 23.

**CATERHAM ACADEMY - GREEN GROUP (11 LAPS)** 1 James Murphy; 2 Neil Fraser +9.230s; 3 Toby Clowes; 4 Daniel French; 5 Paul Steed; 6 Matt Sheppard. **FL** Sheppard 1m20.449s (82.82mph). **P** Murphy. **S** 24.

**WHITE GROUP (11 LAPS)** 1 Tom Grensinger; 2 Chris Bates +3.640s; 3 Tom Allen; 4 Sam Jefferson; 5 Oli Pratt; 6 Daniel Halstead. **FL** Allen 1m20.707s (82.56mph). **P** Allen. **S** 28.

**CATERHAM ACADEMY AUTUMN TROPHY - RACE A (11 LAPS)**



Ryan Smith was a winner in British Trucks

1 Allen; 2 French +1.085s; 3 Andy Morgan; 4 Sheppard; 5 Clowes; 6 James Gilmour. **FL** Sheppard 1m21.896s (81.36mph). **P** French. **S** 24. **RACE B (11 LAPS)** 1 Graham Macdonald; 2 Murphy +0.221s; 3 Grensinger; 4 Halstead; 5 Pratt; 6 Fraser. **FL** Macdonald 1m21.279s (81.97mph). **P** Murphy. **S** 23.

**CATERHAM SEVEN 270R (BOTH 23 LAPS)** 1 Alex Jordan; 2 Andrew Perry +3.793s; 3 Gary Smith; 4 Alan Cooper; 5 Rob Watts; 6 Peter Reynolds. **FL** Perry 1m17.382s (86.10mph). **P** Jordan. **S** 17. **RACE 2 (11 LAPS)** 1 Perry; 2 Jordan +0.907s; 3 Watts; 4 Cooper; 5 William Lloyd; 6 Smith. **FL** Jordan 1m17.447s (86.03mph). **P** Jordan. **S** 17. **OSS (15 LAPS)** 1 Duncan Williams (Juno Sportscar); 2 Matt Manderson (Ligier JS53 evo 2) +9.706s; 3 Richard Wise (Chiron LMP); 4 Patrick Sherrington (MCR Sport); 5 Jon-Paul Ivey (Radical PR6); 6 Graham Hill (Radical PR6). **Class winners** Sherrington; Hill; Neil Harris (Radical Clubsport). **FL** Williams 1m01.515s (108.31mph). **P** Mike Jenvey (Jenvey-Gunn TS6). **S** 28. **RACE 2 (19 LAPS)** 1 Sherrington; 2 Jenvey +2.075s; 3 Wise; 4 Hill;

5 Manderson; 6 Josh Smith (Radical PR6). **CW** Jenvey; Hill; Harris. **FL** Manderson 1m02.054s (107.37mph). **P** Williams. **S** 27. **RACE 3 (19 LAPS)** 1 Jenvey; 2 Wise +7.930s; 3 Sherrington; 4 Manderson; 5 Smith; 6 Ivey. **CW** Sherrington; Smith. **FL** Manderson 1m01.856s (107.72mph). **P** Sherrington. **S** 27.

**PRODUCTION GTI MK2 & MK5 (15 LAPS)** 1 Simon Hill (MK5); 2 Altay Ali (MK5) +4.514s; 3 James Howlison (MK5); 4 Paul Blackburn (MK5); 5 James Colbourne (MK5); 6 David Parris (MK5). **CW** Peter Milne (MK2); Matthew Eccles (MK2). **FL** Hill 1m19.468s (83.84mph). **P** Hill. **S** 22.

**RACE 2 (12 LAPS)** 1 Blackburn; 2 Ali +0.301s; 3 Adam Hance (MK5); 4 Parris; 5 Howlison; 6 Colbourne. **CW** Chris Webb (MK2); Luke Haberman (MK2). **FL** Ali 1m19.408s (83.91mph). **P** Hill. **S** 19.

**TRACK ATTACK AUTUMN TROPHY (8 LAPS)** 1 Nick Gwinnett (Renault Clio); 2 Bob Hoosier (SEAT Leon) +0.683s; 3 Eliot Dunmore (Mini Cooper S); 4 Tony Hunter (Renault Clio); 5 Kristian White (Toyota MR2 Mk2); 6 Lee Mabbett (Toyota Celica). **CW** Hoosier; White; Andy McLennan

(Suzuki Swift GTi); Neale Hurren (Toyota MR2 Mk1). **FL** Hoosier 1m19.538s (83.77mph). **P** Hoosier. **S** 26. **RACE 2 (11 LAPS)** 1 Hunter; 2 Mabbett +0.108s; 3 Dunmore; 4 Steve Cassar (Honda Civic); 5 Josh Bennett (Renault Clio); 6 Alex De-Moore (Honda Civic Type R). **CW** Arron Pullan (Toyota MR2 Mk3); Clive Haynsford (Mazda RX-8); Philip O'Halloran (Toyota MR2 Mk1); McLennan. **FL** Mabbett 1m19.631s (83.67mph). **P** Gwinnett. **S** 21.

## PEMBREY BARC

**SUPER & MIGHTY MINIS (15 LAPS)**

1 Scott Kendall; 2 Neven Kirkpatrick +8.232s; 3 David Kirkpatrick; 4 Alex Comis; 5 Dave Rees; 6 Mark Ditchburn. **CW** Damien Harrington (Mighty). **FL** Kendall 1m18.451s (68.43mph). **P** Kendall. **S** 20.

**RACE 2 (15 LAPS)** 1 Kendall; 2 Adrian Tuckley +7.657s; 3 Rees; 4 D Kirkpatrick; 5 N Kirkpatrick; 6 Comis. **CW** Daniel Heywood (Mighty). **FL** Comis 1m18.593s (68.30mph). **P** Connor O'Brien. **S** 19.

**RACE 3 (12 LAPS)** 1 Kendall; 2 Tuckley +5.766s; 3 N Kirkpatrick; 4 Comis; 5 O'Brien; 6 Steven Rideout. **CW** Mick Grover (Mighty). **FL** Kendall 1m18.592s (68.31mph). **P** O'Brien. **S** 18.

**BRITISH TRUCKS (13 LAPS)** 1 Ryan Smith (MAN TGA); 2 Shane Brereton (MAN TGX) +1.641s; 3 Stuart Oliver (Volvo VN); 4 Mat Summerfield (MAN TGS); 5 Ray Coleman (MAN TG); 6 Jamie Anderson (MAN TGX). **FL** Smith 1m10.701s (74.13mph). **P** Smith. **S** 9. **RACE 2 (13 LAPS)** 1 Summerfield; 2 Smith +0.310s; 3 Anderson; 4 S Oliver; 5 Coleman; 6 David Jenkins (MAN TGX). **FL** Smith

1m11.412s (73.39mph). **P** Jenkins. **S** 9. **RACE 3 (10 LAPS)** 1 Smith; 2 Brereton +2.228s; 3 S Oliver; 4 Jenkins; 5 Terry Gibbon (MAN TGS); 6 Coleman. **FL** Smith 1m10.914s (73.91mph). **P** Michael Oliver (Scania). **S** 9. **RACE 4 (1 LAP)** 1 Summerfield; 2 Anderson +2.019s; 3 Jenkins; 4 S Oliver; 5 Smith; 6 Gibbon. **FL** M Oliver 1m20.468s (65.13mph). **P** Anderson. **S** 9.

**BRITISH TRUCKS DIVISION 2 (12 LAPS)** 1 Mika Makinen (Sisu SL250); 2 Sami Ojanen (Iveco Stralis) +3.119s; 3 Steve Powell (ERF EC1); 4 Adam Bint (Volvo White); 5 Paul McCumisky (Volvo FM12) 6 Brad Smith (DAF CF). **FL** Luke Garrett (MAN TGA) 1m15.359s (69.55mph). **P** Makinen. **S** 12.

**RACE 2 (8 LAPS)** 1 McCumisky; 2 B Smith +9.031s; 3 Andrew Fulcher (MAN TG); 4 Jim Bennett (Seddon Atkinson); 5 Trevor Martin (Scania P Series); 6 Makinen. **FL** Makinen 1m14.728s (70.14mph). **P** Bennett.

**S** 10. **RACE 3 (7 LAPS)** 1 Powell; 2 Makinen +3.273s; 3 Tony Smith (Sisu SL250); 4 Martin; 5 B Smith; 6 Bint. **FL** T Smith 1m15.324s (69.58mph). **P** Powell. **S** 12. **RACE 4 (10 LAPS)** 1 Makinen; 2 T Smith +8.929s; 3 Bint; 4 Powell; 5 McCumisky; 6 B Smith. **FL** Makinen 1m14.461s (70.39mph). **P** Bennett. **S** 9.

**WELSH SPORTS AND SALOON CARS (12 LAPS)** 1 Chris Everill (Ginetta G50); 2 Reuben Taylor (Peugeot 206CC) +0.265s; 3 Martin Davies (Ford Sierra Cosworth); 4 Damian Longotano (Westfield SE); 5 Keith White (BMW Z4); 6 Fabio Luffarelli (Volkswagen Corrado).

**CW** Taylor; Davies; White; Luffarelli; Dave Scaramanga (VW Scirocco); Tyrone Luffarelli (Peugeot 106 GTi); Daryl Radford (Honda Civic); Richard Francis (Citroen Saxo VTR); Alan Smith (Ford Ka Sport). **FL** Davies 1m07.111s (79.99mph). **P** Taylor. **S** 32.

**RACE 2 (8 LAPS)** 1 Everill; 2 Taylor +0.113s; 3 White; 4 Longotano; 5 Ken James (Loco Hornet); 6 Nick Crompton (Mitsubishi Evo). **CW** Taylor; White; Longotano; T Luffarelli; Radford; Scaramanga; Melissa Luffarelli (Mini Saloon); Francis; Smith. **FL** Davies 1m07.300s (79.77mph). **P** Everill. **S** 32.

**RENAULT UK CLIO CUP JUNIOR (16 LAPS)** 1 Jack Young; 2 Harry Gooding +3.295s; 3 Ethan Hammerton; 4 Max Marzorati; 5 Connor Grady; 6 Lorcan Hanafin. **FL** Young 1m14.227s (72.32mph). **P** Hanafin. **S** 9. **RACE 2 (10 LAPS)** 1 Marzorati; 2 Young +0.362s; 3 Hammerton; 4 Louis Doyle; 5 Gooding; 6 Grady. **FL** Young 1m14.551s (72.01mph). **P** Hanafin. **S** 9.



Gillias (l) and Everett collide in Caterham Roadsport contest

# The supporting stars who shone

From a 135-point victory to two drivers tying at the top, there was plenty happening in the TOCA support categories

By Stephen Lickorish, Special Correspondent

[@sdlickorish](#)

## GINETTA JUNIOR



AT THE MID-STAGE OF THE SEASON IT LOOKED as though we were on for a cracking title battle. Tom Gamble, Seb Priaulx and Dan Harper were evenly matched and star rookie Kiern Jewiss wasn't too far behind either.

Then came the Silverstone meeting. Gamble was dominant, enabling him to arrive at the Brands Hatch finale with a 42-point lead.

Gamble made history at Silverstone by becoming the first driver ever to win all three races in a weekend. That was enough to separate him from the pack after a season that featured some incredible racing between the leading quartet and others, including Harry King and Tom Wood.

"Silverstone was awesome – I didn't expect to win all three," says Gamble. "The first was close,

the second one the conditions were a bit weird, and then in the third they were scrapping behind me, so it was the easiest race I've ever won."

But Gamble's path to title glory wasn't always so straightforward. He was affected by Ginetta's decision to suspend JHR Developments mid-season while the manufacturer investigated the team's conduct. This meant he had to switch to the Elite Motorsport squad but, crucially, it didn't hamper his progress.

