#### **156-PAGE CHRISTMAS SPECIAL ISSUE**



**BEST DRIVERS OF 2017** 

# WHY LEWIS

"It has been the hardest year"

#

TOP 50 DRIVERS

PLUS

THE ULTIMATE CHRISTMAS QUIZ THE BEST F1 LOSERS

THE WORST CRUSHED CARS



PETRONIS

AVL RACING - limiting the unknown in electric motorsports



# ELECTRIFYING SPEED

www.avl.com/racing











**TEST** 

RACE



# Picking the year's best performers

#### LEWIS HAMILTON AND MAX VERSTAPPEN IN

Formula 1, World Rally champion Sebastien Ogier, and McLaren's increasingly versatile Fernando Alonso. All performed to an astonishingly high level this year, but who do you think was the best driver of 2017?

As has become tradition, we engaged in some healthy office debate to come up with our top 50 drivers of the year. As ever, comparing drivers across different categories proved tricky, with varying levels of competition and machinery quality at our candidates' disposal.

Given the way he rose to the challenge of Ferrari — and that of the fast-but-tricky Mercedes Wo8 — to take his fourth F1 world title, Hamilton takes our number-one spot, the third time he has topped our annual list. As Ben Anderson's piece shows (page 42), Hamilton believes that 2017 was one of his toughest seasons, and he also opens up about the three drivers on the current grid he really rates.

We've packed this bumper issue with a mix of reflection on 2017 and some more unusual topics, including the best F1 cars never to win and Gary Watkins's investigation into the unfortunate fate of some notable racing cars. We also interview rally legend Sebastien Loeb, who topped our top 50 list back in 2005.

We hope the issue will provide you with a dose of motorsport through the festive period before everyone comes out of hibernation for 2018. Merry Christmas!







**COVER IMAGE**Sutton Images

#### **COVER STORY**

- 19 Autosport's top 50 drivers of the year
- 42 Hamilton on the challenges of 2017

#### PIT+PADDOCK

- 4 A new dawn for World Touring Cars
- 7 Carlin commits to two-car IndyCar attack
- 9 Porsche doubles Le Mans GT line-up
- 11 Fury over FIA Jorda appointment
- 12 Fifth Column: Nigel Roebuck
- 15 In the paddock: Scott Mitchell
- 17 Feedback: your letters

#### **FEATURES**

- 52 Best pictures from a year in motorsport
- 66 The UK's fastest laps of 2017
- 68 WRC review: how Ogier won without VW
- 86 Armchair enthusiast: Christmas gifts
- 92 Christmas quiz
- 96 Best losers: F1 cars that failed to win
- 106 Racers that didn't escape the crusher
- 112 Loeb on the challenges of Dakar and WRX

#### **RACE CENTRE**

78 Season reviews: DTM; Porsche Supercup; Super GT; European Le Mans Series; Formula V8 3.5; World Rallycross; Euroformula Open; Scandinavian Touring Cars; Super Formula; World Touring Cars; TCR International; Australian Supercars; British Rally Championship; NASCAR Cup; Blancpain GT; Formula Renault Eurocup; IMSA SportsCar

#### **CLUB AUTOSPORT**

- 133 British GT champ Cocker in Lambo return
- 134 Donegan wins Road To Indy Shootout
- 136 Marcus Pye's review of the year
- 140 Top 10 club racing drivers of 2017
- 142 Club racing's top 10 2017 rivalries
- 144 National pictures of the year

#### **FINISHING STRAIGHT**

- 150 What's on this week
- 152 From the archive: 1966 German GP
- 154 Motorsport memory: 2013 British GP

#### **AUTOSPORT SUBSCRIPTION OFFER**

102 Special Christmas deal

# S - DEBATE - CONTROVERSY - OPINION -



WORLDTOURINGCARS

# Why the WTCC had to go

THE WORLD TOURING CAR CHAMPIONSHIP is no more — for now at least — after a landmark deal to allow the series to adopt TCR regulations next year was confirmed at last Wednesday's FIA World Motor Sport Council meeting.

From 2018, the WTCC will cease as an FIA world championship and instead will become the FIA World Touring Car Cup, running under the WTCR banner to denote its change of technical platform. The two-year span of the new deal — under which regulations will be licensed out by TCR trademark owner WSC — effectively covers the remainder of a planned second three-year cycle of TC1 regulations that, while written with good intentions, threatened the very existence of the championship.

It brings to an end the Super 2000 foundation of touring car racing that had been employed since 2002 — when what became the WTCC was still the European Touring Car Championship — but is not a change that will leave many yearning for an extension of the TC1 era.

The need for a replacement technical framework for TC1, which Eurosport Events chief Francois Ribeiro admits went both "too far" for privateers in cost terms and "not far enough" for the manufacturers it aimed to appeal to, has been apparent since the end of 2016, when Citroen and Lada walked away from the series. Proposals to adopt the shared DTM/Super GT Class 1 concept were met by a lukewarm response from WTCC teams, and a switch

to former WTCC boss Marcello Lotti's revolutionary TCR formula became the only viable route forward.

"To be honest, the decision was a no-brainer," says Alan Gow, president of the FIA Touring Car Commission. "Lotti had the TCR International Series, and this will take its place. It's an interim measure. The cars are not at world-championship level and that's why it's not a world championship. With the TC1 regulations, we were getting less and less manufacturer involvement and it simply couldn't last. TC1 was too expensive for privateers and it wasn't sexy enough for the manufacturers. It was like being half-pregnant."

Out go works teams from manufacturers — the WTCC was survived by Honda and 2017 title winner Volvo — and in comes an emphasis on GT3-style customer racing as well as a rules freeze to ensure budgets don't spiral out of control and the "spirit of TCR", in Lotti's words, is respected. The TCR International Series and WTCC-supporting European Touring Car Cup have also been canned as a result.

With entry fees up from 2017's TCR International Series figure of €40,000 to €75,000 per car for a two-car team, in conjunction with the €129,000 cap on car costs that brings the initial investment for a full season to around €200,000 per car. To put that in some context, annual budgets for WTCC privateers cost upwards of £1million



# low-cost with TCR merger

"TC1 wasn't

sexy enough. It

was like being

half-pregnant"

towards the end of the TC1 era.

In other significant changes, teams made up of a minimum of two cars will be permitted for the World Cup and applications for places on a limited 26-car grid open this Friday (December 15), with priority for those slots given to existing WTCC and TCR squads. Weekend formats will also be tweaked, with three races now taking place over 10 events.

"There were moments of fame for privateers, but they are too short compared to the factory

teams," says veteran racer Tom Coronel, the Dutchman who has been part of the ETCC/WTCC fabric since 2001 and has also competed occasionally in TCR. "The manufacturers are getting all the attention. I understand, I'm not complaining at all.

"But now with TCR, it's like [the WTCC in] 2006, '07, '08 — there are more possibilities to shine, to get your moment of fame. I'm not young, but I know what I'm doing and for me it's a much bigger chance to bring trophies home than I've had for the last seven years. I get more excited by the new regulations."

Alessandro Mariani, whose JAS Motorsport team — which ran Honda's factory WTCC effort — will not be permitted to run cars in WTCR, but supplies customers as the constructor of Honda's Civic Type R TCR cars, adds: "It was the right solution for touring cars in this time. Touring cars is like a wave. We have a period of big success, then the costs become too much and then we have to drop to a different car."

It's hard to see who loses from this deal: WTCC promoter Eurosport keeps hold of its flagship touring car category; TCR gets its product promoted on a proper international platform; the manufacturers — despite being banned, as far as factory efforts are concerned,

from competition — benefit similarly from added exposure; entry budgets come down significantly for drivers and teams.

That's not even factoring in the potential spectacle on offer, with a genuine opportunity for 20 top-class drivers to go wheel to wheel

 so long as the Balance of Performance, which will be calculated by the FIA and TCR, proves an adequate field leveller.

But TCR is unlikely to feature in the FIA's masterplan for global touring car racing's future beyond 2020. Class 1, despite initial reservations, is understood to be the favoured option. Until then, there will be plenty in touring cars grateful for an intervention that is far more comprehensive than a simple stopgap.

The future of the WTCC: Alfa Romeo leads Opel and SEAT in TCR, here at the Salzburgring FORMULA1

#### SIROTKIN NOW TOP TIP FOR WILLIAMS

SERGEY SIROTKIN HAS emerged as the favourite to drive for Williams in 2018, with Robert Kubica no longer in the frame.

Williams has spent the past week evaluating data gathered from the recent Pirelli test at Yas Marina, where it ran Sirotkin and Kubica.

Kubica had been favourite to make a sensational return to F1, with the team impressed by his feedback and the way he fitted in and built up strong relationships. But it has emerged that performance data suggests Sirotkin is the stronger candidate.

Williams has insisted throughout the process that its decision on the driver to partner Lance Stroll next season will be based on performance.

Talks with the
22-year-old Russian, who
has performed reserve
duties for Renault this
year and was third in
GP2 in 2016, are now
at an advanced stage.

Sirotkin is understood to bring substantial backing in the region of £15million from Russia's SMP Racing, which was founded by amateur racer Boris Rotenberg, who controls SMP Bank.

Should the deal fall through, Toro Rosso refugee Daniil Kvyat is believed to be the back-up. Sources suggest that Paul di Resta is also out of the running.

Williams was not making any official comment on its line-up as we went to press.

LAWRENCE BARRETTO



#### 2018 RACE DAY HOSPITALITY & MUSEUM TOURS AT WILLIAMS RACING

#### **RACE DAY HOSPITALITY**

Watch an F1 race live at the home of Williams Racing during the 2018 season. The Williams Conference Centre offers a unique way to experience the thrills of a Formula One Grand Prix with a live link up to the team at the track, five-star catering and F1-inspired activities room.

#### **MUSEUM TOURS**

Housed in the award-winning Williams Conference Centre is Sir Frank Williams' private Grand Prix Collection, one of the largest of its kind in the world, spanning the history of the team since 1978.





#### CHRISTMAS PROMOTION

Still looking for the perfect Formula One-themed gift this Christmas?

Use code **"Autoxmas20"** to receive **20% off** 2018 Race Day Hospitality packages and Museum Tours.

Code is only valid on bookings made before 31 December 2017



#### WWW.WILLIAMSF1.COM

F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX and related marks are trade marks of Formula One Licensing BV, a Formula 1 company. All rights reserved.





**INDYCAR SERIES** 

# Carlin IndyCar team is go with Chilton and Kimball

CARLIN'S LONG-ANTICIPATED MOVE INTO THE IndyCar Series is on for 2018, and the team will compete with two of its former drivers: ex-Formula 1 driver Max Chilton and IndyCar veteran Charlie Kimball, following their exits from Chip Ganassi Racing.

Carlin has procured an engine deal with Chevrolet to secure its IndyCar move, after a link-up with KVSH Racing for 2017 failed to materialise.

Team boss Trevor Carlin, whose squad moved into Indy Lights in 2015, said that the new programme realises a long-held ambition. "To be joined on that journey in our debut season by drivers we already have a race-winning history with in Max and Charlie [both in British Formula 3] is beyond what we could have expected," he said.

Chilton added: "Carlin being the first British team to

enter IndyCar in the modern era is a result of a lot of hard work and ambition following the team's move into US racing a few years ago. IndyCar is exceptionally competitive, but the introduction of the new aero package will help level the playing field slightly. I know that finding the maximum in a spec series like this is where Carlin really excels."

Kimball (following Chilton in picture above) said: "I've already got two years of experience working with Max as a team-mate and I think our strengths and weaknesses will really complement each other."

Carlin carried Ed Jones to the Indy Lights title in 2016 and has several other graduates from its junior-category teams in IndyCar, including champion Josef Newgarden, Will Power and Indianapolis 500 winner Takuma Sato.



DTM

#### **Brands GP on draft DTM schedule**

THE BRANDS HATCH GRAND Prix Circuit will play host to the DTM next season for the German tin-top series' first visit to the UK since 2013.

A draft calendar submitted by the DTM to the FIA for approval features a round at Brands on August 11-12, following recent stories that the series could race either at the Kent venue or at Donington Park. The GP loop has been chosen over the unpopular Indy Circuit, which was

used for the DTM from 2006-13. The DTM will also make its first visit to Misano in Italy.

The DTM-supporting Formula 3 European Championship will not compete at Brands because its Silverstone World Endurance support slot is the following weekend. F3 has a late kickoff, due to the shift of its Silverstone fixture and the loss of its Monza date, and begins at Pau in May.

Dates for both are: May 5-6

Hockenheim (DTM only); May 12-13 Pau (F3 only); May 19-20 Lausitzring (DTM only); June 2-3 Hungaroring; June 23-24 Norisring; July 14-15 Zandvoort; July 27-28 Spa (F3 only); August 11-12 Brands Hatch (DTM only); August 18-19 Silverstone (F3 only); August 25-26 Misano; September 8-9 Nurburgring; September 22-23 Red Bull Ring; October 13-14 Hockenheim.

R WITTEMEIER, J KLEIN & M SIMMONS

**V8 STOCK CARS** 

#### MASSA AND PIQUET ON V8 STOCK CARS GRID

FELIPE MASSA WILL CONTEST the opening round of Brazil's V8 Stock Car championship next season, while Nelson Piquet Jr has signed up for the entire series.

Massa will share with five-time champion Caca Bueno at Cimed Racing in the one-off two-driver race at Interlagos on March 10. "I am honoured by the invitation and will be very proud to make my debut in Stock Car with the greatest champion still active and my great friend, Caca Bueno," said Massa.

Piquet, 32, will join Full Time Racing for the entire 2018 season, when he will team up alongside Rubens Barrichello and Ricardo Mauricio. The programme is possible for Piquet (below) because there are no clashes with his campaign in Formula E, where he was the inaugural champion in 2014-15.

Meanwhile, factory Aston Martin World Endurance Championship driver Daniel Serra wrapped up the 2017 title at the Interlagos finale last weekend. Serra - who only needed a top-three finish to be crowned - tried desperately to pass Mauricio for the lead. He then dropped to third after the mandatory pitstops, trailing Mauricio and Max Wilson to the finish in a 1-2-3 for the RC team. Thiago Camilo was Serra's only title rival - he qualified eighth but struggled for speed and finished down in 14th place.

PABLO ELIZALDE AND LITO CAVALCANTI





## MACH 2018 — Be part of it...



Be part of the UK's largest engineering and manufacturing event, with dedicated zones delivering quality sales leads, direct to your stand.



#### Key benefits of exhibiting include:

- Access to over 25,000 quality visitors from across UK manufacturing
- Gain valuable face-to-face time with buyers and specifiers with budget authority, looking to invest
- Meet new prospects and strengthen relationships with existing customers
- Showcase your latest products and services for engineering and manufacturing at a professional, business focused event
- Raise your profile, exhibiting alongside some of the largest names in UK manufacturing



To book your space at MACH 2018, please contact the sales team: 0800 470 4690



Organised by the industry,

for the industry



Join in the conversation @MACHexhibition #MACH2018





AN EXPANSION OF PORSCHE'S GT programme for 2018, including a four-car assault on the Le Mans 24 Hours, has been made possible by its withdrawal from LMP1 in favour of a move to Formula E.

The German manufacturer will bring its IMSA SportsCar Championship squad over from North America to race alongside its regular World Endurance Championship line-up and give it four cars in the GTE Pro class at Le Mans on June 16-17. At the same time, it will field a solo factory car in the Blancpain GT Series Endurance Cup for the first time, as well as contesting all rounds of the Intercontinental GT Challenge with at least one works-supported car.

Porsche GT boss Frank-Steffen Walliser

explained that the move would not have been possible had the company remained committed to the high levels of expenditure required in P1.

"We would not have been able to do that if we were still competing in a more expensive category like LMP1," he said. "When we made a decision to change our top sporting category, part of the idea was to allow us to strengthen our commitment to GT racing. That includes Le Mans, but also our customer programmes in GTE and GT3."

Porsche will build seven examples of its newfor-2017 mid-engined 911 RSR for customer programmes across Le Mans, the WEC and the European Le Mans Series. It is also introducing an update kit for the existing 911 GT3-R. Porsche has reshuffled its driver line-ups across its two programmes with the GTE-spec 911 RSR for next year. LMP1 drivers Nick Tandy and Earl Bamber have returned to IMSA as expected, while marque newcomer Gianmaria Bruni will switch from the North American programme to the WEC.

Dirk Werner and Frederic Makowiecki, who respectively raced in IMSA and the WEC in 2017, will be part of the BGTS and IGTC programmes. They will share a Manthey-run 911 GT3-R with Romain Dumas in the BGTS and be placed with local teams in the Bathurst, Suzuka and Laguna Seca enduros that make up the IGTC along with the Spa 24 Hours.

**FORMULA3** 

#### Ferrari protege on board as F3 grid takes shape

FERRARI PROTEGE MARCUS
Armstrong will race in the Formula 3
European Championship next season with
Prema Powerteam — that was confirmed
last week, and should trigger a flurry of
announcements over the next few weeks
for what will be the final season of F3 as
we know it, before the new International
F3 rules are introduced for 2019.

Italian Formula 4 champion Armstrong will also return to his New Zealand homeland to contest the Toyota Racing Series, meaning a driver who is very highly rated in some quarters will be well prepared for his rookie F3 season.

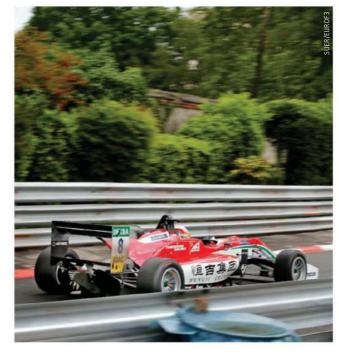
No sooner was the Armstrong story out than Carlin confirmed Canadian Devlin DeFrancesco — no surprise there, after he contested the final two Euro F3 rounds of 2017 and the Macau Grand Prix with the team. That makes four F3 drivers in place for '18, with McLaren Autosport BRDC Award winner Dan Ticktum and Swiss F4 graduate Fabio Scherer on the books at Motopark.

Who else can we expect? Prema was out testing last week at the Algarve Circuit and Jerez with Armstrong, plus Mick Schumacher, returnee-from-Hitech Ralf Aron, Russian Ferrari recruit Robert Shwartzman and existing Ferrari junior Guan Yu Zhou, with Chinese ace Zhou (right) setting the quickest time at Jerez.

Carlin has been out with its 2017 race winners Jehan Daruvala and Ferdinand Habsburg, Formula Renault Eurocup champion Sacha Fenestraz, plus Euroformula Open frontrunners Nikita Troitskiy, Ameya Vaidyanathan and DeFrancesco. Motopark, which was also at Algarve and Jerez, ran Ticktum, Scherer, '17 F3 racer Marino Sato, German F4 king Juri Vips, plus F4 graduates Jonathan Aberdein and Sebastian Fernandez. You can mark all these down as very likely.

BRDC British F3 champ Enaam Ahmed is also in the mix, and has tested at Silverstone with Carlin and at Barcelona with Hitech GP in recent days.

MARCUS SIMMONS





hallenging and exciting, the most famous circuit in the world - the Nürburgring Nordschleife also has the reputation for being one of the most intimidating and difficult to learn.

Because of this intimidation factor, too many people miss out on this jewel in the spectacular Eifel landscape.

This is where the team at RSRNurburg come in. Located only 300m from the entrance to the circuit, this team of motoring enthusiasts have a wealth of knowledge to share, helping anyone gain the confidence required to take on the "Green Hell" for themselves.



Should you not wish to "risk" your own car on the circuit, then choose from their extensive fleet of sports and track cars, with options for everyone (Including right hand drive / UK variants); such as the Ford Fiesta ST, Volkswagen

#### Experience Heaven at the "Green Hell"

Golf GTI, BMW M2 and even Porsche GT3 RS 991 available to hire.



# When will you make your dreams a reality?

RSRNurburg also offers full driving academy programs that are tailored specifically to learning the Nürburgring and are suitable for any experience level.

However, don't think you have to go it alone - RSRNurburg can also cater for groups of friends or large corporate events; creating memories that will be shared for years and years to come.

Having already made dreams come true for thousands of their customers from all over the world for over 20 years, the only question is when will you make your own dreams a reality?



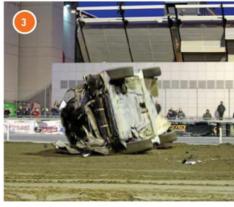


RSRNurburg GmbH Antoniusweg 1a, 53520 Nürburg

Tel.: 02691 931 952 Email: sales@RSRNurburg.com Web: www.RSRNurburg.com









**MEMORIAL BETTEGA** Petter Solberg's boy Oliver made a memorable World Rally Car debut in a Ford Fiesta WRC at the Bologna Motor Show last weekend. The young Norwegian emerged unhurt, but unsurprisingly lost the final to fellow son-of-a-Nordic-rally-great Kalle Rovanpera. **Photographs by Lorenzo Botto** 

WOMENINMOTORSPORT

#### Anger over Jorda's FIA role

LAST WEEK THE FIA GAVE FORMER Lotus Formula 1 development driver Carmen Jorda a position on its Women in Motorsport Commission. And, understandably, women in motorsport are kicking up a fuss about it.

Jorda, who proved uncompetitive in three seasons of GP3 from 2012-14, has previously advocated a separate Formula 1-style series for women, claiming that they are unable to compete on an equal footing with men. Coincidence or not, but could recent reports that there are plans for a women-only championship to get under way in '19 be linked to the Spaniard's appointment?

British IndyCar racer Pippa Mann has spoken eloquently in the past that women must race on equal terms with men, and took time out from her bid to put together a deal with Dale Coyne Racing for next year's Indy 500 to tell Autosport what she thought about Jorda's position on the Commission, the president of which is former World Rally Championship heroine Michele Mouton.

Mann spoke of the accomplishments this year of Christina Nielsen (IMSA GTD champion), Katherine Legge (a race winner in the same class), Tatiana Calderon (podium in World Series Formula V8 3.5) — and her own accomplishment in becoming the first female to lap Indianapolis at over 230mph in her only open-wheel race of the season.

"Against this backdrop of current and rising female racing talent, it is extremely disappointing to learn that a racer with no notable results in any of the categories in which she has competed, and who believes and is quoted as saying that she does not believe we as female racers can compete, has been appointed to the FIA Women in Motorsport Commission," she said.

"To me personally, the appointment of someone with these core beliefs, to a Committee meant to further the cause of women in racing, is incredibly disheartening, and represents a true step backwards from the FIA. Most worrying of all, one wonders whether this appointment is in any way truly representative of the FIA's beliefs towards females competing in motorsport in general.

"I have the utmost respect for Michele Mouton, both in terms of her rally achievements and for her overall vision. I cannot begin to imagine the type of undue pressure and influence that must have been exerted upon Michele for her to allow this appointment to go ahead."

With critical tweets from such as racers Calderon, Jamie Chadwick and Jade Edwards, plus Commission member and top engineer Leena Gade, this is a subject that is not going to fade away over the coming months.

MARCUS SIMMONS

#### IN THE HEADLINES

#### **SENNA JOINS DI RESTA AT DAYTONA**

World Endurance LMP2 champion Bruno Senna has completed the United Autosports line-up for next month's Daytona 24 Hours. Senna joins the already confirmed Paul di Resta, Hugo de Sadeleer and Will Owen in one of United's Ligier-Gibsons, alongside the sister car of Fernando Alonso, Lando Norris and Phil Hanson.

#### **LOTTERER AND JANI FOR LMP1 RETURN**

Porsche drivers Andre Lotterer and Neel Jani are set for an immediate return to LMP1 in the World Endurance Championship with the privateer Rebellion squad next year. WEC LMP2 champion Rebellion was scheduled to announce its switch back to P1 with a new ORECA design and a driver line-up including LMP2 frontrunners Thomas Laurent and Gustavo Menezes this week.

#### **CLIO KING BUSHELL BACK TO BTCC**

Renault UK Clio Cup champion Mike Bushell will return to the British Touring Car Championship next season. The Tunbridge Wells-based two-time Clio king has secured a ride in one of Team Hard's Volkswagen CCs. Meanwhile, Matt Simpson transfers his Honda Civic Type R from Team Dynamics to Eurotech Racing for the campaign.

#### **BERTHON AND LAGORCE ON TOP ON ICE**

Nathanael Berthon claimed his first victory in the main class of the Andros Trophy ice-racing series at Alpe d'Huez last weekend, before Franck Lagorce triumphed on the second day. Berthon, in an Audi A1 Quattro, topped qualifying and led throughout the final on day one. A last-lap attack from Evens Stievenart (Mazda 3) led to Stievenart spinning, but he blocked the track and continued to finish second. Lagorce and his BMW M2 were dominant on day two, with series leader Benjamin Riviere (Peugeot 3008) beating Berthon to second.

#### **DRUGOVICH HAUL IN MRF IN DUBAI**

Brazilian Felipe Drugovich won two of the four MRF Challenge races in Dubai last weekend to remain at the top of the points table. Drugovich took the first race from Alex Karkosik. He then battled to second place in the reversed-grid race two behind Rinus van Kalmthout, only for electrical failure at the very last corner to allow Louis Gachot into second. A great move by Drugovich on Presley Martono gave him victory in race three. Martono struck back in the reversed-grid finale to beat Drugovich.

#### **BETTE HILL 1926-2017**

The widow of Graham Hill and mother of Damon, Bette Hill, died last week aged 91. As Bette Shubrook she was a member of the British women's rowing team in the 1950s, and was more famous than Hill when they married in '55. She became a prominent figure in the paddock, and was highly active with the Doghouse Owners' Club for drivers' wives and girlfriends, which raised money for charity. She is survived by son Damon and daughters Brigitte and Samantha.



# NIGEL ROEBUCK

## Hanker for rancour

A little friction goes a long way in motor racing, but is Toto Wolff right to suggest that his Mercedes team needs more 'disruption'?



"Even with DRS, in 200

to put a move on Lewis"

miles Seb was unable

#### CONTRASTING VIEWS LAST WEEK FROM THE TWO

world championship protagonists of 2017: Lewis Hamilton said there was no excuse for Formula 1's producing less spectacular racing than Formula 2, while Sebastian Vettel suggested that those unhappy with the lack of overtaking should stop complaining, and accept that some grands prix will always be boring.

It was perhaps Abu Dhabi that prompted Hamilton to say what he did, for while the grand prix was beyond tedious, the two Formula 2 races provided excellent racing, and relatively

unsophisticated 'aero' had much to do with it.

I can't take issue with Vettel's contention that 'overtaking should be an achievement, and not handed to you' of course it should, which is why so many of

us loathe DRS, and, like Ross Brawn, wish to see it expunged from Formula 1.

Seb is right, too, to remind us that inevitably some races are going to fall short, for such has always been the case. In my youth I went to countless races pretty certain that if his car lasted – Jim Clark was going to win. Invariably his Lotus was at least as quick as any other car, and he was the best driver. QED.

That did not, though, necessarily mean we were in for a wearisome afternoon. For one thing, no-one had a huge power advantage; for another, it was easily possible to sit right on another car's tail through a corner. In short, Jimmy might be unassailable, but still everyone could race.

At Spa Vettel spent the entire race in company with Hamilton, and in a Ferrari that he and Lewis agreed was that day superior to the Mercedes – yet, even with DRS, in 200 miles he was unable to put a move on him.

Yes, some grands prix have always disappointed – as with any sport, it is simply in the nature of things, and will never change. Any fan can live with that: what he or

> she finds less easy to accept is that these days processional racing is more or less guaranteed

> It's all very well for Seb to say people should stop carping about dull races – he is paid

by idiotic rules.

millions every time he goes to the grid, and that can perhaps ease the pain of a torpid afternoon. For spectators, required to fork out handsomely to watch him, it's a different matter: if they've had it with goalless draws, he should understand that, and respect it.