JHR team-mate Priaulx had an even more complicated year, since he was initially excluded from the Thruxton meeting for engine irregularities and docked a number of points. While that was under appeal, he put together an impressive winning streak before the National

Gamble's hat-trick at Silverstone enabled him to pull clear in the championship

Court ruled that his points could be reinstated. But ultimately it was to no avail as he fell 27 points short of Gamble after switching to HHC Motorsport following the JHR saga.

### STANDINGS

POS	DRIVER	POINTS
1	Tom Gamble	654
2	Seb Priaulx	627
3	Dan Harper	625
4	Kiern Jewiss	542
5	Tom Wood	514
6	Harry King	508



## PORSCHE CARRERA CUP GB



IT COULD NOT HAVE BEEN CLOSER. AFTER TWO seasons where Dan Cammish has strolled to glory, this year's crown rested on the outcome of a battle between Charlie Eastwood and Tom Oliphant for fifth in the finale.

Right from the start of the season Cammish said the pressure was on his rivals to deliver. A record-breaking third title for the Redline driver was always going to be a tough task since he had to skip the Snetterton weekend because of a clashing Porsche Supercup event.

In the end, Cammish was unfortunate not to win again. A qualifying crash at Donington Park with Pro-Am2 driver Rupert Martin, his infamous collision with Eastwood at Knockhill and a fire at Silverstone were the only events that kept him off the podium. He ended up just 18 points short.

"The last couple of years I could've afforded issues and DNFs and incidents, and still won with a comfortable margin," says Cammish. "This year I needed everything to be perfect and I knew that – and so did everyone else, and people made their decisions based on that."

"I won eight races out of 15 and only contested 13. I have been very successful over the past two years and it was a shame not to get that third title, but I don't think I could've done much more."

Instead it was over to Eastwood and Dino Zamparelli to fight for honours. Eastwood had the advantage in the early stages of the season, capitalising fully on Cammish's Donington woes to secure two wins. After Cammish's absence from Snetterton, Eastwood had the lead and was in a prime position to take the crown.

But Zamparelli had other ideas. While Eastwood was benefiting from the years of experience of series dominator Redline, he was

### "The 2017 Carrera Cup title battle could not have been closer"

settling in at a new team. Despite JTR team owner Nick Tandy's experience in Porsches, the squad had never competed outside the single-seater field and was very much learning the ropes in the early stages of the season. Zamparelli's exclusion from the Donington opener, owing to incorrect camber settings, was evidence of that.

But by the second half of the season the team had really found its feet. Zamparelli was coming on strong and took crucial wins at

Eastwood emerged as the champion, but only just after tying with Zamparelli

Snetterton and Silverstone to ensure there was all to play for in the Brands finale.

Ultimately a fifth and a second weren't enough and Eastwood scraped home, after the pair tied on points, by virtue of winning four races to Zamparelli's three.

"It's a totally different story when you've got the championship on the line," says Eastwood of the finale. "Race two didn't go massively to plan and everything was going through my mind. You need to keep yourself on track, but I was also trying to work out what the two in front of me were doing and what was going on at the front."

"It was a bit of a relief more than anything else! But it's great once you get over it."

#### STANDINGS

POS	DRIVER	POINTS
1	Charlie Eastwood	228
2	Dino Zamparelli	228
3	Dan Cammish	210
4	Tom Oliphant	182
5	Lewis Plato	161
6	Tio Ellinas	156

## GINETTA GT4 SUPERCUP

BEN GREEN, GEORGE GAMBLE, JACK MITCHELL, Declan Jones, Tom Hibbert and Tom Roche all won either the same number as or more races than Ginetta GT4 Supercup champion Callum Pointon this season. But it was the HHC Motorsport driver's remarkable consistency that enabled him to take the crown despite claiming just two victories.

Pointon finished every single race he started this year (he skipped the third race at the Brands Hatch finale after sealing the title in race two). It wasn't just a case of consistent finishes, it was where Pointon was finishing that proved crucial: overall, he notched up 14 podiums. In contrast, Green took seven wins but retired from three races.

"We've gone all out this year and when we were testing we knuckled down and had good

set-ups from day one," explained Pointon.

Meanwhile in the Am class, Colin White was dethroned after two consecutive crowns as Jac Constable claimed the honours this year.

#### STANDINGS

POS	DRIVER	POINTS
1	Callum Pointon	550
2	Ben Green	528
3	George Gamble	496
4	Declan Jones	440
5	Jack Mitchell	436
6	Tom Hibbert	427



Pointon (7) showed unrivalled consistency during 2017 season

## RENAULT UK CLIO CUP

IT'S AMAZING WHAT A DIFFERENCE A YEAR makes. In last season's Clio Cup finale, Mike Bushell's title hopes were ended when he spun off behind the safety car. This year he arrived in Kent having already been crowned champion.

Bushell played a starring role in a close fight with Ant Whorton-Eales for last year's crown. But this year he went to a whole new level. He looked at his weaknesses from 2016 and fixed them.

Take his starts. Last year, Bushell was excellent in qualifying but Whorton-Eales was often into the lead by the first corner thanks to his demon getaways. This year was a different story. By the end of the season Bushell was getting the car moving just 0.15s after the lights went out.

"I think coming back into it last year I was maybe a bit too arrogant in my personal belief that I was going to do it [win the title]," says Bushell. "But the Clio Cup is so competitive – it's

taken all of last year to get where I am this year."

His closest challenger was Paul Rivett, who marked his 200th Clio race with a win, but struggled to match Bushell's consistency. Lee Pattison and Max Coates were fast but inconsistent, while two wins for James Dorlin marked the teenager as a star of the future.

### STANDINGS

POS	DRIVER	POINTS
1	Mike Bushell	514
2	Paul Rivett	379
3	Lee Pattison	366
4	Max Coates	360
5	Daniel Rowbottom	322
6	James Colburn	302



Mike Bushell typically occupied the head of the Clio Cup field in 2017

## BRITISH FORMULA 4

MOST NUMBER OF WINS IN A SEASON (10). MOST points in a season (442). First driver to win all three races in a weekend. British Formula 4 in its current guise may only be three seasons old, but Jamie Caroline certainly stamped his authority on the category this year, taking a number of records.

Considering those achievements previously belonged to star McLaren F1 tester Lando Norris, Caroline showed he came of age this season.

Last year was a disrupted one for Caroline as a switch from the withdrawing Jamun team to Fortec failed to deliver results. But Caroline laid down a marker by winning two of the first three races of 2017 with Carlin. He was imperious at the start of the season, and at Thruxton he was at his

brilliant best, winning all three races and putting on a masterclass in overtaking.

"Winning all three races at Thruxton was pretty cool," says Caroline. "It's a high-speed track and it's never easy in the lead there, but I managed to pull away in two of the races."

"The reverse-grid race was the hardest because I was on old tyres and started sixth – but I got into the lead by the first corner! I would say the first two weekends were important [in winning the title, since he took four wins] and then Thruxton came along and I extended that gap. After race one at Oulton I had a 100-point lead."

At this point he looked unstoppable. But things literally came crashing down on him in

race two at Oulton when he was involved in a "rollercoaster" crash after clipping the rear of team-mate Patrik Pasma. He was uninjured, but the incident threatened to derail his title bid.

"It wasn't ideal and hindered a few test days because of the price of the crash," he admits.

Caroline was never able to recapture the stunning Thruxton form for the rest of the year as he struggled with a lack of straightline speed and

Caroline (r) was at his best at Thruxton, winning all three of the weekend's races

### "Caroline stamped his authority on the category early on"

began driving more cautiously with the championship in mind. This enabled Oscar Piastrì to gradually eat into Caroline's advantage. But it was too little, too late and a disastrous Rockingham spelled the end of any real challenge from the Arden driver.

As well as Caroline, the season will forever be remembered for Billy Monger's crash at Donington, which resulted in him having both lower legs amputated. The incredible response from the wider motorsport community was a heartening response to a shocking incident that threatened to cast a long shadow over the series.

### STANDINGS

POS	DRIVER	POINTS
1	Jamie Caroline	442
2	Oscar Piastrì	376.5
3	Logan Sargeant	356
4	Alex Quinn	307
5	Linus Lundqvist	306.5
6	Oliver York	274.5



ALL PICS EBREY/LAT



## AUTOSPORT'S TOP 10 DRIVERS



### 1 MIKE BUSHELL

"Perfect" is how Bushell describes his 2017 season. You can't help but agree with his assessment. Nine wins. Twelve poles. Fifteen podiums. And a 135-point winning margin – a record in the modern era of the Clio Cup (after it replaced the Spider Cup series of the late 1990s). It's very difficult to find fault with his performances, and he carried on winning even after securing the title. Quite simply, he was the best of a field full of drivers with star quality. And as the only champion to seal a crown before the Brands Hatch finale, he has to be number one.



### 2 DAN CAMMISH

Even though he missed Snetterton, Cammish should still have won a third Carrera Cup crown this year. Without some bad luck – such as his clash with Charlie Eastwood at Knockhill and his freak fire at Silverstone – he would have been champion. Eastwood and Dino Zamparelli took a step forward this season but Cammish remained the class of the field. Winning eight of the 13 races he started again meant he had the best winning percentage of any TOCA series driver and he ends his period of dominance with 40 podiums from 45 races. It's just that third title that eludes him.



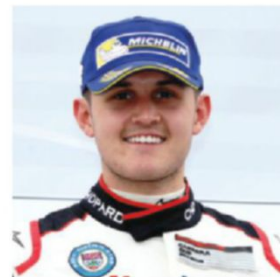
### 3 JAMIE CAROLINE

Any driver who wins three races in a single-seater around the slipstreaming classic that is Thruxton clearly has talent. And Caroline produced some breathtaking passes to seal an F4 hat-trick. The Carlin driver was unstoppable in the early stages of the season, striking fear into the hearts of his rivals. But when things got difficult in the second half of the year, and when his competitors found their feet in the series, he could easily have thrown it all away. Instead he took fewer risks to ensure he ended the year as a comfortable champion.



### 4 DINO ZAMPARELLI

Zamparelli and eventual Carrera Cup champion Charlie Eastwood were evenly matched all season. The fact that the pair tied on points demonstrates this. But one of them has to be higher in the rankings and Zamparelli *just* gets the nod. He was a little off the pace at the start of the year as his JTR team learned the ropes in its first sportscar foray. In the end it was an error from the team that ultimately cost him the title as incorrect camber levels caused him to be excluded from the Donington opener – and that zero score couldn't be dropped.



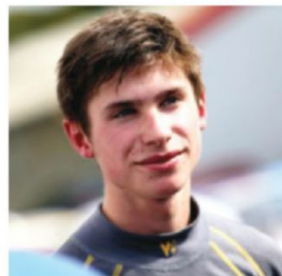
### 5 CHARLIE EASTWOOD

Porsche has an eye for future champions when picking Scholarship drivers. The previous incumbent, Josh Webster, won the Carrera Cup in his first year while 2016/17 chosen one Eastwood delivered this season. His progress over the two-year scheme has been impressive, getting ever closer to team-mate Cammish. But the pair got too close at Knockhill as Eastwood appeared to force Cammish off. It was a low point of what was otherwise a bright season. Arguably he should have won the title even more comfortably with Cammish and Zamparelli missing races.



### 6 TOM GAMBLE

Ginetta Junior is a series that has developed a reputation for having chaotic races. So to win two encounters in a weekend is a very good achievement, but to triumph in all three is something special. Gamble proved this season that he is a special driver as he became the first racer to achieve that feat, and his Silverstone hat-trick was crucial to title glory. He also showed great mental resilience in his recovery from the gravel to seventh in race one of the Brands Hatch finale. Coped admirably with the switch to Elite from JHR too.



### 7 SEB PRIAUX

It's fair to say that Priaux had rather a lot thrown at him during 2017. And considering he's only 16 years old, he handled it remarkably well. He could easily have given up on the Ginetta Junior title after being excluded from the Thruxton meeting and docked over 100 points for a suspected illegal engine. Instead he won the next four races. Then, after his points were reinstated, he had to deal with JHR being suspended from the series and was forced to switch teams, choosing HHC. To emerge in second place after all that is a credit to his ability.