This period of the year, right after the last race, is inevitably the quietest in Formula 1. We still await an announcement from Williams as to who will partner Lance Stroll in 2018, but otherwise all the pieces are in place, and the drivers - save Fernando Alonso and





Stroll, who are competing in the Daytona 24 Hours next month — are footloose until testing gets under way at Barcelona in late February.

Not much going on, then, but Toto Wolff rippled the waters at the weekend with his assertion that Mercedes needed 'disruption' between its drivers if the team were to perform at its highest level.

Oh Lordy, talk about be careful what you wish for... One sort of understands what Toto is getting at, but do Hamilton and Valtteri Bottas see it that way?

Following the retirement of Nico Rosberg and the arrival of Bottas, everything was indeed harmonious at Mercedes this year. The friendship between Nico and Lewis, as karting kids, perhaps inevitably metamorphosed into 'baggage' when they became team-mates in 2013 — the more so a year later when the hybrid era began, bringing with it Mercedes domination. For three seasons the world championship distilled to a two-hander, and there were tensions, let's say.

It's been different this year, for although there were weekends when Bottas had the better of Hamilton, overall his season was patchy, and he was not the threat to Lewis that Rosberg had been — indeed it was only in 2017, I think, that some came to appreciate just how good Nico was. Certainly he had the ability to unsettle Lewis, and that contributed to occasionally... erratic behaviour.

Teamed with Bottas, though, Hamilton has been relatively serene, which served to confirm, apart from anything else, how much Rosberg managed to get under his skin. As well as that, while again having but one challenger in the world championship, this time Lewis at last faced someone from another team, and, as Alain Prost will tell you of his feud with Ayrton Senna, any driver finds that infinitely preferable to fighting with his team-mate.

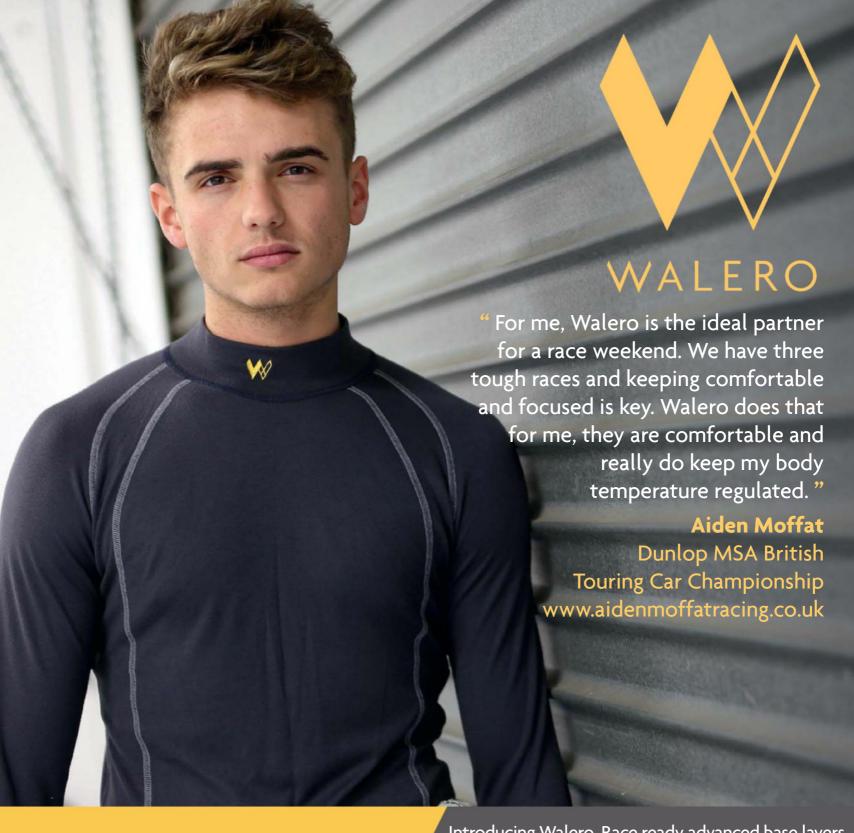
The fact that suddenly Mercedes found itself facing genuine opposition, in the shape of Ferrari, in itself had a unifying effect on the team, and the calm, apolitical, presence of Bottas contributed further to that.

After the summer break, though, Valtteri's season took an emphatic downturn, the popular theory being that this was in response to an instruction from Wolff that from now on he was to play a supporting role in Hamilton's quest for a fourth world championship. Whatever, for quite a while Bottas simply wasn't at the races, and it was only at the tail end of the season that he picked up again.

While Lewis may have been long regarded as the de facto number one at Mercedes, in 2017 it was manifestly acknowledged, and in this environment he thrived as never before, rather dispelling the time-honoured maxim that racing drivers give of their best when pressured by the other man in the same car.

Hence my surprise at Wolff's remarks at the weekend, which seem to suggest that within his team he thinks everything a little too cosy. "I don't think we need to avoid a stressful situation," Toto said. "We're not trying to build a new family here — we want to be the most effective racing team, and that needs stress, tension, disruption, as much it needs calmness and a positive mindset."

Not sure Lewis would agree. \*\*



We sweat the small stuff so you don't have to.

Introducing Walero. Race ready advanced base layers.

NASA approved temperature regulating technology reacts quickly to reduce perspiration by up to 30% when the heat is on, and delivers warmth when its not. Antimicrobial technology keeps you fresh and superior tailoring helps you maintain concentration.



Get The Edge www.walero.uk





# Soft cells not tainted

If you said hello to battery competition in Formula E, then you'd be waving goodbye to its future, says our electric-racing guru

#### By Scott Mitchell, Features Editor

**y** @ScottAutosport

#### AN ELECTRIC-RACING SERIES NOT GETTING

manufacturers to build their own batteries? That sounds a bit fishy. Especially for a championship that prides itself on being a development hub for electric vehicles. No surprise, then, that news of Formula E pushing back battery competition into the middle of the next decade — at the earliest — has been met with scorn and derision from some.

But what may appear as a stagnation that calls into question the premise of FE as a technological hotbed is really the series avoiding the blind pursuit of a technology path that could lead it to oblivion. The manufacturers are unified in not being fussed about building their own batteries, but it's valid to ask why, given the importance of battery technology.

If FE went ahead with allowing manufacturers to build their own batteries, it could quickly turn a €20-30-million-per-season formula into something far more expensive as exposure and financial recompense expand at a slower rate. The risk of creating unsustainable development programmes would be high.

It could also annihilate one of FE's strongest fundamentals:

close racing. In Hong Kong's Sunday qualifying session at the start of this month, 16 drivers (from nine teams) were covered by less than 0.9 seconds, albeit around a relatively short lap of just over a minute. Compare that to

#### "The hardware may not be transferable to road cars, but knowledge is"

the second part of qualifying for F1's Monaco Grand Prix, for which everyone bolted on the softest-compound tyres and turned up performance, and the same gap only covered the top five. You can see why FE wants to hang onto its current competitive balance.

Also, what's relevant to FE has shifted as the series grows and the technology evolves. Introducing all-wheel drive or torque vectoring, and allowing teams to harvest energy from the front axle, are all key discussion points at the moment and represent a much more sensible short-term move in terms of expanding FE's technological experimentation. And the most obvious example of FE avoiding development of what's irrelevant is its refusal to open up chassis and aerodynamics.

Battery technology is not at the same level, but its relevance is still dictated by what manufacturers need to learn. Jaguar Land Rover, for example, employs suppliers to conduct the chemistry involved in creating battery-cell technology, and JLR is responsible for packaging and integration. It's not a chemist.

There is value in seeking a middle ground between a singlespec battery and manufacturer-built units, though. FE has not eradicated the expectation for it to go beyond a single supplier at some point. An interim phase could be to open up the number of battery suppliers to two or three, but this again comes with cost implications. Teams make a financial contribution to the development of the spec battery and as soon as you move beyond a common battery and split more than one supplier across the teams, you have fewer squads paying into the pot. Plus, the development cost wouldn't remain the same, let alone reduce, because the rivalry would ramp up the pressure to make competitive gains to reduce the weight of the components, increase power density, improve thermal efficiency, and so on.

FE could decide that cost implications are a necessary evil. Then the focus would shift to how to control that. A maximum price on the battery and only two or three suppliers could be a compromise, as battery manufacturers may be dissuaded from investing tens of millions in the technology if teams are only paying a few hundred thousand a year to use them. If the price per annum moved into seven figures then that could change the battery supplier's view, but team budgets would balloon.

Other interim measures could be a spec cell that manufacturers build a battery around, or making an additional, smaller battery at the front — to facilitate new technologies — an area open for development.

In the meantime, a battery standard among teams needn't be standard in terms of technology. There is a tender to supply the battery and this is a competitive process — McLaren Applied Technologies won the most recent. So, there's a race to produce the best cells, but once those cells are chosen it's the same for each team — costs are kept down, and competition preserved.

It also still provides valid lessons around understanding how a spec battery operates and how to get the best out of it. The physical hardware may not be directly transferable to the manufacturer's road cars, but the knowledge is. This also extends to writing the software, which is completely open in FE and massively important to both race and road-car performance.

Working out the next move is crucial to Formula E, and any commitment to pushing technological boundaries will need to be matched with more eyeballs on TV, bums on seats in the grandstands and money in the teams' coffers. This delicate balancing act is an unavoidable consequence of its magnetic pull to almost every major car manufacturer in the world. Other series could learn a lot from FE as it bids to prevent a collapse under the weight of its own success. \*\*

## REECE IS RAISING THE BARR

Reece Barr may be a relatively new name in the word of circuit racing, but he's certainly going places.

The 17-year-old Irishman is rapidly climbing the ranks in tin-top racing, and will next year move into European competition with a campaign in the German ADAC TCR Championship with reigning champion team Target Competition.

It's a big move to jump straight into such a competitive series, especially on foreign soil, but Barr has more than proved his ability in his maiden season in the Mini Challenge JCW Championship.

Already a multiple Irish karting champion, Barr tackled his first year of car racing in an Excelr8 Motorsport-run JCW this term, and proved a revelation.

After just four races, he'd already secured his maiden victory, and was leading the championship after the opening two weekends.

"Ahead of this year the target was to finish inside the top five in the championship and get a few podium finishes," says Barr. "If the chance was there to fight for a win it would have been great, so to get the first win in just my fourth race meant I was already ahead of expectations. That defined my whole season really.

"It meant I could relax a bit more and focus on my driving and learning. The Mini Challenge was the best place I could have gone for that. It taught me racecraft in cars, and it's such a competitive series that mistakes really do punish you. We had a few mechanical problems that hurt us ultimately, but I never let them get me down. It taught

me to not let issues get on top of me. I'm a different driver after my first full season."

Despite a few costly setbacks, Barr finished the year second overall in the championship, and winner of the JCW Rookie Cup class. With his original targets met and exceeded, Barr now feels it's time to make another step up.

As part of the Andy Priaulx Sports Management programme, he benefits from mentoring and specialist training, which he feels will help him adapt to European touring car racing.

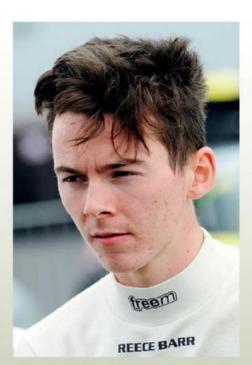
Barr tested a Honda Civic with Target in Italy recently. He says he was sold on the TCR concept in Europe.

"The Civic was an amazing car," he says. "You get so much more control as a driver with many more options for things like brake bias, and it actually feels easy to drive and very enjoyable.

"There's a lot more grip and power to adjust to, and I'll change my training to help prepare me for that, and of course all of the circuits will be new to me, but many were new to me this year and it didn't hold me back.

"As soon as I tested the TCR car I knew I had the capability to race it next year. I felt comfortable immediately. If you look at this year, I was brand new to car racing, brand new to the Mini and the circuits, and we set ourselves an ambitious goal, which I ended up bettering. So the goals have to be similar for next year. I have to keep the intensity up and keep striving to be better.

"It will undoubtedly be a challenge for me, but it's one I really feel ready for."







#### On the right track with circuit changes

I was very pleased to read that Liberty Media is looking at revising tracks to help with closer racing.

In all the years I have followed and competed in motor racing, it has always been clear to me that increasing the number of lines through a corner helps with passing strategy. However, this will not be provided by only increasing the width of the track.

I believe the best solution is to vary the camber across the track in critical corners preceding straights and after braking places to allow similar speeds to be achieved with a number of optional lines. This could be easily calculated by computer modelling and amended to work properly on site.

Generally this would entail negative camber on the inside of the corner and banking on the outer portions to allow overtaking 'around the outside', or getting into clear air on the way onto a straight without having to take the optimal line.

A flat, consistent track will almost always dictate one single 'best line', resulting in the car behind being condemned to dirty air. Look what happens in the wet – Verstappen, Brazil 2016, anyone? Seems a better solution than Bernie's 'let's artificially wet the track'.

**Guy Dormehl South Africa** 

#### **Read Roebuck and learn**

I hope Autosport sent a copy of Nigel Robuck's Fifth Column 'Waiting for racing' (November 30) to Liberty Media.

The last race of the 2017 F1 championship in Abu Dhabi was just one example of how cars cannot follow each other due to 'dirty air'. It needs to be the final curtain on the current aerodynamic aids. Do we really have to wait for 2020? So far for 2018 all we have is the removal of 'shark fins' and a new range of tyres from Pirelli.

Ross Brawn would like to remove the rear-wing drag reduction system, but I can understand his view that presently this is the only hope we have to see any overtaking.

Please remove all fancy aerodynamic bits first, simplify front and rear wings to reduce downforce, and remove the need to save fuel. Liberty Media needs to change direction quickly for the sake of F1.

**Graeme Lovell** Snitterfield, Warwickshire

#### Three steps to a better F1

To my mind there are three things that need to change with Formula 1: fairer distribution of funding for teams; more overtaking, which I understand could be improved by underfloor aerodynamics instead



Last month's Abu **Dhabi Grand Prix** encapsulated F1's 'dirty air' difficulty of all the unsightly add-ons as at present; and, thirdly, the abolition of the absurd penalty system.

I appreciate that there will always be better funded and therefore more competitive teams, but I'm sure most fans would welcome the smaller teams being given a chance.

**Roger Edwards** Maidenhead

#### **Electric shocker**

What a fiasco Formula E turned out to be in Hong Kong. It was more like Hong Kong Phooev than the muchhyped future of racing. The circuit was much too narrow, with stupid 180-degree turns. No percentage battery levels remaining displayed until after the car changeover in race one. The 30-minute delay to sort the race order was diabolical. Hardly a showcase for future technology!

As for Ferrari's threatened departure from Formula 1, it is only equivalent to the baby throwing the rattle out of the pram. They have had a financial advantage over every other F1 team and too big a say in the rules for years. Let Ferrari leave; for me it can't come soon enough. The money saved can be distributed among the smaller teams.

**David Kirkwood** Byemail

#### HAVE YOUR SAY, GET IN TOUCH

**Autosport editorial** 

Autosport Media UK Ltd 1 Eton Street Richmond TW9 1AG



autosport@ autosport.com



### SelectMotorRacing.com





#### Flexible Travel Options

Travel the World with our Escorted Tours and UK Travel Team



#### **Escorted Tour Packages**

VIP Travel | BY-AIR with Extended option BY-COACH European GP's | Combined Tours

#### ENHANCED TRAVEL EXPERIENCE



Paddock Club, Track Experiences, Amber Lounge
Testing | Team Packages | Factory Tours

♦ Niagara Falls ♦ Route 66 ♦ Nasa ♦ US Music Cities

#### LE MANS 24HR - WEC - BLANCPAIN

Le Mans 24hr Travel Packages ; with Hotel or Circuit Camping

Self Drive | By Air | Train | Coach Tours

♦ WEC 6hr Spa
♦ Blancpain Monza | Spa 24hr | Barcelona

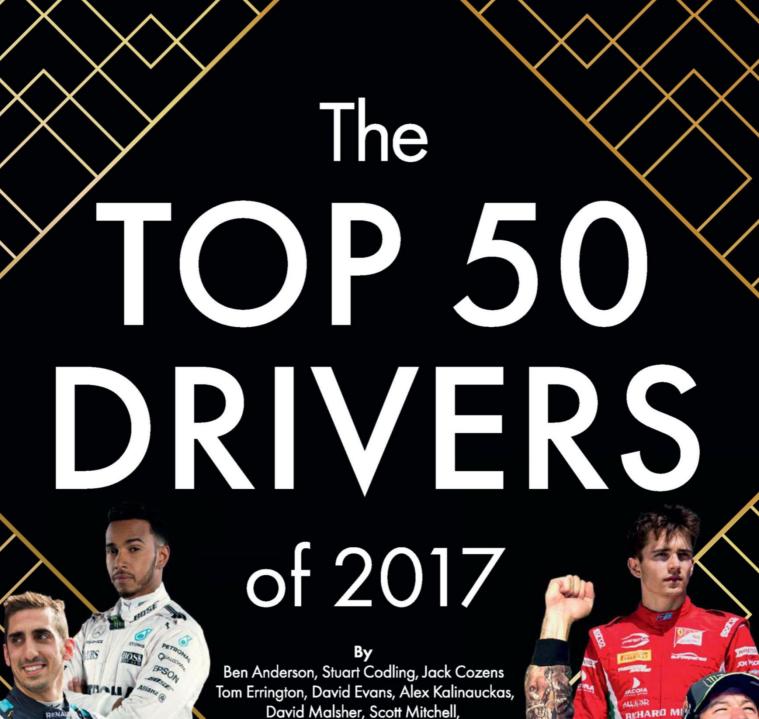
#### HISTORIC MOTORSPORT RACING EVENTS

♦ MONACO HISTORIOUE
♦ MILLE MIGLIA
♦ LE MANS CLASSIC

♦ GOODWOOD FESTIVAL OF SPEED ♦ GOODWOOD REVIVAL







For extra content visit autosport.com/top-50-drivers-of-2017

James Newbold, Hal Ridge, Marcus Simmons, Edd Straw, Andrew van Leeuwen and Gary Watkins



#### **Dane Cameron**

2nd in IMSA SportsCar Championship

#### **NEW ENTRY**

He didn't manage to retain his title, yet Cameron emerged from the 2017 IMSA SportsCar Championship with arguably an even bigger prize – a drive for next season with Penske Racing in one of its Acuras. It was a fitting reward for one of IMSA's consistent top performers who arguably drove better than ever this year.

There was only one race victory for Cameron in the #31 Action Express Racing Cadillac DPi-V.R he shared with 2016 co-champion Eric Curran, but there were some sterling drives on the way to second place in the points. Most pertinently, however, he was the fastest on the race averages of all Prototype drivers across the 10 IMSA rounds in 2017.

Cameron is an elbows-out kind of driver who makes things happen. Bang on the pace from the moment he jumps in the car, he's surely destined for even bigger things in the rough-and-tumble of the IMSA series.



#### Engineer's view

#### **SIMON DOWSON**

Dane is extremely driven. He pushes the engineers and the mechanics. He's aggressive, as well as a little bit angry and sometimes moody, which I think is a good thing. That helps in extracting the performance from the car when it's maybe not at its best.

I wouldn't say there's much difference in out-and-out laptime compared with the Taylor brothers or Filipe Albuquerque, but he has an ability to wring the car's neck. He positions it in traffic well, which made the difference on a number of occasions this year.

49



#### **Nicki Thiim**

6th in World Endurance Championship GTE

#### **RE-ENTRY**

The World Endurance Championship's reduction in the allocation of tyres per weekend hurt Aston Martin's venerable Vantage more than most, but outgoing GTE-Pro champion Thiim extracted the most from it at every opportunity. Yet as Aston technical director Dan Sayers explains, Thiim's best performance is easily overlooked: "The standout for me was Le Mans. He was brilliant there, he didn't put a foot wrong.

"Of all our drivers I think he had the strongest Le Mans, although it's kind of forgotten because



of the mistake from Richie [Stanaway] that put them out of contention.

"They had a mishap early in the race with a puncture and they were literally last, a couple of laps down, but they fought back and he'd got the car back up to the front with an incredible stint.

"The regulations didn't help us in terms of results and consistency, but every time he had the car and the package underneath him, Nicki always made the most of it and eked out absolutely everything."



48



#### Raffaele Marciello

Spa 24 Hours standout

5th in Blancpain Endurance

#### **RE-ENTRY**

A driver who was once on the books of the Ferrari academy, Marciello reminded the wider world of his talents with a starring performance at the Spa 24 Hours. For the Italian, it was really the Spa 14 Hours, because that's how long he spent behind the wheel — bar the odd three minutes — of the Mercedes-AMG GT3 he drove for the French Auto Sport Promotion team.

The Merc wasn't a truly competitive proposition in the blue-riband Endurance Cup round of the Blancpain GT Series, but a combination of ASP's clever strategy and Marciello's talents kept it in the hunt until the final hour. That he outperformed co-driver Edoardo Mortara – who would go on to claim a fourth victory in the end-of-season Macau GT3 extravaganza – says a lot.

#### Engineer's view

#### **NICOLAS DUMAS**

There were 28 or 29 laps in a stint, and Raffaele would be flat through Eau Rouge for 20 of them. The other Mercedes drivers were only flat for four or five laps when the tyres were new. He was so impressive and so consistent. I asked him to do a triple stint at the start, and he said he was fine when he got out. I asked him to do another, and he reckoned it was easy. He was our fastest driver, so it made sense.

Raffaele isn't the smallest of drivers [he's 6ft3in], which probably hurt his single-seater career. But I think in the next few years we will see him with a factory, maybe in Formula E or the World Endurance Championship.



#### **Alex Lynn**

Sebring 12 Hours winner Formula E polesitter

#### **RE-ENTRY**

Sebring 12 Hours debut win? Check. Nurburgring 24 Hours debut in a factory BMW? Check. LMP2 pole for Le Mans 24 Hours debut? Check. Pole for debut Formula E race? Check. Promotion to a full-season Formula E drive? Check. Earn factory Aston Martin GTE deal for 2018? Check. Put together a year that "has been so important for my career?" You better believe that's a check.

Lynn was at a crossroads at the end of 2016, when he made the decision to stop pursuing his dream of a Formula 1 drive. His stint as Williams development driver came to an end and, much like he did when he left the Red Bull programme of his own volition at the end of his GP3 titlewinning season, Lynn decided to take matters into his own hands.

He was so effective that a successful year has now laid the foundations for what should be a fruitful, and long, professional career.



#### **Driver's view**

I feel like coming from single-seaters I needed to do something different to prove my worth to several different teams. Some of that was going right out of my comfort zone. It's been a crazy year.

The thing that sticks out in my mind was doing the Nurburgring 24 Hours in a factory BMW. That was a real jump-into-the-firepit really, and I think that was probably the one race that got me the Aston Martin drive.

It's been such a busy year, but honestly so enjoyable. The main thing has been getting into Formula E, and then the Aston Martin drive – I'm so proud to be representing a brand like that and going to Le Mans with them.

# 46



#### Kimi Raikkonen

4th in Formula 1

#### **DOWN 9**

Raikkonen is endlessly frustrating. Every so often you see glimpses of what made him the most exciting talent of his generation, but these moments are too often tempered by chances that go begging or errors.

It's difficult to think of a driver more committed at high speed, but Raikkonen regularly falls the wrong side of that fuzzy line between overcommitment and adhesion. Pole in Monaco, his first since 2008, shows what he can do when it comes together, but for every Monaco there's a Malaysia – an opportunity squandered. That Ferrari persists with a driver twice called out by Sergio Marchionne for underperforming in a top car suggests he brings much else to the party hidden from view.

This wasn't the best season of Raikkonen's grand prix comeback; not the worst either, but it increasingly feels as though he is simply keeping a Ferrari seat warm until Charles Leclerc is ready to take his place.

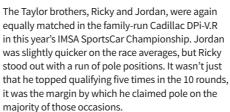




#### **Ricky Taylor**

IMSA SportsCar champion, Daytona 24 Hours winner

#### **NEW ENTRY**



The elder of the Taylors took pole in Austin by a

whopping 1.6 seconds, followed that up with a 1s margin at Road America and then took the top spot at Laguna Seca by eight tenths. It was impressive stuff from the Wayne Taylor Racing Caddy driver.

It's not always easy to read qualifying performances in IMSA. But given the style in which he took the poles, there can be no doubting Taylor's speed.

Penske certainly didn't and has lured him away from General Motors for next season.







#### Jari-Matti Latvala

4th in World Rally Championship

#### **RE-ENTRY**

The last Saturday in July is not one that Latvala will forget in a hurry. Rally Finland's middle day, during a season in which he got Toyota's comeback victory on Rally Sweden, was his best ever in a rally car. And his worst.

He'd ended day one 4.4 seconds down on his rookie team-mate Esapekka Lappi. Latvala took his hat off to his countryman, then plotted his downfall through Saturday's stages. Paijala, Pihlajakoski, Ouninpohja are all names J-ML knows and loves. He led after the day-two opener and built that lead through day two. Fastest every time.

At the end of the first afternoon stage, he grinned. "I could only go faster in one corner... It was fantastic."

An hour or so later and disaster struck. The Yaris WRC stopped. It just stopped. Latvala thumped the steering wheel until his hand hurt.

The broken car broke the man, ruined his best day ever and cost him another home win. But those troubled days at Volkswagen were left behind.



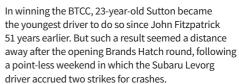
**43** 



#### **Ash Sutton**

**British Touring Car champion** 

#### **NEW ENTRY**



After a sitdown with the team and a good talking-to, everything changed. Two podiums followed at Donington Park, and Sutton later strung together a run of 11 podiums from 14 races to assume the points lead. His mental fortitude was tested again at the season finale, but a refocused Sutton defeated WSR's Colin Turkington to claim his crown.





#### **Jamie Green**

DTM runner-up

#### **RE-ENTRY**

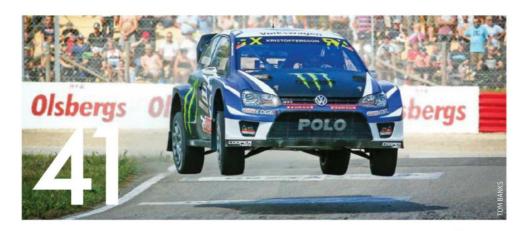
Green came closer than ever during his 13-year DTM career to winning the title in 2017. In fact, you could say he was robbed of it.

Three times in the last four races the Audi star lost a significant chunk of points, twice for reasons that were outside his control and once because he'd picked up a very harsh penalty – and he fell only six points shy of Team Rosberg stablemate Rene Rast in the final reckoning.



Did Green himself feel robbed? "When I look back, after the final race, then yeah," he says. "But I wasn't leading the championship like I was in 2015 for a significant period, so I didn't feel as though it was perceived as people saying it was mine to lose.

"From my point of view I performed really well, and when things fail on the car [like when leading race two at the Red Bull Ring], what can I do about that?"



#### Johan Kristoffersson

World Rallycross champion and tin-top ace

#### **RE-ENTRY**

Having been third and then second in his first two full-time World Rallycross Championship campaigns, the stage was set for Kristoffersson to go one better and secure the title at his third attempt. He joined Petter Solberg's Volkswagen-backed PSRX squad to drive a WRC-derived Polo and claimed the crown in style by winning seven events (five consecutively) and achieving 10 podiums from 12 starts.

The Swede also won six Scandinavian Touring Car

Championship races from 11 starts, a trajectory that would have taken him to the title but for missing rounds due to calendar clashes.

DTM and rallycross engineer Laurent Fedacou worked with Kristoffersson in 2015 and '16. "When we started working together, I saw he was looking at the data until midnight," he says. "He's really into every single detail. You could give him a skateboard and he could do good things with it."

#### Q&A

#### How was it working with and competing against a legend like Petter Solberg?

I had really high expectations, but I have to say that Petter himself overdelivered on my expectations. He helped me so much and I've learned so much from him. He is a big factor why I won the championship.