### 8 CALLUM POINTON

Pointon is the lowest of the five champions in the list simply because he won the fewest races – just two. But aside from that, the GT4 Supercup champion was impressive, consistent, and able to stay out of trouble. Crucially, he brought the car home in every race he started. It's all very well taking plenty of victories but it's how a driver performs in the races they aren't winning that is really significant. Also, if other drivers were more consistent then Pointon might have been forced into taking risks to claim more wins. Instead, he didn't need to.



### 9 BEN GREEN

Claiming three and a half times the number of victories of your nearest rival normally puts you in a pretty good place to win the title. Green's seven GT4 Supercup wins in 2017 was certainly an impressive achievement, but he never really looked like clinching the crown. He was unable to match the consistency of Pointon, and the opening round at Brands Hatch set the tone for the year. He was a strong second in the opener, but was unable to start race two with a loss of drive and then got caught up in a collision with Carl Boardley in the finale.



### 10 DAN HARPER

With Gamble and Priaux taking 15 wins between them, you would perhaps expect the remaining 11 Ginetta Junior wins to be spread out fairly evenly. But that wasn't the case. Harper won seven races in 2017 and was a genuine title contender for much of the season, playing his part in a number of thrilling races – including in a brilliant battle with Kiern Jewiss at Knockhill. In the end it was two podium-less meetings at Oulton Park and Croft that proved costly, but that just underlines how competitive the category was this year.

# WHAT'S ON

**JENSON BUTTON**

## In his own words



IN MANY WAYS, JENSON BUTTON'S *Life to the Limit* reflects his Formula 1 career. The book is warm, engaging and can thrill, but for a lengthy period it never quite sets the world alight.

The strength of Button's memoir is the touching affection, evident throughout, for his late father John. From the family home in Frome where Button was inspired watching F1 in the 1980s, through their partnership in karting and then the highs and lows of life in the grand prix spotlight, the love and devotion between the pair is clear. When recalling his father's death in 2014, Button quotes a friend saying "you haven't mourned him enough" – hopefully the process of reflecting on the memories they made together for this book has helped the process.

*Life to the Limit* suffers from the same problem as many sporting autobiographies. Button spends a bit too much time recounting his childhood and early racing exploits before covering most of his F1 career at a higher speed than he achieved in a McLaren-Honda towards the end of his time in the

category. Turbulent, and therefore controversial, moments feel a touch glossed over too. You're left wanting to know more about Button's Williams/BAR contract wrangling in 2004, for example, but then covering every fascinating tale from a career packed with ups and downs would be tricky.

But there is genuine insight across the pages. You especially find it in the little details of the bigger moments of Button's story. Naturally, the Honda/

Button says his final race in Monaco in 2017 (above) didn't make him want to come back; he also gives perspective on joining "Lewis's" McLaren team (below)

Brawn transformation is well covered, and you learn that Button considered a Toro Rosso drive before committing to Ross Brawn's eponymous squad for what went on to become his title-winning season. The 2009 world champion's memory of Nick Fry's fury at finding out Button was heading to McLaren for '10 is also a real peek-behind-the-curtain moment, as was reading about Fernando Alonso "laughing his tits off" after taking an anti-malaria pill in Kenya in '02.

Button's book is split into three parts – his karting days, his F1 career leading up to the end of 2009, and then his time at McLaren. In the final part, we read his thoughts on his switch to the Woking-based team, as well as his take on Lewis Hamilton. You're left with the impression that Button respects and admires his fellow Brit, while at the same time he doesn't hold back on questioning the high-profile contentious moments that characterised the final years of Hamilton's time at McLaren.

A somewhat glaring omission from





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## HOT ON THE WEB THIS WEEK

 **RALLYCROSS'S STREET-FIGHTERS**

**Search for The quickest route through Riga with Mattias Ekstrom**

World Rallycross (and DTM) star Mattias Ekstrom and his Team EKS cohorts Topi Heikkinen, Reinis Nitiss and Nico Muller take to the streets of Latvian capital city Riga for a neatly choreographed intra-team race.



LAT IMAGES

*Life to the Limit* is any criticism of Honda's performance as McLaren's engine supplier in recent years. Button's frustration with F1 as he dealt with his father's death is clear, but you wonder if his tale might have had an altogether different ending had the manufacturer actually produced a decent power unit.

Button writes that he understands the media always hope "I'm going to break with the protocol" and that he prefers to leave that to the more combative Max Verstappen. At times the book feels like an extension of that approach. Given that Button writes he "will race in the future", we shall no doubt see if the lack of Alonso-esque Honda bashing is a tactful play with his future racing ambitions in mind.

Overall, *Life to the Limit* is a charming tale, told with the wry humour Button is known for. There's enough insight to captivate the reader and air a few amusing grievances – he doesn't hold back on Flavio Briatore and Sir Richard Branson – so it's a must-read if you're a Button fan or a general F1 supporter.

ALEX KALINAUCKAS

## INTERNATIONAL MOTORSPORT

**UNITED STATES  
GRAND PRIX  
FORMULA 1 WORLD  
CHAMPIONSHIP**  
Rd 17/20

Austin, Texas, USA  
**October 22**  
**TV Live** Sky Sports F1, Sunday 1930. Channel 4, Sunday 1935. Radio BBC Radio 5 Live, Sunday 1900

**SUPER FORMULA**  
Rd 7/7  
Suzuka, Japan  
**October 22**

**EUROPEAN  
LE MANS SERIES**  
Rd 6/6  
Algarve Circuit, Portugal  
**October 22**  
**TV Live** Motorsport.tv, Sunday 1245

**AUSTRALIAN  
SUPERCARS**  
Rd 12/14  
Surfers Paradise, Queensland, Australia  
**October 21-22**

**NASCAR CUP**  
Rd 32/36  
Kansas Speedway, USA  
**October 22**  
**TV Live** Premier Sports, Sunday 1930

**V8 STOCK CARS**  
Rd 10/12  
Taruma, Brazil  
**October 22**

**MOTOGP**  
Rd 16/18  
Phillip Island, Victoria, Australia  
**October 22**  
**TV Live** BT Sport 2, Sunday 0545

## UK MOTORSPORT

**OULTON PARK BARC**  
**October 21**  
Britcar, Sports/Saloons, Karts

**BRANDS HATCH  
FORMULA FORD  
FESTIVAL**  
**October 21-22**  
FF1600, Classic FF1600, Sports 2000 Pinto, Sports 2000 Duratec, Porsches, BMW Compacts

**SILVERSTONE HSCC**  
**October 21-22**  
Derek Bell Trophy, Classic F3/Classic FF2000, Historic F3, Historic FF2000, Historic FF1600, Historic Touring Cars, Guards Trophy, Classic Clubmans, Historic Road Sports, '70s Road Sports, Formula Junior



HAWKINS

FORMULA FORD FESTIVAL

## NEXT WEEK ON SALE THURSDAY

 **US GRAND PRIX** All the stories from the action in Austin



LAT IMAGES



# TOP FIVE

## RED BULL JUNIOR RECOVERIES

Ahead of Brendon Hartley's Formula 1 debut at the US Grand Prix, we pick out five former Red Bull juniors who rejuvenated their careers with high-profile racing achievements.

**1 BRENDON HARTLEY**  
Hartley tops this list because his recovery from being dropped by Red Bull in mid-2010 has delivered him to his Formula 1 debut... with Red Bull's junior team. The New Zealander doggedly pursued success in single-seaters before making his sportscar debut in 2012. Since then he's become a works Porsche LMP1 star, the 2015 World Endurance champion (and is likely to recapture that crown this year) and won Le Mans in June.



LAT IMAGES



**2 SEBASTIEN BUEMI**  
Buemi surfed the Red Bull junior team waves all the way to Formula 1 and raced for Toro Rosso for three seasons. He was dropped ahead of 2012, but immediately found a berth in Toyota's LMP1 ranks and remained on Red Bull's reserve books. Although a Le Mans win has eluded him, he won the '14 WEC title and has scored 12 Formula E race victories, winning the 2015-16 crown.

**3 NEEL JANI**  
Jani was a Red Bull junior between 2005 and '07, racing with the energy-drink giant's colours in GP2 and Champ Car (and carrying its logo on his helmet during his title-winning A1GP season). He was a Toro Rosso Friday practice driver in '06 after previously testing for Red Bull. Has since gone on to win Le Mans with Porsche in 2016, and also became WEC LMP1 champion that year.



**4 KARUN CHANDHOK**  
Chandhok was a Red Bull junior during the 2008 season when he raced in GP2, scoring one win and finishing 10th in the standings. He went on to make his F1 debut with the HRT squad in 2010 – competing in 10 races – and then made a further race appearance for the Lotus team the following year. Now takes part in regular sportscar events and is a popular TV pundit for Channel 4 in the UK.

**5 NARAIN KARTHIKEYAN**  
Another driver who went on to race in F1 after being dropped by Red Bull. Finished sixth in World Series by Nissan during the 2004 season when he was part of Red Bull's junior line-up, scoring two wins, and tested an F1 car for Minardi. The following year he raced for Jordan in F1 and finished fourth in the farcical US Grand Prix. Returned to drive for HRT in '11 and '12 and is now a Super Formula regular.



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Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1EF  
Tel +44 (0) 20 3405 8100 Email [autosport@autosport.com](mailto:autosport@autosport.com)  
Individual email [firstname.surname@motorsport.com](mailto:firstname.surname@motorsport.com)  
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# ENGINEERING

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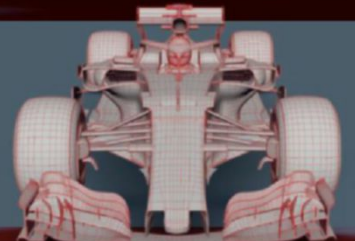
**HOW PETRONAS USES F1 TO  
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**RICARDO: THE  
POWER BEHIND  
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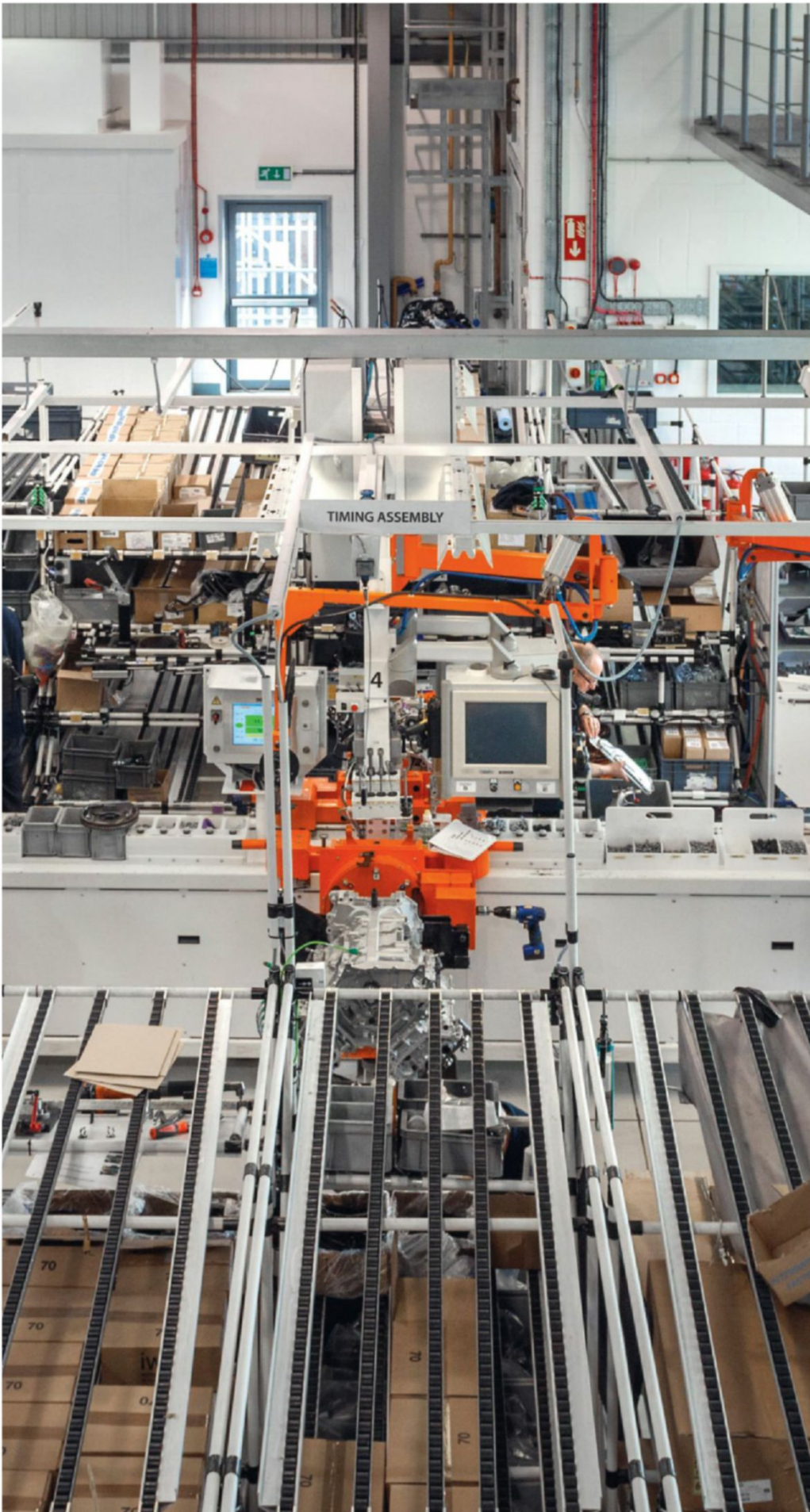
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**0 4 NEWS**