#### What was your highlight of 2017?

Of course when I wrapped up the championship in Riga, but also winning my home event. I've been going to Holjes since I was young and this was the fifth time I went there trying to win it. In the past I didn't have any success there at all, so this year to have a weekend where everything just worked my way was really good.

#### Could you have won the STCC title if you had competed in the full season?

I believe so. I like touring cars. Rallycross is a sport where the cars are very extreme, but touring cars, with the TCR regulations, are not the most extreme to drive. For me it doesn't matter. One weekend I drove the Polo, then the next I drove more or less a road car with bigger brakes and slick tyres. What I enjoy is to find the key to perform the best and win the race I'm in. That's what drives me.

40



#### Kevin Magnussen

14th in Formula 1

#### **RE-ENTRY**

Magnussen's uncompromising style in wheelto-wheel battle has won plenty of points for his new Haas team, where he says he finally feels at home after a difficult introduction to Formula 1, but it has gained him few friends among his rivals.

Not that the man Nico Hulkenberg described as "the most unsporting driver on the grid" is particularly bothered by what others think of him.

"I wouldn't say I'm the most popular among the drivers, but I don't need to be," Magnussen says. "They are not my friends. I am not aiming to be unpopular. I'm aiming to get good results, and sometimes you need to stick your elbows out to get those results.

"What matters to me is the results and what the stewards say. This year I have only had one penalty from a driving incident, so it means I'm not that bad."



39



#### **Will Power**

5th in IndyCar Series

#### **DOWN 25**

Power scored 'only' three wins this season, one fewer than last year, and was only fifth in the championship, but those stats bely the fact that he was back to his best after a 2016 dogged by health/fitness issues (it's a long story). In '17 he looked trim, enthusiastic, and the regular knife-between-the-teeth qualifying runs were back, resulting in six pole positions.

He was by no means flawless. Two of his four(!) lap-one shunts were his fault, his restarts were mediocre unless he was at the front and controlling the pace, he was slower than his Penske team-mates in qualifying on occasion (Helio Castroneves at Road America, Simon Pagenaud at Toronto) and he was caught napping by Josef Newgarden in the race at Mid-Ohio.

But the wins at GP Indy, Texas and Pocono were masterful. Cruel luck robbed him of at least a couple more, and he remains the fastest in the series.



#### Kris Meeke

7th in World Rally Championship

#### **DOWN 20**

Two victories and all anybody remembers is a hedge, a car park and three words from Killarney: 'Jesus Christ Kris'.

On the startline of the final stage of Rally Mexico, Meeke and co-driver Paul Nagle led by 37 seconds. Twelve minutes later they were in a car park heading, ironically, for the beer tent. They made it out. Just. A win remained a win.

Months later, Meeke stepped up to accept an award for the 'magic moment of the season' at the WRC Gala evening in Sydney.

"It was a mistake rather than a magic moment," he says. "I still cringe every time I see that, but I think it's one that will live in the memory of the WRC for quite a while. Thanks to Paul for those wise words... He was a passenger just as much as me. None of us was in control, and 'Jesus Christ Kris' doesn't tell you where to go!"



36



#### **Elfyn Evans**

5th in World Rally Championship

#### **NEW ENTRY**

This was an important season for Evans and his co-driver Dan Barritt. After a difficult campaign in 2015 they were split up. In his season on the naughty step, Evans won the British Rally Championship with Craig Parry, but for '17 he and Barritt stepped back into the big time with M-Sport. And together they became genuine contenders.

The highlight of the year came when Barritt sat being spun around and around and around outside Marks and Spencer in Llandudno. They'd won Rally GB, their first WRC success together, after an up-and-down season on DMACK tyres.

"The change in him is remarkable," says Barritt.
"I knew from the start of the season how he'd
grown and matured, but it's been amazing to
see it up close. He's a very different driver and
a different person from the one I left in 2015.
He's ready now. I think we both are."



#### Mirko Bortolotti

Blancpain GT and Blancpain Endurance champion

#### **RE-ENTRY**

Lamborghini factory ace Bortolotti was the standout driver in the Blancpain GT Series in 2017, leading Grasser Racing to the overall and Endurance Cup titles after four successive victories across the Monza, Brands Hatch and Silverstone weekends.

Involved in the development of the Huracan GT3 since the start, the Austro-Italian has shown the car to be a competitive force since its first year in 2015, but too often was let down by factors outside his control.

Aside from a throttle-damper failure at Spa, that all changed this year. Racing in Dubai, Daytona and Sebring prior to the European season helped Grasser iron out any issues, and having the underrated Christian Engelhart as his co-driver only seemed to spur him on.

Two moments stick in the memory: correcting an Eau Rouge tankslapper on the first lap at Spa was sublime, but his Q3 stunner to take pole on the Brands GP loop by a full half-second was even better.

#### Q&A

Which was the most important moment in shaping your championship challenge? We managed to have a run of wins and that was the foundation of the titles, because after Silverstone we didn't win for the rest of the season. It was important to take those results when we were on top, especially on the cooler races in the beginning of the season. When it started to get hot, we were struggling a bit more, so I would say that a very important weekend was Budapest. We didn't win, but we finished second and third, which put us in a really good position for the overall championship.

Was this your most satisfying season to date? The titles from 2017 are extremely satisfying if I take into account the fact that I was there from day one, working on that project from nowhere to more or less the highest level you can get in GT3 racing.

I've invested myself completely into this, I wanted it really bad and I'm really satisfied that we managed to do it. But I'm not the only guy that works – everyone is working so hard and that makes it even more satisfying because you are competing with the highest levels of GT teams and drivers.



#### **Jamie Whincup**

Australian Supercars champion

#### **UP 14**

There are a number of reasons why Whincup's seventh Supercars title is his finest; first, he had to win the crown with the second-fastest car in the field. There's no doubt that the DJR Penske Ford package was significantly superior over a lap, and marginally better over a race distance. It meant Whincup and his Triple Eight crew had to dig deep to overcome an in-form Scott McLaughlin, and do so with an engineering department spread thin thanks to the simultaneous development of the new Holden Commodore. It was a poorly timed distraction given Penske's upswing in speed, and one that makes Whincup's grinding title win all the more impressive.

The big thing, though, is the personal sacrifices he made to win that seventh title; for example, Whincup called off his engagement late last year to focus on what was going to be a tough 2017. Big call, but that's how badly he wanted that silverware.





#### **Timo Bernhard**

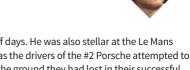
World Endurance champion

#### **DOWN 5**

There wasn't much to choose between the six Porsche LMP1 drivers over the 2017 World Endurance Championship, but Bernhard gets the nod for a spot in the Top 50 – along with F1 debutant Brendon Hartley - because he was again a rock of consistency. The German is one of the foundation stones on which the success of the 919 Hybrid project was founded.

He was as super-consistent in 2017 as ever on the way to a second world title: Bernhard doesn't appear to have off days. He was also stellar at the Le Mans 24 Hours as the drivers of the #2 Porsche attempted to make up the ground they had lost in their successful chase of the leading LMP2 car.

It was somehow fitting that Bernhard should be at the wheel of one of the 919s at the finish of its final race in Bahrain, because he was the first to drive the car in the summer of 2013. He played a big part in the success of the 919 in general and his car in particular.







#### Felipe Massa

11th in Formula 1

#### **RE-ENTRY**

This was one of the more impressive Massa seasons in his four-year stint with Williams, having postponed a short-lived retirement to replace Mercedes-bound Valtteri Bottas. Massa certainly left a strong impression on new technical chief Paddy Lowe.

"I'd only really observed him from a distance, but it's been a real pleasure to work with him," says Lowe. "Firstly, he's always happy in his work – always cheerful, always enthusiastic. Then, in the car, completely dependable.

"There are a lot of drivers who have bad days and then you don't know where you are. In our case, we needed that reference or we'd have been a bit lost, so he's been great for the team and a great support to Lance [Stroll] by being so consistent, and also literally helping Lance - he's given him quite a lot of coaching, a lot of important advice around techniques for different things, whether it's warming tyres or tactics."

#### A&Q

You've had a strong year. Do you feel you should be getting another shot?

Now it's OK man – it's fine for me. I wanted to stay because I was feeling I was doing a great job. If teams and people didn't see that, I'm ready to go - and I'm happy to go as well.

What has the team's feedback been on your performances this year?

I think you need to ask them. I'm sure they need to have a good driver to replace me! Otherwise, it will not be very great.

This seems a key point for the team with its big ambitions - there was a big gap between you and Stroll most of the time, so it's not like they can rely on him yet. But if the team cannot see that, what should I do? That's the way it is. Sometimes, the talent doesn't count compared to some other things. Unfortunately, sometimes this is a little bit of a shame in Formula 1.

#### It's very unusual to have these consecutive retirements...

For the moment it feels normal. Maybe next year when the season starts it'll feel [strange], but I'm happy. I have nothing to regret.



#### Sam Bird

Formula E and GTE ace

#### UP 7

For an idea of just how good Bird can be, just look at his pass on Jean-Eric Vergne from the opening round of the 2017-18 Formula E season in Hong Kong. His pass on a man who is arguably the championship's most aggressive defensive driver was masterful. It was a reminder that when it all comes together he is in the same league as a Sebastien Buemi or Lucas di Grassi.

Bird has diversified his talents in recent years, and is now a mainstay of Ferrari's World Endurance Championship attack in GTE, winning two races with Davide Rigon and helping secure the teams' title. Unsurprisingly for a driver constantly focused on improving, prior to the Hong Kong FE weekend he rated his year "a 6/10, maybe a 6.5". Maybe he could be persuaded to mark that up to a 7 after leaving Asia with the championship lead, as an early Christmas present to himself.

#### FORMULA E'S NUMBERS MAN

In FE, numbers are king: battery state of charge, battery temperature, gaps to the car in front and behind, power output, energy-harvesting values. It's a complex category. And in the land of the brainiacs there is arguably no driver as invested in the data as Bird.

"There's a lot to manage and he's really good at that side of things, keeping cool and calm, doing the driving on autopilot and being able to have conversations," says his DS Virgin Racing engineer Mike Lugg. "Sometimes we might talk non-stop for an entire lap. We're chatting about strategy, temperature management, things like that."

Lugg reckons one of Bird's biggest attributes is "when it comes to the crunch, you can rely on him" – and he knows the difference between relaying information and getting too involved.





#### **James Calado**

World Endurance GTE champion

#### UP 1

Calado took up where he left off at the end of last year in the 2017 World Endurance Championship. He had arguably already become the complete sportscar driver, but the difference was that he now didn't have Gianmaria Bruni alongside him in the lead factory AF Corse Ferrari 488 GTE.

It would be wrong to suggest that the Briton somehow stepped into the shoes of the erstwhile team leader at Ferrari after Bruni's defection to Porsche, but he did everything that was required of him in 2017. Together with team-mate Alessandro Pier Guidi, the 28-year old extracted everything every time from a car that was the most consistent performer in GTE Pro across the season.

Calado's performances made him a worthy world champion, and he backed them up with more strong drives in the Blancpain GT Series enduros and a couple of IMSA cameos.





#### Kamui Kobayashi

5th in World Endurance Championship Le Mans polesitter

#### **RE-ENTRY**

That lap will be remembered for a long, long time. When the clocks stopped at 3m14.791s for Kobayashi in qualifying for the Le Mans 24 Hours, the Toyota driver gained himself a place in the record books and, surely in years to come, sportscar racing folklore.

The stars aligned for the fastest-ever lap of the Circuit de la Sarthe in any configuration. There was a tailwind down the long Mulsanne Straight and a headwind into the Porsche Curves. And the Porsche Carrera Cup support event had laid a friendly layer of Michelin rubber.

Kobayashi still had to do the job, however. But then that's what he did all year aboard the #7 Toyota TS050 HYBRID. The shame for the Japanese driver was that the speed and consistency didn't yield a World Endurance Championship victory for any number of reasons that reached a freakish zenith at Le Mans.



#### **Driver's view**

I didn't expect that [pole] laptime and afterwards thought, 'that's amazing'. But when the car is good you can do it. I was quite conservative in the first sector. But I knew then what the car could do, so I pushed a bit more in the second sector and it was looking good. I think the third sector was brilliant.

I would have to say that if I had the same opportunity in the same conditions I could be faster by being more aggressive in the first sector. But I think being conservative at the start of the lap was actually the right decision.



#### **Kyle Busch**

NASCAR Cup runner-up

#### **DOWN 14**

Busch won't want to reflect on his 2017 NASCAR Cup season, coming agonisingly close to a second title. He had the favoured car in the new-for-2017 Toyota Camry, but lost to Martin Truex Jr's consistency.

He and Truex were a class above the rest late on in 2017 and, if not for Joey Logano's constant blocking at Homestead, Busch could have pounced on the slower Truex and won the title.

But what is certain is that too often Busch missed out at crucial moments. There were the bizarre multiple hits with the wall at Charlotte, just as Truex started to look less dominant and Busch had a winning streak in the playoffs.

Toyota could remain ahead of the curve in 2018 and Busch has shown he was just as quick to adapt to the stage format as Truex, so it's not inconceivable that there will be a repeat head-to-head next season.



#### **BUSCH AT HIS BEST**

Busch managed to be the only driver to consistently beat Truex in the playoffs and hit his stride as the post-season got under way. He grabbed the headlines with a win at Loudon with a clean sweep of the weekend, but his pace and form had started to show a race earlier at Chicagoland. The Joe Gibbs Racing driver had lapped 26 of 40 cars after a disappointing qualifying and won the first stage, but was hit with a penalty that sent him down to a 15th-placed finish. Busch's pace was rewarded at Loudon with that impressive dominance before he starred with a stunning late pass on the impressive Chase Elliott to win at Dover.



#### **Bruno Senna**

1st in World Endurance Championship LMP2

#### **RE-ENTRY**

There were times when Senna looked in another class to the rest of the LMP2 pack in the World Endurance Championship in 2017. Judging what's going on in the secondary prototype class isn't always easy, given the tyre strategies the teams employ to make their four and a half sets last through the race, but the Brazilian was undoubtedly the standout driver in the class.

He gave a hint of what was to come early doors at



Spa, followed it up with a strong performance at the Le Mans 24 Hours, and then got better and better as the Rebellion team got to grips with its ORECA-Gibson 07. His pace was the crucial component in his championship victory with Julien Canal.

Senna looked like a driver who was at home in his surroundings during 2017. He reckons he's now driving better than ever, and it's difficult to doubt him. 27



#### **Joel Eriksson**

F3 European Championship runner-up

#### **NEW ENTRY**

Lando Norris took the plaudits for his Formula 3 European Championship title, but the man himself is in no doubt about the qualities of his closest rival this year: Joel Eriksson.

"He's one of the few you're able to race against so closely," says Norris. "In the end it was me who made contact with him [at the Red Bull Ring]! The more I've got to know him, the more respect I've had for him, because he's such a nice guy. You know that whatever you give to him, he's going to have to give back to you, and you kind of just have a mutual respect. There are few drivers, and he's one of them, you have that with."

Norris believes Eriksson also deserves an F1 shot. "If every F1 team had to put a young driver in for a test session, he'd definitely be deserving," he says. "There's not many people who have his speed, racecraft and respect."



# Top 50 in stats 174 wins Sepecial stage wins 29 special stage wins 90 fastest laps 29 years 169 days 18 Youngest driver years Oldest driver Kris Meeke 38 19 nationalities



# KEEP PLAYING





#### LOGITECH G TAKES RACING TO ANOTHER LEVEL

G920 Racing Wheel for XBox One and PC G29 Racing Wheel for Playstation and PC



#### **Pierre Gasly**

Super Formula runner-up and F1 rookie

#### **DOWN 10**

Having to spend a season in a holding pattern before a Formula 1 drive became available proved little obstacle for Gasly - indeed, he may have emerged from Super Formula as a better driver.

"It was in a way a really tough challenge," he says, "because in March when I came here it was my first time in Japan, my first time in the car."

Gasly struggled for race pace in the opening rounds, but his season began to click with fifth place in the

fourth race at Fuji, then back-to-back wins at Motegi and Autopolis put him into title contention.

"It has a lot of downforce and good tyres with no degradation, so you could really push. We found some things to get more performance, and I worked really hard with the team - it's the most I've been involved in the technical side, so it was a good experience for me."

The cancellation of the final double-header at Suzuka left him just half a point shy of the title.





#### **George Russell**

**GP3** champion

#### **NEW ENTRY**



Russell romped to the GP3 title, winning with one round to spare ahead of ART Grand Prix team-mates Jack Aitken, Nirei Fukuzumi and Anthoine Hubert. But after the first round he was just sixth in the

standings following a pair of poor starts at Barcelona. The issue was he had yet to adapt to the GP3 car's hand-clutch system. "We knew our main issue was the starts and going to Budapest [to test] really paid off for us," he explained at the Red Bull Ring after taking the first of his four poles and four race wins.

Russell's Austrian success was the start of a purple patch in form that resulted in further victories at Silverstone, Spa and Monza.

He is likely to graduate to Formula 2 in 2018.



#### **2016 Top 50**

- 1 Daniel Ricciardo
- 2 Lewis Hamilton
- 3 Max Verstappen
- 4 Sebastien Ogier
- 5 Nico Rosberg
- 6 Fernando Alonso
- 7 Sebastien Buemi
- 8 Lucas di Grassi
- 9 Simon Pagenaud
- 10 Carlos Sainz Jr
- 11 Gianmaria Bruni
- 12 Sebastian Vettel 13 Valtteri Bottas
- 14 Will Power
- 15 Kyle Busch
- 16 Pierre Gasly
- 17 Jimmie Johnson
- 18 Kris Meeke
- 19 Neel Jani
- 20 Scott Dixon
- 21 Nico Hulkenberg
- 22 Sergio Perez
- 23 Brendon Hartley
- 24 Marco Wittmann
- 25 Antonio Giovinazzi
- 26 Joey Logano
- 27 Rene Rast
- 28 Shane van Gisbergen
- 29 Timo Bernhard
- 30 Robin Frijns
- 31 Jose Maria Lopez
- 32 James Calado
- 33 Edoardo Mortara
- 34 Pascal Wehrlein
- 35 Charles Leclerc
- 36 Lance Stroll
- 37 Kimi Raikkonen
- 38 Mark Webber
- 39 Sam Bird
- 40 Pipo Derani
- 41 Mattias Ekstrom
- 42 Gordon Shedden
- 43 Ott Tanak
- 44 Christopher Mies
- 45 Josef Newgarden
- 46 Andre Lotterer
- 47 Jenson Button
- 48 Felix Rosenqvist
- 49 Jamie Whincup
- 50 Stoffel Vandoorne



#### Lucas di Grassi

Formula E champion

#### **DOWN 16**

Free from the pressure of an Audi LMP1 programme, the absence of which explains his drop in places since last year, di Grassi's Formula E focus paid dividends as he stole the title from arch-rival Sebastien Buemi.

Much was made of Buemi being absent from the New York double-header and his torrid final weekend in Montreal, but di Grassi was his usual persistent self as he dragged his Abt Audi Sport car to often unlikely results. His new team principal Allan McNish points to two examples of his abilities. In Hong Kong and Mexico, di Grassi pitted with damage early on and then swapped cars under a safety car before middistance – somehow earning a second and a win. In Montreal, on the Saturday, he qualified on pole and controlled the race from start to finish. "Those were the two standouts," says McNish. "His ability to get the job done when we thought it was all lost, and when the real pressure was on."



#### **Felix Rosenqvist**

3rd in Formula E

23

#### **UP 25**

After a mammoth multi-discipline programme in 2016, the cheeky-chappy Swede scaled back his efforts to just the four different types of car in '17 – majoring on a Mahindra Formula E campaign alongside a rookie Super Formula effort, and adding his Le Mans 24 Hours debut in LMP2 and the FIA GT World Cup in Macau to the list to boot. Everywhere he went, he excelled – no mean feat given he was attacking disciplines with unique characteristics and challenges.

Rosenqvist is a showman, a take-it-to-the-limit kind of driver who gets people excited. In his home country he is thought of as a modern-day Ronnie Peterson – to which his manager, ex-Formula 1 driver Stefan Johansson, says he has "no doubt he belongs in F1: of all the drivers in Sweden, he's by far more deserving".

"He's got bundles of talent," says Johansson.
"But he's got that mental attitude and capability
of figuring out what you need to do to win. That's
what makes him so great."





22



#### **Lando Norris**

F3 European champion

#### **NEW ENTRY**

Trevor Carlin has had a lot of future superstars come through his F3 team, and he reckons 2017 European champion Norris is a match for any of them: Daniel Ricciardo, Jean-Eric Vergne and Takuma Sato included.

"They have identical qualities," says Carlin.
"You can rely on them, every time they do a lap
they go P1 or P2. Every time, every session, every
track, in any conditions. And if you make it a wet
track it's just guaranteed top of the pile.

"As a team it's manna from heaven. You know whatever you do doesn't matter because whatever he does is going to sort it out. Only time will tell where he fits in the overall ranking in global racing, but in my ranking he's right there, no doubt at all.

"He doesn't complain, doesn't moan, he just points out something better he could do with having – you give it to him and he goes faster."

#### **CARLIN'S TOP 10 FIA F3 WINNERS**

1 Takuma Sato **21 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*** 

3 Alvaro Parente 12 \*\*\*\*\*\*\*\*\*\*

=4 Alan van der Merwe **10 \*\*\*\*\*\*\*** 

=4 Antonio Giovinazzi **10 \*\*\*\*\*\*\*\*\***6 Lando Norris **9 \*\*\*\*\*\*\*\*** 

=7 Jack Harvey **8 \*\*\*\*\*\*\*\*** 



#### **Mike Conway**

5th in World Endurance Championship

#### **RE-ENTRY**

Is Conway still improving as a sportscar driver? On the evidence of the 2017 season, the answer is most definitely yes. The 34-year-old, in his third full season with Toyota in the World Endurance Championship, was a match for any of his team-mates aboard a TS050 HYBRID and eradicated the mistakes of previous seasons.

Conway was generally on a par with Kamui Kobayashi aboard the #7 Toyota and often faster. The Japanese driver made the headlines at the Le Mans 24 Hours this year, but it was the Briton who was the faster on the averages. In fact, until his TS050 retired from the race, Conway was the fastest Toyota driver of all ahead of Sebastien Buemi.

The travesty for Conway was that he didn't add to his tally of WEC victories in 2017. As well as the one that got away at Le Mans, Conway and his team-mates had the pace to beat the sister car both at Spa and at Shanghai.



20



#### **Brendon Hartley**

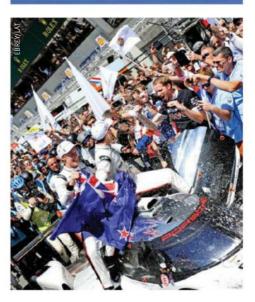
World Endurance champion Le Mans 24 Hours winner F1 rookie

#### UP 3

Winning the Le Mans 24 Hours, winning the World Endurance Championship, making your Formula 1 debut and earning a full-time grand prix drive for the following season. Any one of those things alone would be enough for consideration for Autosport's top 50. But Hartley did all of them, also winning Petit Le Mans and the Dubai 24 Hours along the way.

As well as being a very accomplished member of an all-star Porsche WEC line-up, his shock F1 debut with Toro Rosso proved just how good he is. Despite being stymied by grid penalties on all four of his outings, his pace, experience and professionalism impressed the team and Red Bull, which had dropped him in 2010, earning him a full campaign next year.







#### **Thierry Neuville**

World Rally Championship runner-up

#### **RE-ENTRY**

They live near next door to each other, train alongside each other and now they work for the same company. The World Rally Championship's most famous besties recently competed together (co-driving and driving alternate stages) at the Monza Rally, giving Andreas Mikkelsen a unique insight into what it takes to be Neuville.

Asked about his mate, Mikkelsen said: "Being in a car with him, I must say it was very, very impressive

and really he is very, very good... as a co-driver! I think maybe the time has come for him to stop driving and become a professional co-driver!

"Seriously, he is a really clean driver, the car is straight and not much drama. And he's quick as well. It's going to be really interesting to work with Thierry next year, it's going to be close – but I'm not worried about our friendship. It's not like we're fighting for the same piece of track going into a corner..."





#### **Scott Dixon**

3rd in IndyCar Series

UP 2

It's sad that the four-time champion's season will primarily be centred on the Indy 500 – his 232mph pole speed, being held up at gunpoint in a Taco Bell, and then cheating death in a raceday shunt. Because it's Dixon's stunning consistency and pace for most of the season that kept him in the running for the title.

Despite him and the team having to learn the deficient Honda aerokit following Chip Ganassi Racing's off-season switch from Chevrolet, Dixon was rarely out to lunch. Only an ill-timed yellow at St Pete and unfortunate strategy at Long Beach prevented him from winning the first two races, and he might have beaten Power at Texas too, had Takuma Sato not suffered a brain fart.

Dixon's Road America win was well deserved, but his relentless pursuit of the Penske machines at Gateway, a short oval where Honda cars suffered most, was no less impressive.



17



#### **Rene Rast**

DTM champion

**UP 10** 

Whichever way you look at it, Rene Rast's performance in winning the DTM title in his first full season in the series was astonishing.

Other drivers joked that, with his 30th birthday well in the rear-view mirror, Rast couldn't be described as a rookie. But it was joshing in an affectionate way for a driver who is as popular as he is fast. With the Team Rosberg Audi squad, he was at or near the top of the points table all year and finally wrested the crown from under the noses of stablemate Jamie Green and late-season series leader Mattias Ekstrom (who was in Audi's traditional number-one Abt squad) at the final race.

A famously versatile racer, Rast also finished on the podium in the Daytona 24 Hours with the Spirit of Daytona-run Riley-Gibson, and claimed third position in the Nurburgring 24 Hours and the Paul Ricard 6 Hours with the WRT Audi R8 LMS team.



#### **JAMIE GREEN ON RAST**

Green may be the moral DTM champion in the eyes of some, but he has no hesitation in rating Rast.

"He's stuck at it and come up through Porsches and GTs – he's got a lot of natural ability and he's got the right attitude as well," says Green. "It was a good time to join the DTM, because it was the first year without tyre blankets. So he didn't have any preconceptions about how to approach that [putting in a new-tyre run in qualifying]. He did a good job in qualifying – that makes life easier in the

DTM, and that was his main strength. And he found himself in a well-set-up team, because Rosberg has developed into a complete unit. So from

my perspective it wasn't such a big surprise. We had a good package and he was talented enough to make the most of it."

Rast replaced Adrien
Tambay, dropped at the end
of 2016, in the Rosberg line-up
and Green found him a good
team-mate to work with. "He's
a confident character and pretty
straightforward," he says. "And
he's got a decent sense of

humour, which makes life easier. I think we'll stay together next year. He's good enough to keep you sharp, and doesn't create a bad atmosphere."

Rosberg, in Green's eyes, has supplanted long-time Audi spearhead Team Abt as the number-one squad for the Ingolstadt marque.

"You only have to look at the teams' standings this year," he points out. "The team has developed in the last couple of years and now it's strong enough to run two cars at a high level. And this year it had two drivers capable of exploiting that."











#### **Sergio Perez**

7th in Formula 1

#### UP 6

Separated by just 13 points in the world championship, and by less than 0.1% on pure pace across the season, there was very little to choose between Perez and his new Force India team-mate Ocon in 2017.

Perez was everything we've come to expect since his mid-2015 breakthrough – a fast and ultra-reliable points scorer, whom Force India believes is operating at the peak of his powers.

And that's what makes Ocon's rise to prominence this year so impressive. To push

#### **Esteban Ocon**

8th in Formula 1

#### **RE-ENTRY**

Perez that hard showed an extraordinary rate of progression, which also created tension between the drivers at times.