**84 days to go...** Six of the companies set to be showcased at Autosport International

**0 8 PETRONAS**

**Lubricating the path to success** How oil underpins the Mercedes F1 team's dominance

**1 5 TDI CHALLENGE**

**Innovation in schools** Budding engineers compete to push their creative boundaries

**1 8 RICARDO**

**Driving force** The power behind legendary marque McLaren's success in GT racing

**2 0 THE FLYING LAP**


**Breaking the TV rules** Why focusing on F1 technology brings fans flocking to learn more


**2 2 BEST IN SHOW**

**Building momentum** Looking ahead to Autosport International in January



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DAYS TO GO

## ENGINEERING COMPANIES ON SHOW AT ASI 2018

**A**

utosport Engineering is a dedicated event for specialist technical suppliers to the motorsport sphere that takes place at Autosport International each year.

For the 2018 event, which takes place on January 11-12, more than 250 companies will showcase their latest technological solutions and products to an audience of over 26,000 trade professionals. Here are six companies that will be at next year's event.



### QUESTMEAD

Founded in 1993 by Alan Brown, Questmead is a specialist supplier and distributor of motorsport components. At the beginning of the company's history, it sold just Mintex Competition products, with Mintex Racing and Mintex Classic now forming part of the Questmead family.

Based in Rochdale, Questmead ships its products to trade customers, race teams and preparation companies worldwide. The company conducted a sales history analysis as part of a research and development investment that led it to build up a stock inventory so that it has the capability of supplying most goods the following day.

As the UK's biggest distributor for Mintex and AP Racing, Questmead has a number of in-house services it provides to clients. These include brake caliper refurbishing, brake cylinder repairs, clutch drive plate repaddling, clutch pressure plate reconditioning, brake hose replacements and relining brake shoes.

Mintex offers a selection of performance and race braking materials to suit most four-wheel applications, from its fast-road and track products to its endurance and high-end components. In 2016, Mintex also launched a classic range.



### GREAVES 3D

Founded in 2012, Greaves 3D Engineering designs and manufactures pitlane solutions for teams competing in racing series around the world. These include the World Endurance and Touring Car championships, the World Rally Championship, IMSA, DTM, the European Le Mans Series, Blancpain and Australian GT.

Greaves 3D will also showcase its bespoke

engineer station for the first time in the UK at Autosport International in January. The company has been working closely with its customers to design and manufacture the most comprehensive and compact workstation available for the pitlane. The new workstation has been designed to travel securely using 180-degree folding mounts that ensure monitors are stored correctly during

transport, and also has secure laptop storage, slide-out desktop, easy connections for power, TV and network inlets, integrated cooling fans, and docking station facility.

Another system that Greaves 3D will be showcasing at ASI 2018 is its new fuel measurement technology product. More details about the system will be offered on the event's trade days.

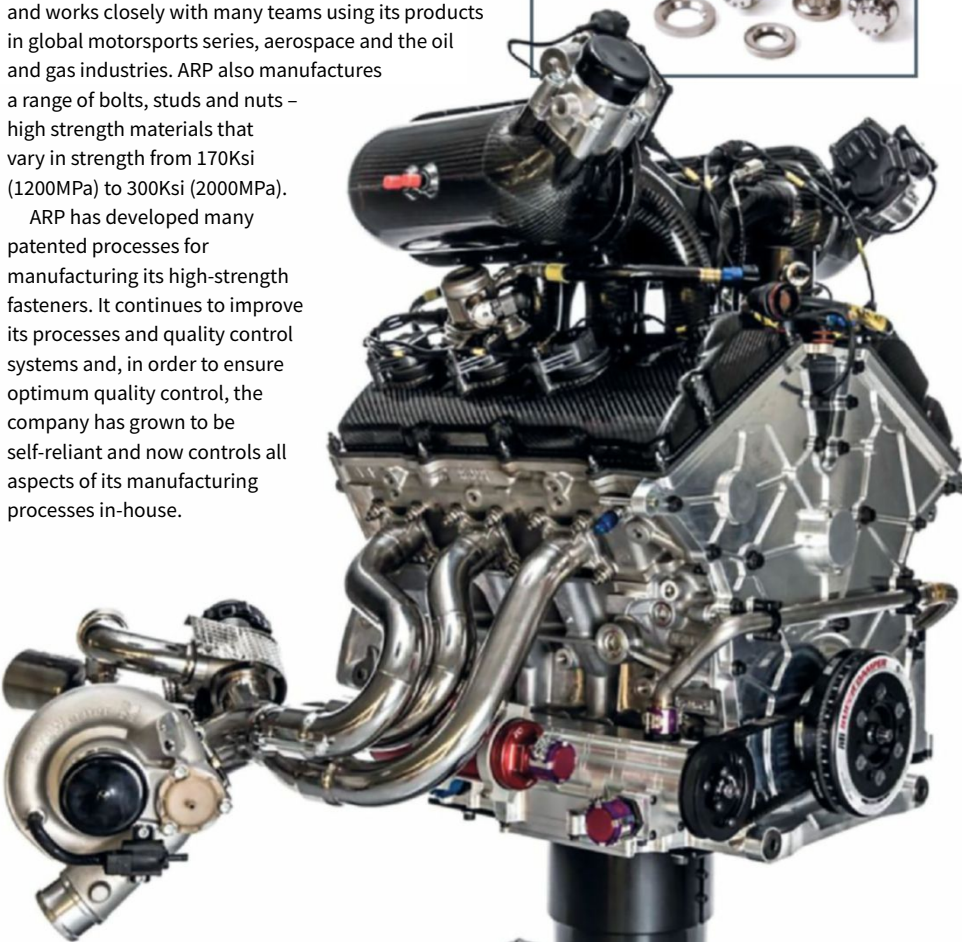


### ARP

ARP develops and produces engine and driveline fasteners, in addition to providing quality OEM replacement parts for speciality hardware. This equipment is used in Formula 1, IndyCar, NASCAR and NHRA drag racing, as well as for marine applications.

The company has more than 49 years of experience in manufacturing high-strength threaded fasteners and works closely with many teams using its products in global motorsports series, aerospace and the oil and gas industries. ARP also manufactures a range of bolts, studs and nuts – high strength materials that vary in strength from 170Ksi (1200MPa) to 300Ksi (2000MPa).

ARP has developed many patented processes for manufacturing its high-strength fasteners. It continues to improve its processes and quality control systems and, in order to ensure optimum quality control, the company has grown to be self-reliant and now controls all aspects of its manufacturing processes in-house.



### GRAND DESIGN SYSTEMS

Since the late 1990s, Grand Design Systems has produced pitlane garage walling systems for race teams all over the world. The company has developed a range of products to suit most team budgets and is always happy to assist in the design and development of garage requirements. Additional services it provides include hiring equipment to teams or exhibitors for one-off events, fabrication, and offering full team support at the Le Mans 24 Hours.

The company also provides pitlane panel support solutions. These include a framework system that involves building a walling system with an infill panel, and two uprights and two beams to create each panel. GDS aims to provide framework walling to both start-up teams and existing squads that need a new system or to top up systems already in place. The company also supplies unique patterned floors for use in team garages that are produced using an anti-static powder.

At Autosport International next year, GDS will be showcasing its Eco-Wall product. Launched towards the end of the 2016 racing season, the Eco-Wall is designed for mainstream motorsport squads and includes features such as helmet boxes and alcoves for team equipment, and TV or social media screens. ▶



# CARTEK: POWER DISTRIBUTION PANEL



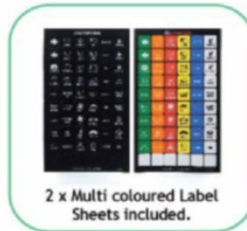
FOR MORE INFORMATION PLEASE GO TO:  
[WWW.CARTEKMOTORSPORT.COM](http://WWW.CARTEKMOTORSPORT.COM)

CARTEK Motorsport Electronics are pleased to announce the new Power Distribution Panel. This product is a full redesign of their successful but bespoke, Power Control Panels, with the main aim of allowing the user to customise and configure it themselves.

The CARTEK Power Distribution Panel is a fully integrated, fully electronic solution to power distribution in race and rally cars. Designed to replace 16 Fuses, Relays and Switches as well as a variety of control systems, these units therefore greatly simplify the wiring, reducing build time, saving weight and maximising reliability.

## FEATURES

- 16 User Configurable Channels (no Laptop required)
- Selectable current settings of 0, 5, 10 or 15 Amps. Combine two channels together for 20, 25 or 30 Amps
- Selectable Functions such as:
  - Momentary action (Starter Motor, Washer Pump etc)
  - Latching with memory/ Latching without memory/ Latching with Time Delay
  - Flashing (Indicators etc)
  - Toggling (Headlights High Beam/Low Beam)
  - 0v Momentary action (use as ordinary switch for ECU Map etc)
- Over Current and Short Circuit Protection - no Fuses or Relays needed.
- 2 Battery Isolator XR Inputs - allowing the Battery Isolator XR to shut down the Power Distribution Panel.
- Dedicated Wiper Module included as standard.
- 16 Momentary Switch Inputs - allowing any channel to be operated by an additional switch or the CARTEK Wireless Control System.
- 16 ECU Inputs - allows the ECU to turn on channels such as Fuel Pumps.
- 4 Dedicated function inputs - Flash Input for Lights, Wash Input for Wipers, Wiper Park position etc.



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## STREPARAVA

Streparava is an Italian company that has developed, manufactured and distributed car, truck and bus components since being founded in 1951 in a small deconsecrated church converted into a workshop in Cologne, near Brescia. The components it builds include suspension systems and axles, as well as steering arrangement, powertrain and driveline products, including rocker arm assemblies, rocker arm shafts, camshafts, crankshafts, shifters, and engine brake systems.

The company, which will showcase its products at the 2018 Autosport International, has researched and developed titanium conrods for use in Formula 1, and produced the crankshafts for the Ducati squad in the MotoGP series.

Streparava has the production capacity to build small-series, special and custom products. The company regularly develops and manufactures tailor-made powertrain components that meet the specific requests of car makers, and also makes products for various industrial applications.