Once the championship returned to the tracks at which Ocon completed his debut part-season for Manor in 2016, Ocon claimed a narrow edge in the qualifying battle (5-4) and was 0.072% faster than his team-mate.

Force India had its pick of Manor's Mercedes juniors at the end of 2016, and Ocon has done nothing yet to suggest it backed the wrong horse.

#### Q&A TOM McCULLOUGH, FORCE INDIA CHIEF ENGINEER

How was Esteban able to make such impressive progress so quickly?
The natural ability was there from the start. But his ability to work with engineers is natural to him as well. He's an endearing character. He also watches Sergio, who is good at that as well, realises how it's working for him, and thinks, 'I want to be part of that.' I think Esteban has been very fortunate to have Sergio as his reference.

Sergio seems close to a fully rounded driver now... He's definitely right at the peak of his career – this is the phase for him where the consistency is there in qualifying and racing. We've seen that over the last 24 months, if not a bit more. We've been very, very happy to have Sergio there, and it's been great how hard Esteban has pushed him.

There were several flashpoints between them. Where did that come from and why did it take so long to get on top of?

At the start of the year it was important in each of their heads that they come out on top. The pressure was there on Sergio to not be beaten by the young, up-and-coming guy; for Esteban,

he's trying to show Mercedes and the rest of the world that he's got the ability to be better than the established driver. So, it was always going to be fierce. A lot of people from rival teams have said to me what a disaster it's been and how badly it's been managed, but looking at other teams - some with one very good driver and one very bad one – we had a slightly difficult phase, but they were nice problems to have. The good thing is, having been through all that and seen how the team has reacted, the drivers have really changed - it's a better relationship than they had even at the start of the season.



14



#### **Carlos Sainz Jr**

9th in Formula 1

#### DOWN 4

Sainz continues to force his way out of Max Verstappen's shadow with consistently strong performances of his own. His rate of development is arguably on a slightly slower burn to Verstappen's, but Red Bull is desperate to keep Sainz as a back-up option for its A-team, should Daniel Ricciardo leave, while Sainz's form continues to make a strong case that he deserves a seat at the top table.

He is still occasionally clumsy in wheel-to-wheel battle, but delivered some excellent drives in a tricky Toro Rosso this season, before a late-season loan move to the Renault team allowed Sainz to get up to speed in his new 2018 environment four races early.

His Austin debut was outstanding. Although he is not quite on Nico Hulkenberg's level yet, Sainz has immediately slotted neatly into the big gap left by Jolyon Palmer, and created high expectations within the team for next season.

# RENAULT TRACKSIDE OPERATIONS DIRECTOR ALAN PERMANE ON SAINZ'S TRANSITION TO RENAULT

"There are interesting ideas Carlos has got in terms of brake mapping, and stuff to do with the way he likes to drive that maybe we haven't thought about that he's brought with him. I think both drivers will push each other forward, and I don't just mean in terms of finding another half-tenth in qualifying, I mean with set-up as well. As a team, having Carlos is fantastic. He's ever so easy to work with. We've got a very good line-up now."



#### **Nico Hulkenberg**

10th in Formula 1

UP8

Joining the fledgling Renault works team represents the potential shot at F1's big time that Hulkenberg's talent has long seemed worthy of. At times during his over-extended stint in grand prix racing's midfield it's looked as though his motivation has suffered for the lack of career progression, but any doubts should be dispelled by an excellent first season at Enstone.

His attacking style has been rewarded by the move towards faster cars with greater grip. Hulkenberg went unbeaten by his team-mates in qualifying and almost single-handedly dragged Renault to sixth in the constructors' championship.

Hulkenberg's feedback was also key to mid-season developments that transformed the car into one that became the class of the midfield on certain circuits. After a difficult comeback season in 2016, Renault needed a driver around whom it could build as it tries to become a championship force again. The early signs suggest Hulkenberg was an excellent choice.

#### Q&A ALAN PERMANE, RENAULT TRACKSIDE OPERATIONS DIRECTOR

What's it been like working with Nico?

We were pleasantly surprised in testing. You could tell he knew what he was doing, and he was very careful to make small changes and revisit them while he was learning the car. Something that brought it home very early in testing – we took the fuel out, put some new tyres on, and 'bang' there's a lap time. You think, 'OK that was good', and then you put another set on and think, 'He's going to find another half-second now' and he didn't, he may have found half a tenth. That is a real mark of a quality driver, who can find the limit straight away. That was very impressive.

I suppose that gives you a much more consistent reference for where the car is at? I don't think it changes that, it just shows he's finding the limit quickly. The other thing with Nico, after a good or bad race, he will take all the emotion out of it and talk for half an hour about the car. That's not an easy skill; lesser talented drivers find it very hard sometimes to take the emotion away. Their answers aren't less honest, just clouded. With him you get the nuts and bolts, which is really good.



12



#### Ott Tanak

3rd in World Rally Championship

**UP 31** 

Estonia's first-ever WRC event winner Markko Martin is not a man to waste his words. Even less so his energies in getting behind a young talent. Which is what made Tanak interesting when Martin first introduced him to Autosport eight years ago. "He's quick," Martin said, "but still there are some... rough edges."

That speed carried Tanak into the 2010 Pirelli Star Driver scheme, where he showed his five classmates a clean pair of heels for much of the season; he built a near three-minute lead on the opening PSD round, then rolled his Mitsubishi with three stages left. Such stories have littered Tanak's career since. Until this year, when he got it all together, won twice and played himself into a potentially title-winning position.



11



#### Valtteri Bottas

3rd in Formula 1

UP<sub>2</sub>

There is something Nico Rosberg-esque in the way Bottas so honestly and studiously works on his weaknesses, refusing to cave to the pressure created by his own shortcomings being laid bare in the harsh spotlight that comes with racing at the very front of the F1 grid.

Where Bottas has deviated from the Rosberg path thus far is in happily maintaining the delicate equilibrium of harmony within Mercedes, from which world champion team-mate Lewis Hamilton clearly benefited in 2017, and for which the team is extremely grateful.

"It was difficult to find the right driver, but we got just the right guy into the team," says team boss Toto Wolff. "The dynamic between Valtteri and Lewis made us develop the car in a very efficient way, and made us win the two championships, so not for one second do I regret where we are today.

"In the past I always believed a very fierce rivalry between team-mates would be good for the team, because they would be pushing each other. I think the lesson I learned is that it is probably not true – you need two team-mates that perform at a high level that keep pushing each other in the car, but the rivalry shouldn't spill over into controversy outside of the car.

"The mindset and the relationship between the two made us stronger, gave an open and honest environment – the exchange with the engineers is very transparent and very clear. Our very fast, difficult car, we got it into a good place also because the two worked so well together."



#### **Charles Leclero**

Formula 2 champion

**UP 25** 

In 2006 Lewis Hamilton became GP2's second rookie champion and 11 years later Leclerc, with the series renamed Formula 2, became the fourth. Linking those two achievements is Guillaume Capietto – technical director at ART Grand Prix in 2006, who now holds that role at Prema Racing, where Leclerc racked up seven wins and eight poles in 2017.

"He was impressive, especially in the races," Capietto says of Hamilton, who he also worked with him during the Briton's title-winning Formula 3 Euro Series season in 2005.

Having seen the pair race, and succeed, at the final step on the single-seater ladder before Formula 1, Capietto reckons they are directly comparable in their ability to thrive in changeable



conditions, which he feels is what separates the great from the good drivers.

"Where it's changing, you see where the top guys [are quicker]," he says.

Leclerc's dominant 2017 season would have had even more shine had he not lost a pole (in Hungary) and a win (at Spa) due to technical infringements. He also lost an on-the-road victory in Azerbaijan as it was deemed he had failed to slow sufficiently for yellow flags. His response to those issues – particularly his drive from last to fourth at the Hungaroring – reminded Capietto of Hamilton's GP2 charge at Istanbul in 2006.

"They know what they want and they have the talent and the character to achieve [it]," he says.

#### **Q&A LECLERC ON HIS SIGN-OFF F2 WIN**

Charles Leclerc ended his Formula 2 season in swashbuckling style with a charge from seventh on the grid to seal a final category win in dramatic circumstances on the last lap of the season finale, after contact with ART Grand Prix's Alexander Albon at Abu Dhabi's Turn 7 hairpin.

How did it feel to sign off the season in style? Last year we didn't have the chance to end the championship on a win [in GP3, where Leclerc crashed out after contact, also in Abu Dhabi], so to end this one with a win was great. Also the way we did it was also very great – I think it's probably one of the best races I had this season.

We managed the tyres very well – we had to wait a little bit at the beginning because the pace of the top four was a bit too quick, pushed at the end, and in the end our strategy worked. I'm very happy with this and also with the very exciting last lap – it couldn't have ended in a better way.

#### Was it one of your best-judged races in terms of tyre management?

Yeah, definitely. It was actually quite a hard race because there was quite a lot of degradation on the soft tyres in Abu Dhabi. I was very happy to finish the season on a point that I wanted to improve a lot – [managing] the degradation of the tyres and to show we were on top of it for the last race.

What happened on the last lap?
To be honest, I lunged on the inside in Turn 7

just so he saw me and [would] leave space, lose time, and for me to be able to overtake him after that. But I was very far back so he probably didn't see me and we touched a little bit – but that helped me to then get better traction than him and I got alongside.

It was quite exciting on the straight. I was a bit slower and so I had to get back in the slipstream all the time. Then, at the end we were on the far inside of the track so I couldn't really see the panels on the outside for my braking point. So, I just hoped he was braking at the right point and I [decided I] would brake one metre later, and that's what I did.

#### Was it your most satisfying F2 win?

Yeah, probably, because we had a difficult weekend overall and I think this has helped this feeling be even greater. We had a difficult qualifying when I struggled quite a bit and sent the team in the wrong direction with the set-up.

Then we had quite a good first race – we came back to third before the last corner [where Leclerc obeyed a team order to give the place to team-mate Antonio Fuoco] and at the end finished second because of the disqualifications [of Fuoco and Oliver Rowland]. And then in race two starting seventh [and getting] to first.

I think it was a really great weekend of coming back to the pace when we were struggling and trying. To win [in this way] after a great season like that feels amazing. All in all, I think it was an amazing weekend.

#### The dropouts

WHAT HAPPENED TO THOSE DRIVERS WHO MADE THE TOP 50 IN 2016, BUT FAILED TO MAKE THE CUT THIS YEAR

- **5** Nico Rosberg **RETIRED**
- 9 Simon Pagenaud 2ND IN INDYCAR SERIES
- 11 Gianmaria Bruni 10TH IN IMSA GTLM
- 17 Jimmie Johnson 10TH IN NASCAR CUP
- 19 Neel Jani 4TH IN WEC
- 24 Marco Wittmann 5TH IN DTM
- 25 Antonio Giovinazzi
  22ND IN FORMULA 1
- 26 Joey Logano 17TH IN NASCAR CUP
- 28 Shane van Gisbergen
  4TH IN AUSTRALIAN SUPERCARS
- 30 Robin Frijns
  1ST BLANCPAIN SPRINT
- 31 Jose Maria Lopez 6TH IN WEC
- 33 Edoardo Mortara 14TH IN DTM, MACAU GT WORLD CUP WINNER
- 34 Pascal Wehrlein 18TH IN FORMULA 1
- 36 Lance Stroll 12TH IN FORMULA 1
- 38 Mark Webber RETIRED
- 40 Pipo Derani 9TH IN IMSA SPORTSCAR CHAMPIONSHIP
- 41 Mattias Ekstrom
  2ND IN DTM, 2ND IN
  WORLD RALLYCROSS
- 42 Gordon Shedden 4TH IN BTCC
- 44 Christopher Mies
  NURBURGRING 24 HOURS WINNER
- **46** Andre Lotterer **4TH IN WEC**
- 47 Jenson Button
  25TH IN FORMULA 1
- 50 Stoffel Vandoorne 16TH IN FORMULA 1



RESERVE YOUR SEAT. SBKK MOTUL
FIM SUPERBIKE WORLD CHAMPIONSHIP
SUPERSPORT SUPERSPORTION (SUPERSTOCK)

SUPERBIKES

14-16 SEPTEMBER

EUROPEAN 26-28 LE MANS SERIES OCTOBER









ALGARVE CLASSIC FESTIVAL 19-21 OCTOBER



#### PROMOCODE: #AIARACES18

Be one of the **first 50** to reserve a seat for these amazing racing events at **aia.pt** and get a special 30% discount on your tickets.







# Sebastien Buemi

World Endurance and Formula E runner-up

# **DOWN 2**

Despite winning more than 50% of his World Endurance Championship and Formula E races, Buemi ended his main 2017 programmes title-less. What's worse is his year will probably be remembered for his infamous outburst after the penultimate race of the FE season in Montreal.

"His natural tendency is to be quite aggressive, and he's worked hard to control his temper," says four-time IndyCar champion and three-time Indianapolis 500 winner Dario Franchitti, who has watched



Buemi through his FE career. "I think it was just frustration finally boiling over."

Buemi moved onto a different level in FE last season, eradicating the majority of qualifying errors that almost derailed his title-winning campaign the year before.

"I think he got a bit frustrated with people saying he's got the best car," says Franchitti. "Last year he put his stamp on it. He's the real deal, and every race that goes by he becomes a more complete racing driver."

# Q&A

# How do you rate your year?

I won more than 50% of my races in the WEC and in Formula E – and in the end I still didn't get any championships! I'm disappointed with that. But I'm really happy with the performance because if you count Hong Kong and Marrakech last year, if you win 11 races out of 19 entered you have to be happy. That's not going to happen all the time.

Losing Le Mans again and then the FE title in a month must have been hard to recover from...
I'm the kind of guy who thinks when it's done, it's

done. I focused on my WEC duties because I didn't have any Formula E, and I won three of the races since Le Mans. I've refocused properly. It's the same in FE – I finished Montreal, and I came to Hong Kong ready to push.

# How significant is the Renault e.dams part in your success?

We won the teams' championship for the third year. They've done an amazing job. It's remarkable for a team that's won four championships out of six to sit down and say, 'We have to do this, this and this.' Normally a team when they win like that it's difficult to say, 'We don't do things well enough.' It's not because we won six races last year that we'll keep winning.