## TOTAL SEAL PISTONS

Total Seal Pistons provides piston development for engines ranging from Formula 1 machinery to standard road cars. The company has also developed a number of separate ring lines that are intended to improve the sealing of any engine.

The Gapless Piston rings produced by Total Seal are capable of providing increased performance by sealing the cylinder and keeping the combustion

gases in the combustion chamber, leading to increased horsepower and torque as well as longer engine life. The company cites other benefits to this approach including less friction, along with cleaner, more consistent oil, a wider torque curve and fewer disruptions to engine function, resulting in cost savings during the life of the engine.

Total Seal plans to showcase its piston ring seal technology at its stand at Autosport International in 2018.

## GLOBAL NEWS

### THIRD WATKINS SCHOLARSHIP LAUNCHED



THE GLOBAL INSTITUTE FOR MOTORSPORT SAFETY HAS LAUNCHED the third iteration of the Sid Watkins Scholarship, which offers an engineering or medical student a fully funded position assisting with safety research projects.

The scholarship, named after motorsport safety pioneer Professor Sid Watkins (above), who died in September 2012, is jointly funded by the FIA, FIA Foundation and the Global Institute. The successful candidate will be tasked with working for the Geneva-based Global Institute, which is the FIA's safety research partner.

Applicants entering the scholarship selection process will be expected to have recently completed an advanced qualification, such as a Master's Degree or PhD, and be able to prove that they have reached a high level of academic achievement. Candidates are also required to have a strong interest in motorsport – in the medical or engineering fields – that they can demonstrate through previous academic projects, professional work or extra-curricular activities.

Applications close on October 20, and the winner of the 2018 prize will be selected by a panel of experts, led by Global Institute General Manager (Research), Laurent Mekies.



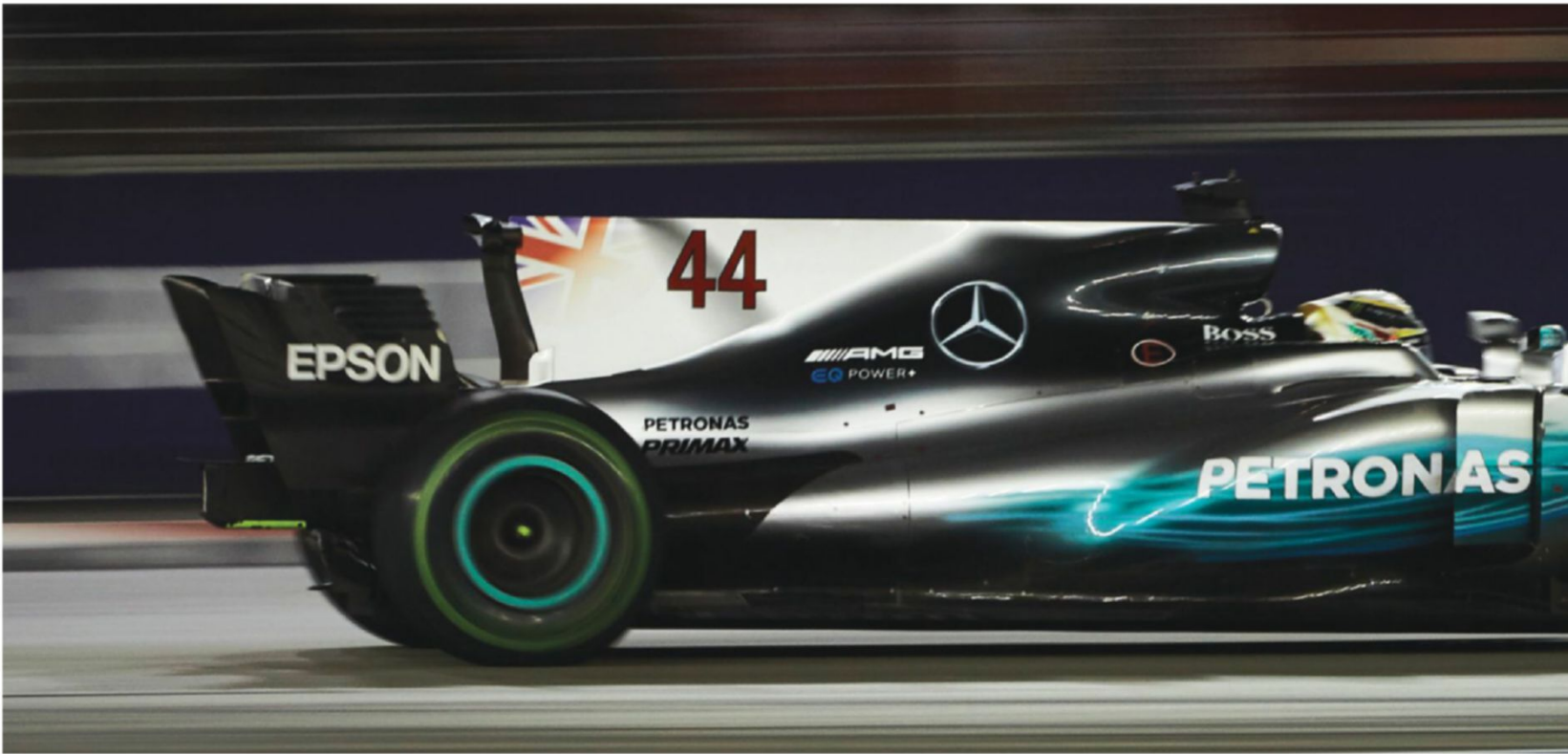
"This is the third iteration of the Watkins Scholarship and it has proved to be a great success so far," said Mekies (left), who is also the FIA's Safety Director.

"The recipient of the award will be working on high-level safety projects that directly benefit motorsport worldwide."

The winner of the 2017 scholarship, Nikil Abraham, who graduated with a Master's Degree in Automotive Engineering from the FH Aachen University of Applied Sciences, worked on projects that included safety developments in Formula 1, as well as the World Rally and Endurance championships.

"This scholarship has enabled me to work on groundbreaking projects and to make a real contribution to the improvement of safety across all levels of racing," he said. "I would encourage all engineering or medical graduates with an interest in motorsport and motivation to do research in safety to apply."

Further information can be found at [www.globalinstitute.org](http://www.globalinstitute.org).



## LUBRICATING THE PATH OF SUCCESS

One company's products has underpinned Mercedes' extraordinary dominance of Formula 1's V6 hybrid era

BY EDD STRAW

**T**he inside of a Formula 1 engine is an inhospitable place. With temperatures in excess of 1000C, precision-engineered components moving at incomprehensible speeds, and every iota of friction wasting the very energy the engine exists to produce and trying to destroy it through metal grinding on metal, all that stands between it and oblivion is oil.

In the cars of the Mercedes AMG PETRONAS Formula 1 team that has won the past three world drivers' and constructors' championships – and is well-placed to make it a fourth double in 2017 – the unsung heroes are the PETRONAS lubricants. To be precise, the PETRONAS Syntium °Cooltech™ oil that you can put in your road car, which is basically the same as that used by Lewis Hamilton and Valtteri Bottas.

Well, it would actually be more accurate to say 'similar'. For while at the fundamental level the demands of the oil remain the same, whether for

a road car or the fastest race cars on the planet, the formulations are refined for different demands and applications. The roadgoing version is from the same family of oil that is used in the unique test-and-development arena that grand prix racing offers. And if you put the roadgoing oil in the F1 car, the engine would still work – if not quite at its optimum.

"The Formula 1 car and engine is a super tailor-made engineering solution," says Dr Andrea Dolfi, Global Technology Manager – Engine, Fluids & Motorsport for PETRONAS Lubricants International. "And the same is true for road cars, although the optimum cannot be fitted for all engines, so you need to have a product that can cover all applications.

"To put things in perspective, the F1 application is very intense in terms of the performance requirement through the relatively brief time it is used. The engine oil needs to last no more than 300km, whereas the oil-change interval for a road car is from 10,000km up to

maybe 35,000km. An F1 lubricant is not capped in terms of cost, whereas an engine oil for the road has to fit within a certain cost bracket."

And that's the beauty of PETRONAS' involvement with Mercedes in F1, a deal that started in 2010 and that has recently been extended for the foreseeable future. The heavy investment in fine-tuning the F1 product to the nth degree offers priceless technical expertise that can be translated to the road.

"F1 forces us to explore new types of chemistry formulation spaces and it forces us to think about all the areas of metallurgy and material," says Dolfi. "F1 is unique and exotic to a certain extent, because you always try new things you wouldn't have the chance to for road cars. So it's a good gym for us."

PETRONAS, of course, is responsible for fuel and all lubricants for the Mercedes team. That means not only powering the car and lubricating the engine, but also supplying other coolants, oil for the MGU-K and MGU-H systems, and



“The two key pillars of engine oil are lubrication and the dissipation of heat”



even assembly oil used in the factory.

The impact cannot be underestimated. Just as with road cars, the quality of the fluids you put in can have a profound effect on performance and longevity of parts. And, what Mercedes technical director James Allison describes as “the flow of goodness that comes out of what PETRONAS invests in us” is key to winning races and championships on track.

“What’s very impressive about the relationship is how quickly PETRONAS realised the opportunities in the regulations that came in from 2014 onwards,” says Allison. “And how swiftly that partnership reached a high level of technical maturity, such that the Mercedes power units and their PETRONAS fuels were operating at a very high performance level right from the beginning. PETRONAS and Mercedes have enjoyed the benefits of seeing that opportunity early and therefore been half a step ahead of the competition throughout this period.”

Such an intensely competitive racing environment cannot fail to improve PETRONAS’ knowledge and understanding of its product. Doubly so since the change in power-unit regulations at the start of 2014, which not only created a vastly increased demand in terms of the addition of more-powerful and complex energy recovery systems (ERS), but also required increased longevity from components and limited fuel to 105kg per race. That number has since risen to 105kg thanks to the raising of car weight and new aerodynamic regulations that increase drag. The fact that Petronas has proved to be the market leader in F1 during this period

Clockwise from top: Lewis Hamilton is well on course to add another world title to his winning portfolio; PETRONAS also built Malaysia’s first concert hall; the company’s products are involved in every aspect of Merc’s operations

is testament to the quality of its products.

“It’s innovative engineering and chemistry that you explore that supports the performance,” says Dolfi. “You need to explore the extremes of rockets and ballistic science to go to the moon, and if you didn’t you wouldn’t have got to the moon — or you would have got there later. It’s the extreme conditions that pushes what is known and pushes you to learn new things.”

When it comes to digging into the detail of lubricant technology in F1, the mindbending complexity of the chemistry makes it ever more difficult to understand. But there are some basic principles that are easy to grasp in an attempt to understand what is happening.

The two key pillars of an engine oil are lubrication and the dissipation of heat, and balancing these two demands is at the heart of the challenge. Add to that the functional prerequisite of keeping the product as stable as possible over its lifetime, and this is particularly pertinent to racing applications. ▶

“You are getting a slice of the same technology that wins world championships”



“An oil that is more fluid is more effective in extracting the heat because it flows better,” says Dolfi. “Over the lifetime of the engine oil, it goes through some degradation patterns because, at the end of the day, it is carbon-based and what happens in the engine is nothing but a chemical reaction, a combustion reaction. That can lead to the oil chain breaking down and producing some by-products.

“These by-products are very reactive and can crosslink and form different types of molecules. An exhausted, aged engine oil is always thicker than fresh engine oil, and this is the chemistry behind the thickening process. If you have oil chains that are strong and less prone to this, the oil remains more stable. So you can better extract the heat through the lifetime of your engine oil. This is just one of the aspects of °Cooltech™.

“One of the key things in performance is that you can reduce energy dissipation and improve efficiency by reducing friction. You also see this in road applications, which contribute to fuel

economy. Reducing viscosity is a key way to give more energy to the wheels. It’s easier said than done, because by reducing viscosity you expose the engine parts to more wear; less-viscous oil is an oil that has a lower working capacity in terms of film formation. So, it flows faster and the layer on the metal surface is thinner. That’s why formulation science is complicated and the trade-off has to be established for all the materials and all types of contact.”

That gives a tiny window, in simple terms, into the balancing act that PETRONAS faces when producing its engine oil. And using the results as proof, not just for the works Mercedes team but also for customer teams Williams Martini Racing and Sahara Force India, it’s a balancing act it excels at.

As for the man in the driving seat, three-time world champion Hamilton, he admits to being constantly amazed by the gains PETRONAS can supply by substituting one fluid for another that looks the same to the eye, but has crucial differences on a molecular level.

“It’s quite amazing what’s happened with the technology of fuel that we now do the same race distance with a third less fuel, so the efficiency is pretty incredible,” says Hamilton. “It’s quite amazing to see the improvements with fuel as we go through our seasons, the two or three upgrades where we have half a tenth to a tenth, just in fuel.

“That’s why we are super-thankful for all the hard work that everyone at PETRONAS does. We wouldn’t have the power without the hard work that they do. And it’s not just the fuel, it’s the rest of the lubricants that we have in the car.”

We’re used to drivers talking up their sponsors, because they have to. But in this case you have to take Hamilton very seriously because he relies on the PETRONAS products, which also include PETRONAS Primax fuel and PETRONAS Tutela, for the performance of his car as much as he relies on those who design and build the chassis at its Brackley base and produce the power unit at Brixworth. He’s talking about a range of products that impacts every part of the Mercedes AMG F1 Wo8 EQ Power+.

So if you put PETRONAS Syntium °Cooltech™ oil in your car, you are getting a slice of the same technology that wins world championships. And while your road car isn’t going at quite the speed, or in such intense conditions, as Hamilton’s is on track, it can benefit just as much from what PETRONAS has to offer. ■





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# TOM GAMBLE

NOT ONLY DID TOM GAMBLE WIN the Ginetta Junior title in 2017, he made history along the way.

The 15-year-old was one of three drivers who were regularly at the front of the field. But it was the penultimate weekend of the year at Silverstone when Gamble really stamped his authority on the championship. He became the first driver ever to win all three races in a weekend and that gave him the crucial advantage heading to the Brands Hatch finale.

It was not the first time that Gamble has tasted success though. He had a strong karting career, achieving top positions in Mini and Junior Rotax as well as winning



two Kartmasters titles.

“It gives you a bit more confidence and you know you can do it if you work hard enough,” he says of his karting days.

And Tom is not the only Gamble to prove they are quick this year. His older brother George also had a successful season, finishing third in the Ginetta GT4 Supercup standings.

Gamble would like to remain on the TOCA package next season, most likely in British F4 or GT4 Supercup.



“It [karting success] gives you a bit more confidence and you know you can do it if you work hard enough”

Twitter: @TomGamble23

Facebook: www.facebook.com/tomgamble23

# 2017 CHAMPIONS

# BOBBY THOMPSON

PERFORMING UNDER PRESSURE is key to success, and Bobby Thompson put in a masterclass this year to secure the Volkswagen Racing Cup title.

Having graduated into VW racing via Ford Fiestas and Formula Ford, Thompson shone in his second VW campaign last year aboard a Power Maxed Racing Polo R.

That led to talks of a move into British Touring Cars for 2017, but things fell over and Thompson secured a last-minute return to the VW Cup just days before the season started.

Using an older car for the first round, Thompson scored well until his new chassis was ready. From then on he flew, scoring six



race wins and adding remarkable consistency. Thompson was on the podium in each of the last six races of the season, securing the title at Donington Park.

“This year’s been amazing as I knew I had to win the title or else I might not be racing in 2018,” he says. “The pressure was really on and to perform the way I have shows a great mental strength. I had the right team behind me too, so now I can start working towards that BTCC move for next season.”



“This year’s been amazing as I knew I had to win the title or else I might not be racing in 2018”

Twitter: @BTMotorsport

Facebook: www.facebook.com/BobbyThompsonMotorsport





# LUKE WILLIAMS

SEVEN WINS AND A FURTHER NINE podiums secured the 2017 National Formula Ford 1600 championship for Luke Williams in emphatic style.

The 25-year-old was the class of the field aboard his Firman RFR16, with notable drives on the opening weekend at Brands Hatch, where he took a brace of wins, and at Silverstone, where he came from seventh on the grid to win the finale.

“From Brands Hatch where we had a mega weekend we went to Oulton Park and that was the turning point,” recalls Williams. “We only got a second and third, but that was where we knew we had the pace to win the championship.”

It wasn’t all easy for Williams,



however. “The low point was Kirkistown where we blew an engine in qualifying and we had an hour and a half to change the engine,” he said. “We started from the pits in race one and managed to get two third places in the other two races. That was a recovery weekend.”

Williams will now contest the Mazda Road to Indy Shootout at Laguna Seca before the end of the year, battling for a \$200,000 scholarship in USF2000.

“From Brands Hatch where we had a mega weekend we went to Oulton Park and that was the turning point”

Twitter: @LukeWRacing    www.facebook.com/LukeWilliamsRacing

# CHAMPIONS



# LEWIS BROWN

IT WASN'T EASY, BUT THE Ginetta GT5 Challenge went to series debutant Lewis Brown during the season finale at Donington Park.

The 18-year-old took the championship by storm with seven wins, including two in the final round to take the title from chief rival Shane Stoney.

“It was probably after Silverstone when we had two wins, that’s when we started thinking about the championship,” says Brown, a former Ginetta Junior frontrunner.

“My mindset sort of changed, I was trying to keep in front of Shane. I was trying to be smart and not go for overtakes I didn’t have to make.”



Difficulties at Zandvoort, including a DNF in the first race, almost derailed his title charge, but two third places at Knockhill in the penultimate round put him back within striking distance going to Donington.

“Coming into the last round behind and coming out in front made it more special,” says Brown. “It was such a relief that we managed to do it.”

For next year, Brown is eyeing a career further up the Ginetta ladder or to rejoin the TOCA support package. “I’ve proved what I can do,” he adds.

“Coming into the last round behind and coming out in front made it more special”

Twitter: @lewis\_brown21    www.facebook.com/LewisBrownRacing



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# INNOVATION IN SCHOOLS TDI CHALLENGE



Now in its 15th year, the TDI Challenge is an opportunity for budding engineers to push their creative boundaries and get inspired

BY JAMES NEWBOLD

**T**he motorsport industry relies on technical innovation and a steady stream of fresh engineering talent to justify its continued relevance to manufacturers, which makes initiatives such as the annual Technology, Design and Innovation (TDI) Challenge increasingly important in a fast-moving world.

Held since 2003, the TDI Challenge is a nationwide competition for Design and Technology students aged between 14 and 19, with the stated goal of inspiring innovation in schools and promoting engineering as a viable career option.

Students are invited to submit their existing GCSE, A-Level or BTEC coursework projects to be assessed by an expert panel of judges from

the Manufacturing Technologies Association (MTA), with a £1000 cheque for the winning school or college to spend on D&T equipment among the prizes up for grabs.

This year's competition at the European HQ of Yamakazi Mazak in Worcestershire was the biggest yet, with group projects admitted for the first time. Six finalists in the individual categories for 14-16 and 17-19 age groups, as well as two groups in the 17-19 bracket, were judged on the creativity of their concepts – ranging from Bluetooth bicycle indicators to an infra-red lifeboat search-and-rescue drone – among other criteria including commercial viability, quality of manufacturing and presentation skills.

Whether any of the finalists will one day convert their enthusiasm into a career in

motorsport is impossible to predict, but MTA Education and Development coordinator Laura Pickering believes the event shows engagement in engineering is on the up.

“The 2017 TDI Challenge received the highest number of entries to date,” said Pickering. “Over 60% of the schools that entered were new to the competition this year and it was great to see such a wide range of innovative projects.”

“The MTA is very supportive of D&T and engineering within the national curriculum, and is keen to address gender disparity and encourage more women to work in the engineering and manufacturing industry.”

Turn to page 17 to find out who were the winners of this year's TDI Challenge ▶



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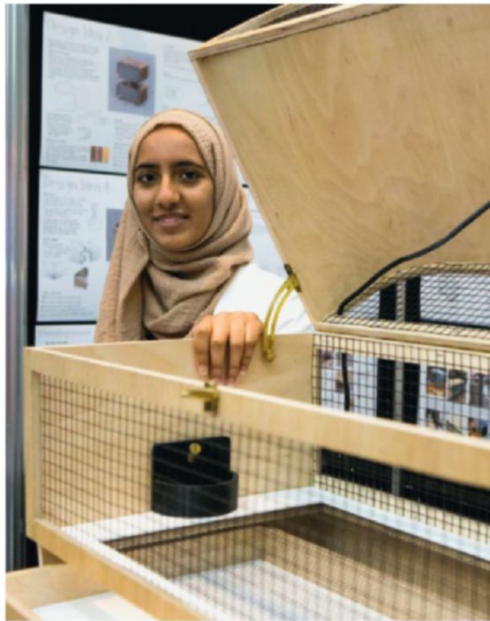
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NEC Birmingham UK  
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**17-19 CATEGORY**  
 HALIMAH ERSHAD, FOREST SCHOOL

**Forest School student Halimah Ershad impressed the panel with her high-end chick incubator, complete with lighting, feeding tray and a user-friendly grille for waste to fall through.**

One of three female finalists in the 17-19 age range, Halimah called on her past experiences as a chick-breeder to create the ‘BrooDen’ – a wordplay not lost on the judges. Her plywood structure was easy on the eye, demonstrated a strong understanding of the market and combined an impressive range of manufacturing processes.

Halimah aspires to a career in manufacturing and is currently an undergraduate engineer at Dyson.

“It’s amazing that I made it to this stage,” she said.

“When they called my name I couldn’t believe it!

“My product is a high-end chicken brooder, which is

what chicks live in for the first two months, and it’s got all the facilities they need to be healthy. It’s inspired by high-end cat and dog houses so, rather than just being a plastic plain box, it’s much more modern and it looks like a piece of furniture.

“I’m hoping to develop the project a bit more and develop it into something people can buy and have in their homes. The product is targeted at quite a niche market, but there is definitely a market for it.

“I think doing a lot of independent research is always good because there is only so much that your teachers can tell you, and that’s how I found out about this challenge. If you are worried about applying then I would say just go for it, there’s literally nothing to lose and you never know where you could end up.”

**14-16 CATEGORY**  
 DAN KIMBER, BRIGHTON COLLEGE

**Brighton College student Dan Kimber’s desk lamp won praise from the judges for its high-quality finish and application of modern technology.**

An avid motorsport fan, Dan drew upon the Brighton pier for inspiration while designing his innovative lamp, which is fully adjustable, doesn’t cast a shadow and uses long-life LEDs located inside the struts that don’t heat up the copper squares.

Although he has plans to continue to develop his concept, Dan’s long-term goal is to emulate the likes of design guru Adrian Newey and one day leave his mark on Formula 1.

“The initial brief was either to make a lamp or a storage unit and the lighting really appealed to me,” he

said. “It’s fully moveable with the hinges on the top, it allows for clear light across your whole desk and a dimmable switch means you can have a range of different light levels, depending on the work that you’re doing.

“I can’t believe that I actually won and I’m excited to see what it will lead me onto. Engineering is the field I would like to work in. I’ve taken a particular recent interest in manufacturing, but also I’ve always had a long interest in F1 and car design.

“I would just encourage people to be proud of what you’ve made and don’t be afraid to push your teacher on what you want to make, because they will be more than happy for you to go for it as long as you show the willingness and dedication to make it a reality.”



**GROUP CATEGORY (17-19)**  
 TEAM UNITE, OAKHAM SCHOOL

**The introduction of group projects allowed the students to explore projects of greater complexity than individual entries.**

Working with Mecc Alte, the world’s largest producer of synchronous alternators, Oakham School students Jacob Hardy-King (right) and Dan Timmerman were tasked with finding a cost-effective and easily portable means of reducing the cooling time of an alternator hub from 600°C to a workable temperature in under an hour, all without changing any properties of the coupling or the hub itself.

Together, they devised a solution using an adjustable and intuitive fan device, which impressed the judges with a sensible business case and a wealth of research.

Given the enormous technical challenges involved, both learned a huge amount from the process.

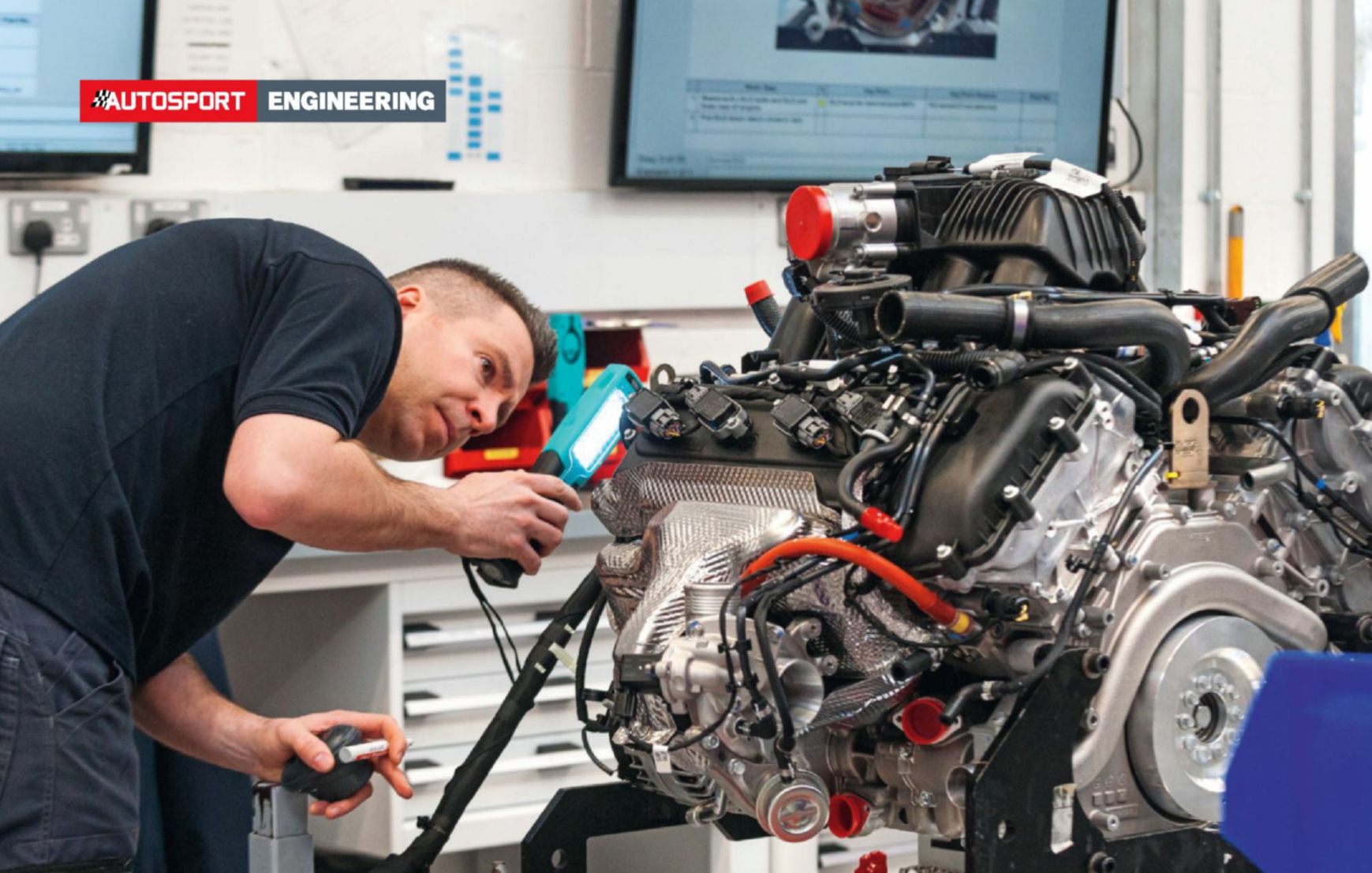
“We started from scratch, then brainstormed a few ideas and from there it progressed to the final product. Luckily it worked, so that was good!” said Jacob, now a Mechanical Engineering student at Loughborough.

“We’ve learned a lot about cooling and also how not to change the properties, which was a key thing for Mecc Alte.

“The best advice I can give is to find a problem and try to solve it. The feedback we got was that our presentation was good, we knew what the issue was and we knew how to get it across, which is good feedback to have for the future.

“I’m really proud that we’ve won this together; it’s a really good achievement to have. It will be a huge help to have this on our CVs and make us stand out as well.”





## POWERING McLAREN'S GT CHAMPIONS

GT racing has provided McLaren with much-needed success in recent years, but another British firm deserves some of the credit

BY KEVIN TURNER

**M**claren's GT programme has provided the legendary British marque with success at a time when there has been little for it to cheer about in Formula 1. The MP4-12C kicked things off in 2012 and won races, but the meaner 650S took things up a notch following its arrival for '15.

Last year, Briton Rob Bell, Frenchman Come Ledogar and Kiwi Australian V8 Supercars ace Shane van Gisbergen won the Blancpain GT Series Endurance Cup, one of the world's leading GT3 contests. That was achieved against cars from Audi, Bentley, BMW, Ferrari, Lamborghini, Mercedes, Nissan and Porsche – some of the biggest names in motorsport. And yet it was made possible by another British firm that normally stays

out of the limelight: Ricardo.

The engineering company has done a lot in the sport over the past century, most of it behind the scenes, and McLaren's engine project has been one of its key programmes in recent years.

Ricardo was involved with McLaren's series of supercar powerplants from the start, developing the M838T unit. There is also a special building on site at the Shoreham HQ, constructed to build engines for McLaren's first new-age supercar, the MP4-12C. The original deal was for 40 engines per week, but that has subsequently expanded considerably.

Ricardo builds all the McLaren engines for its racing and road-based sportscars at this facility. It doesn't make the parts – it assembles them – but it does directly manage the global supply base, including managing

and resolving all issues.

"You try to convince suppliers whose core business is in much higher volumes that it's worthwhile because of the niche volume and high technical demands, so there is a lot of management," says Ricardo's Martin Starkey. "The effort of creating such engines is 20% high-tech assembly and 80% complex supply-chain management. And whether you're building 10 of a variant or 10,000, it has the same process and challenges."

Perhaps the most impressive thing about that process is the quality control. Unlike mass-production lines, every engine Ricardo builds – as required by McLaren – is put through a 20-minute power and peak-torque test as soon as it is finished. Ricardo can also perform random testing on components for validation. Even after that, there are manual checks once the engines have cooled down. The most minor glitches can result in 'fails'.

Interestingly, the quality control of major road-car manufacturers is such that Ricardo wanted to use it as a basis to build on. Starkey confirms the days of large tolerances, concessions and rework on standard production units are over: "We try to use more mainstream





production suppliers even for motorsport so it has that repeatable-quality mindset from the start. It doesn't matter to the assembly team member whether it's a motorsport part or not, the process is the same.

"There is a standard we've developed so the engines are consistent. McLaren's assumption is that they are receiving a quality-assured product, right first time – and that's how it should be."

Standardisation is thus important, even though there are almost a dozen different engine variants, some with very special and exotic components that are almost indistinguishable from their 'standard' counterparts. The race engines, for example, tend to be lighter and more responsive, with power capped in line with homologation rules, but are made on the same production line, to the same exacting standards as a road variant.

There are 10 assembly stations to that line, including one merely for quality control. Each station takes 45 minutes before the engines move on.

This is one area in which Ricardo has improved upon the high-volume production lines. Typically, the latter have 100 stations,

where far fewer parts of the process are completed, and the engines move more quickly on conveyors. Similar checks are carried out, but not all engines are tested at the end, and there are fewer engine variants on the same line compared to Ricardo.

At Ricardo all assemblers are trained on a number of stations, but they will stay on one station per shift. The computer-controlled (but expert-workforce-manned) production line can cope with the various McLaren engine models being constructed at the same time. There are, for example, 60 valvetrain shim variants, each fractionally different, and the computer measures them to ensure the right one is selected.

Parts are scanned as the engines are built. The system knows what items need selecting

Clockwise from top left: Hall shows Autosport the engine production line; parts for the various versions look similar, so the system has to be rigorous; McLaren took last year's Blancpain Endurance crown; expert workforce is combined with computer systems

for a particular build and it knows who selected a given part. It won't let them continue until the correct item is scanned. The systems and processes are stringent all the way through.

"We're talking microns of difference," says Daniel Hall, Ricardo's head of new product introduction. "At different points the assembly is quality checked. Only if it passes will it move on. If you pick the wrong part it'll lock and you can't move on. Don't think, just do. If it doesn't fit, flag it up. And it's all recorded and archived."

The system even knows to load the correct torque and turn for specific tools on particular jobs...

Depending on demand, nine or 10 engines can be built per shift. Ricardo currently builds around 4500 engines per year, of which between 100 and 200 will be for motorsport purposes.

It also services road engines and some race units. "Sometimes we get a failure in motorsport we would not get elsewhere, so we want to look into it," adds Hall.

But that's not a regular occurrence. That, and the success that has come the way of McLaren's GT3 racers, helps to explain why this exacting British company has maintained this partnership with Ricardo for almost a decade. ■

# BREAKING THE RULES TO PROVE FANS LOVE THE TECHNOLOGY OF F1

Some media empires believe that F1 followers are only interested in the people, not the cars. Prepare for the debunking of a myth

BY PETER WINDSOR

**T**here is probably nothing more polarising in motorsport than ‘engineering’. On the one hand, Formula 1’s USP is its technology; on the other, the F1 teams are massively secretive about their work.

Then there’s the media in general. You’re either a ‘techie’ or a ‘Street-of-Shamer’. You’re either into cascade element updates or nasal jewellery and Lewis’s latest squeeze.

There are exceptions, of course. Autosport is one and so is *F1 Racing* magazine. I’ve lost track, though, of the number of times a TV director has been in my headset at an F1 race saying: “This is getting too technical. Wind it up. Throw it back to the studio.” Or, as was the case when I was covering F1 races for *The Sunday Times*: “Write nothing technical. The readers only want to know about the stars and the action. Don’t mention tyres or engines, let alone wings.”

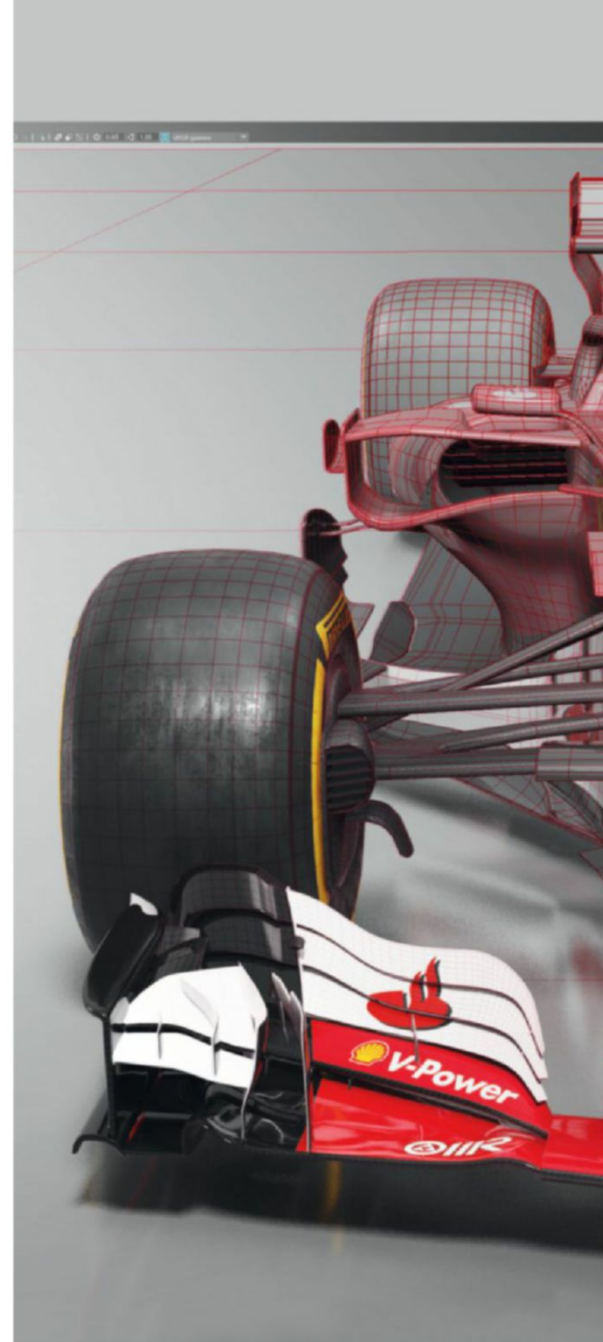
So it was that, defying the odds, I teamed up with former Autosport technical journalist Craig Scarborough a few years ago to plug what

we believed to be an obvious hole in the market. With none of the TV networks spending any resources (time, energy, money) on the engineering side of F1, we thought it would be useful to supply the TV networks with short, 3D animation videos about the key car-tech updates from any given F1 weekend.

This would involve four key elements:

- We needed to ‘build’ from zero a minimum of three F1 cars. These would then be ‘updated’ as we went along;
- We had to be on top of said updates by close of play Thursday (cars being wheeled to and from the scrutineering garage) or first thing Friday (FP1);
- The animation needed to be created from Craig’s storyboard, and then rendered, in less than 36 hours;
- We then had to sell and supply these animations to the TV networks.

Our belief was that we could make the engineering not only interesting to the F1 stalwarts in an easily watchable way, but also accessible to the uninitiated. It’s one thing for 15-year-old Xtreme Sport YouTubers to glance



at an F1 technical drawing or to read the odd word or two about centres of pressure, it’s another for them to be able to see the old Ferrari front wing being replaced by the new one in video form – and to understand why that change has been made.

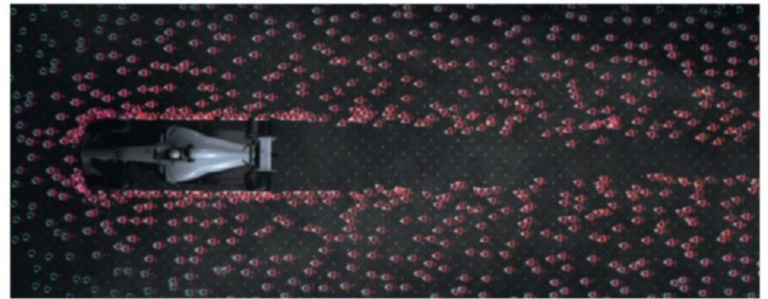
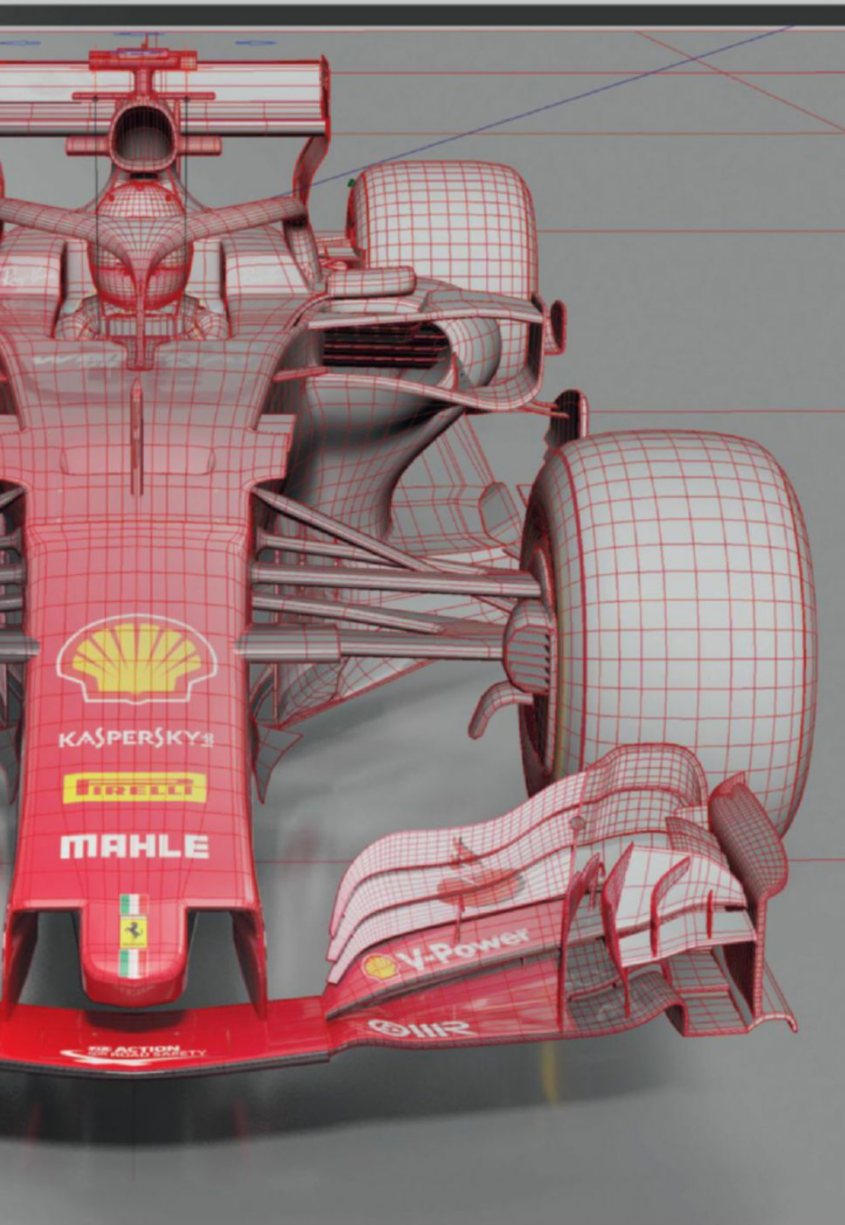
It wasn’t easy. Some teams, such as Mercedes and McLaren, were very helpful with our ‘ground-zero’ car matrix builds, other teams were not. We were very fortunate to meet Dean



3D ILLUSTRATIONS: DEAN & EMMA WRIGHT

motorsport.tv





Wright, our 3D animator, at an early stage; and both LAT and Sutton Images kindly supplied us with many digital images to add to our own photos for our storyboards.

In two years we produced 86 different videos around the updates at Mercedes, Ferrari, Red Bull and McLaren within a day or two of the specific changes appearing. Together, car by car, they provide a fascinating view of how these designs evolved over that period.

Five TV networks plus FOM (but not Sky or Channel 4) quickly bought in to the videos and the response to them was huge, even if the audiences were mainly non-English language. At the end of 2016 there came another development: video production would be taken over by Motorsport.tv,

Clockwise from above: digital rendering of Ferrari includes underlying wireframe and halo; F1 airflow wake visualisation; rear-wing turbulence; downforce visualisation. Far left: Aston Red Bull concept. Centre left: Ferrari internal airbox ducting and front-suspension damper

the new TV/digital platform based around the old MotorsTV channel.

This year we have produced at least one update video for *The Flying Lap* from every F1 race (sometimes two or three) and also broken new ground with Willem Toet, an aerodynamicist who has worked at Benetton, Ferrari and Sauber. Both from his base in Switzerland and in our rapidly expanding Richmond offices, Willem has been working closely with Craig, Dean and Emma Wright and the special-effects team to produce the next generation of 3D animations, featuring vortex flows, turbulence wakes and downforce spreads. And that's just the start of it: sometime soon we'll be taking 3D F1 animation to an even higher level, by which I mean that you'll be seeing the cars somewhat out of context.

The key thing is that the fans, both technical and otherwise, seem to love them. Our McLaren F1/IndyCar comparison drew 88,000 views on YouTube alone. The Red Bull pre-August break update video attracted 110,000 views; and over 200,000 people have viewed our Ferrari halo 3D animation.

There was a time, back when Craig, Dean and

I were starting out, when YouTube guidelines went as follows: "Make the videos short; don't get too technical; and include live action wherever possible."

We broke all those rules and the videos kept cranking up the numbers. Which led us to one inescapable conclusion: despite what we're told, the fans love the technology.

But then we always knew that, didn't we? *W*

**Motorsport Network's animated engineering can also be watched on MotorsportTV every Friday; on Motorsport.TV's on-demand platform; and in short, digital clip form, on motorsport.com and autosport.com.**







Clockwise from top left: Careers and Education area; Pakelo Oil is just one of the new exhibitors; Talk Shop takes over where Tech Talk left off, offering industry advice; Ferrari centrepiece with Corse Clienti



# WHAT'S NEW AT AUTOSPORT INTERNATIONAL

Momentum is gathering for the pre-season exhibition at the Birmingham NEC in January

**A**utosport International, Europe's premier pre-season motorsport show, returns to the NEC, Birmingham, from January 11-14, with two dedicated trade days on

January 11-12, bringing together the world's leading companies from the performance engineering, automotive and motorsport sectors.

The show creates a truly global hub for companies to do business, with 21 different nations represented in 2017. This means that many companies return year after year, as well as being joined by new exhibitors.

## RETURNING EXHIBITORS

- **KW Automotive** Offers adaptive coilovers compatible with numerous control systems of various automotive manufacturers for the aftermarket industry. The latest generations of adaptive KW DDC plug-and-play coilovers are also available for the current Ford Focus RS III (DYB).
- **Viraver** Based in Italy, Viraver specialises in the design and manufacturing of composite windscreens, glass and polycarbonate windows sets for show cars, prototypes and racing cars.

- **SuperPro Europe Ltd** The sole distributor in the UK and throughout Europe of SuperPro's full range of Polyurethane Suspension Bushes. Superpro has recently launched the Mitsubishi L200 lift-correction upper control arms to correct camber, caster, droop and clearance on lifted vehicles.

## NEW EXHIBITORS

- **Pakelo Oil** Italian company focused on the formulation, production and worldwide distribution of vanguard lubricants.
- **920 Engineering** Designs and manufactures a range of solutions including brake calipers, actuation, control electronics and bespoke engineered products.
- **Safety Devices** Europe's largest rollcage manufacturer has been designing and manufacturing for 40 years.

**There are numerous new and updated elements for 2018, highlighting the exciting times ahead for the show now it is part of Motorsport Network, the world's largest independent automotive and motorsport-related digital platform.**

- **New meeting areas** Within Autosport Engineering, the show's heart of innovation and technology, there will be new meeting areas available to help exhibitors

conduct their business in a formal and appropriate environment as well as undertake talks in private.

- **Tuning Village** For the first time, the Performance Car Show will feature a dedicated area for industry-leading exhibitors to showcase the latest products for modifying and upgrading your car. Exhibitors include Celtic Tuning, Knight Industries, MAGICMOTORSPORT and Steeda UK.
- **Ferrari** The 2018 show will see an exciting new centrepiece created in collaboration with Ferrari, showcasing the lineage from its legendary sports cars through to F1, courtesy of Corse Clienti – Ferrari's exclusive client racing programme.
- **Careers and Education** Aimed at visitors considering a future in motorsport or performance engineering, this area is returning to Autosport International for the 21st year, this time in partnership with The University of Bolton and new recruitment platform MotorsportJobs.com.
- **Talk Shop** Situated in the Careers and Education area, the Talk Shop stage (previously Tech Talk), run by the MIA, is where experts from a range of disciplines within the industry will share their advice and insight.

**Information about Autosport International**  
To register for trade tickets, please visit our website [www.autosportinternational.com](http://www.autosportinternational.com)



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