8



# **Martin Truex Jr**

NASCAR Cup Champion

# **NEW ENTRY**

Truex's first Cup title has at times been overlooked by the dominance enjoyed by the free-spending Toyota being the only manufacturer to introduce a new car in 2017.

Ford's Brad Keselowski was compelled to call Toyota's season as dominance akin to Formula 1, but that understates Truex's sensational season. Considering that before 2017 he had a total of seven wins, Truex added eight in one campaign in which he nailed the new stage format and went unchallenged at the top from mid-season onwards, winning more races and stages than anyone else. His run to the final four was a stroll in the park, easily amassing the wins and points to sail through each round.

And that final-four showdown at Homestead showed his coming of age; he could easily have blown it – as he did in 2015 – against three previous Cup champions. Instead, it was a straight fight between the Toyotas of Kyle Busch and Truex. Truex beat him despite having the slower car on the day and won his first crown under immense pressure in the final 20 laps.







# **Daniel Ricciardo**

5th in Formula 1

# DOWN 6

Based purely on his peak results, 2017 was Ricciardo's best season yet in Formula 1, but he will probably be the first to admit it has not been his finest year. Yes, he won a race and fell just five points shy of beating Kimi Raikkonen to fourth in the world championship, but this is the first season Ricciardo has been comfortably outperformed by a Red Bull team-mate.

That will hurt. Ricciardo is a conqueror of Sebastian Vettel, and has fostered a deserved reputation for being

one of F1's best qualifiers and classiest racers. But he struggled to consistently hit the RB13's sweet spot in qualifying this year, and occasionally overreached trying to make up for that. He is not as comfortable as Max Verstappen with a loose car, cannot switch the Pirelli tyres on as easily, and has been guilty of overreacting in the face of his team-mate's strong form. Qualifying shunts in Melbourne and Baku were very uncharacteristic for a driver usually so sublime on Saturdays.

But Ricciardo remains a class act. When everything came together he produced some superb qualifying laps, particularly at Austin and in Abu Dhabi. And that expert judgement in battle was again on show, whether it was battling hard with Valtteri Bottas at Austin, or lunging past Raikkonen in a burn from the stern at Monza.

Ricciardo's standing is now threatened by Verstappen's inexorable rise. The big question facing Ricciardo is how to turn the tide.





# Josef Newgarden

IndyCar Series champion

**UP 39** 

Newgarden's hunt for a first IndyCar championship looked set to follow the Penske 'curse' that Simon Pagenaud endured in his opening season – he struggled in 2015 before winning the title last year.

A dreadful Month of May for Newgarden finished with him 19th at the Indianapolis 500 and falling to 59 points behind series leader Helio Castroneves in eighth position in the standings. "May was our lowest point of the year," agrees Newgarden.

But that became the catalyst for a remarkable



charge. One week later he took a podium in the second race at Detroit – the first of seven podiums in the last 10 races that won him the title.

That charge came as Newgarden grew familiar with a Penske-run Dallara-Chevrolet that didn't suit him and required fine-tuning, aided by the experienced crew left behind by Newgarden's predecessor Juan Pablo Montoya.

There was a brief wobble in the championship charge at Watkins Glen as his title lead fell from 31 points to

three ahead of Scott Dixon after a self-inflicted mistake in the pitlane. It would be the only sign of inexperience in a title race. It was poorly timed, leaving him narrowly ahead in a six-way battle for the crown at the season finale. Pressure could have told, but Newgarden seized pole and, if not for Pagenaud's superior race strategy, he could have won the race as well as the title.

Second proved enough, though, and was worthy of a driver who has gone from IndyCar's best driver outside of the 'big three' teams to a worthy champion.



# Sebastien Ogier

World Rally champion

# DOWN 1

From the moment Ogier stepped out of M-Sport's test Ford Fiesta WRC in Walters Arena on Friday November 25 last year, team boss Malcolm Wilson knew what he wanted.

"He liked the car," Wilson said, "which was great, but that was when the hard work started; that's when the negotiations started. I'd come close to signing him in 2011, just like I'd come close to signing Sebastien Loeb in '05, and this time I



was determined I didn't want to let him go."
Was he worth the money?

"Absolutely," is the emphatic reply. "He and [co-driver] Julien Ingrassia walked into Dovenby [Hall, M-Sport HQ] and everything went up a level. The whole team could really see what it meant to work with world champions and that was the key to making us world champions this year. Seb has so much experience of winning, how to win and when to take the points. That made

the difference. The car wasn't bad, mind..."

Victory on Ogier's M-Sport debut on the Monte Carlo Rally was followed up with a run of strong results, including a second victory in Portugal, allowing Ogier to clinch his fifth WRC crown with an event to spare. Only in Finland, where he crashed on the first day, did Ogier fail to finish in the top five in what was a very different kind of championship campaign from those of his Volkswagen days.

4



# **Sebastian Vettel**

2nd in Formula 1

UP8

Apart from triggering two high-profile and costly collisions – three if you follow Lewis Hamilton's logic and count Mexico as well – this was a very fine year for Vettel. He won five races in F1's second-fastest car. More impressively, he qualified that car on the front row of the grid 14 times in 19 attempts.

It is that consistently excellent qualifying form that stands out. Handed a car capable of challenging for the championship – for the first time since 2013 – Vettel raised his game this year. Perhaps the biggest



compliment of all to Vettel is that he also forced Hamilton to raise his own game in response.

Vettel is clearly on a Michael Schumacher-esque mission to make Ferrari great again. If he can emulate his hero and win multiple world championships for the team, it will define his legacy as a true grand prix great. Vettel seems to feel Ferrari is on the cusp, and is steeling himself for the fight.

Ferrari is not the same team it was in Schumacher's time. The balance of power has shifted and the drivers

must dance to Maranello's tune. This played a part in Fernando Alonso's downfall at the team, and it almost undid Vettel in 2016 too.

But Vettel is humble enough to accept his place in the new world order. This year his work was outstanding for the most part. The nagging doubt remains that capacity to let emotions cloud his judgement in moments of peak stress. This proved Vettel's undoing in 2017. He says he is now wiser for the experience. He will need to prove it in '18.



# **Fernando Alonso**

15th in Formula 1 Indy 500 rookie of the year

UP3

Alonso has been in Autosport's top 50 15 times out of 16!

McLAREN RACING
DIRECTOR ERIC BOULLIER
EXPLAINS WHY ALONSO
REMAINED ONE OF THE
BEST ON THE FORMULA 1
GRID IN 2017, DESPITE YET
ANOTHER SEASON OF CHRONIC
UNDERACHIEVEMENT AT
McLAREN-HONDA

# On Alonso apparently raising his game in 2017

I would say it looks like he's getting better because he likes the new regulations. He was always praising more downforce, more grip, and faster cornering speeds. Now that he has it, he really enjoys it. Because the car is better, the driver is happy.

### On why Alonso is so important to McLaren

He's capable of extracting 100% from his car. First lap. He's a complete driver. Maybe Lewis can be a tenth faster on one lap in qualifying, but he is not as complete as Alonso. Fernando's technical feedback, the way he's motivating and pushing people to do better, the fact you can rely on him, no mistakes, for us it's invaluable, because every time he goes out we know where we are.

# On dealing with McLaren-Honda's frustrating form

You just shift the reference. I'm always asked by people, 'What do you predict this weekend?' and that makes me



sad. I just have to reset this – shift our mind to something else to make ourselves better, and it's the same for Fernando: how fast you can go on this track; how close we can get here? He is still pushing like if he was going for pole. You can see if Stoffel [Vandoorne] does something better, straight away he absorbs this.

### On why Alonso became frustrated in some races

This car is a bit complicated. In qualifying you can charge the batteries and you have one lap more or less OK. In the races, we had to put the engine down – we didn't have enough recovery compared with last year. We couldn't deploy all the lap in the race, anywhere. Some of the teams can deploy everywhere 100%. Imagine you're on the straight and then you lose 160bhp. We stop deploying and then the other car passes us. That's why the fans don't understand why we're so slow sometimes. During that period, you lose so much time and the speed difference is huge. At Spa, there were cars passing us with ease...

## On gunning for a different kind of glory

He knew he could do the fastest lap in Hungary because he knew the car was good. End of the race, you could see he changes switches, recharges for one lap, puts qualifying mode for one lap, and he got fastest lap. He was so happy. He said, "I got my name near Ayrton Senna in the McLaren-Honda." People will remember the last driver to have a fastest lap in a McLaren-Honda as Alonso. Legacy.







# **Max Verstappen**

6th in Formula 1

UP 1

It seems there may be no stopping Verstappen, apart from any persistent lack of performance and reliability from Red Bull's Renault engines in the short-term.

A distant sixth in the world championship, 32 points behind Red Bull team-mate Daniel Ricciardo, doesn't come close to doing Verstappen's 2017 performances justice. The final six races, where Verstappen scored two wins and equalled world champion Lewis Hamilton's haul, are a better reflection of his driving.

"I'd say it was a nine out of 10 to be honest with you," says Red Bull boss Christian Horner, when asked to rate Verstappen's season. "The way he's driven and raised his game this year, and handled certain situations, I think has been very good.

"The way he's driven and qualified and raced this year has been outstanding. I think he's worked out what he needs from the car. He's put a lot of work in, done a lot of hours on the simulator, been very, very committed. Sebastian [Vettel] set the standard in that and Max has got that similar kind of ethic.

"Daniel is absolutely one of the best out there. Definitely, this year, Max has stepped it up a gear, and Daniel's had to go some to go with him." The most impressive aspect of Verstappen's season is that Ricciardo has usually been unable to "go with him". Ricciardo has been F1's outstanding driver for two of the past three seasons, one Fernando Alonso rated as the absolute best on the grid in 2016.

That's an incredibly high benchmark, and it's one Verstappen has surpassed, which is why Red Bull was so keen to tie what Horner calls "probably the most exciting talent to hit Formula 1 since Lewis Hamilton" down to a new contract until the end of 2020.

Perhaps the only lingering doubt concerns
Verstappen's ultra-high-risk approach to battle. He
had several collisions this year – with Kimi Raikkonen
and Valtteri Bottas at Turn 1 in Spain; with Vettel in
Canada and Mexico; with Ricciardo at Turn 2 in
Hungary; with Felipe Massa in Italy.

Red Bull motorsport boss Helmut Marko has said in the past that Verstappen could learn to be more patient. He will need to be when involved in a title fight. There is no evidence yet that he can temper that fierce racing instinct in the heat of the moment.

"I think when it comes off you're a hero and when it doesn't you get criticism," argues Horner. "I think he's raced incredibly well this year, and his patience has been tested to an extreme with the amount of engine failures – while in great positions – that he's had.

"He'll take the risks – he's committed, and I think the drivers around him know he won't give any quarter. He's not going to just settle [for less]. He's built himself a reputation.

"He's got this never-give-up attitude, which is what I think excites so many fans. Austin was an incredible charge; his first lap in China – look at that on YouTube, that's pretty remarkable.

"You don't have to be a rocket scientist to see the trajectory that he's on."

A collision course with the world championship, most likely, if he gets his hands on a good enough car.

# A&Q

How would you rate your season out of 10? I think too many things have happened to give it a mark, really, so I would rather not do this."

What have been the highlights for you? Malaysia, Mexico, Austin. Just in terms of speed, we were up there at those tracks."

Do you feel you made any mistakes this year? The only thing that happened was Hungary – that thing with Daniel. But for the rest, no. I also think that every weekend the speed has always been good. So, nothing really to complain about in that area. For what was possible for us, we always achieved reasonably good results.

# Where did you improve as a driver?

I think it's just more experience. I think that's the only thing, actually. But that definitely helps. It's just about getting more experience, getting older and doing more races. That helps with everything.

Any lessons learned since joining Red Bull? No. At a top team it actually becomes a bit easier than when you're at a team in the midfield, because everything is better arranged, you have a better car.

Are you now where you expected to be when you started your F1 career three years ago?
No, I'm way more ahead. I never expected to be in this position now, and to have won three races by now. I think everything has gone a bit more rapid.

# Lewis Hamilton

Formula 1 world champion

UP 1

# Hamilton became better than ever in 2017

By Ben Anderson, Grand Prix Editor

ewis Hamilton has consistently been among Formula 1's most outstanding performers for a decade now, but 2017 was arguably his best season yet among a very impressive bunch.

Nico Rosberg's shock retirement at the end of last year allowed Hamilton to reset his mind and achieve a fresh equilibrium within Mercedes coming into 2017.

New team-mate Valtteri Bottas was stunned by Hamilton's work ethic, and it seemed that a renewed threat from Ferrari and Sebastian Vettel drove Hamilton to new levels of excellence.

It was impressive enough that he equalled Vettel's tally of four world championships, vanquishing his rival with two races to spare, breaking Michael Schumacher's record for F1 pole positions in the process, and surpassing Jackie Stewart as Britain's most successful grand prix driver in terms of titles won. But the way Hamilton raised his game through the season to get the job done was outstanding.

It seems rather unfair that Hamilton was often cast as merely

a seat-of-the-pants driver, living on his wits, while Rosberg was considered the brainiac. Hamilton is prepared to graft as much as rely on his natural skillset. He struggled much more than Bottas in the early part of this season, when the capricious diva that Mercedes produced was at its most, well, capricious, but a forensic approach to destroying those weaknesses, and adapting his own driving to get the most from that difficult car, made Hamilton 2017's most outstanding driver.

He put together a remarkable run of six wins from eight races between July's British Grand Prix and October's US race at Austin, which proved decisive in turning the championship battle in his favour. Hamilton is still the same super-fast, instinctive racer he always was, but marrying that to growing maturity and a fiercer work ethic than ever makes him potentially unstoppable.

"Silverstone — that was really turning the wick up," says Hamilton, reflecting on the first race in which he definitively destroyed Vettel in what until that race had been a close, seesaw fight. "It was like sailing without wind then suddenly you pick up the gust. Silverstone felt like that — the right blow, like





# "I don't look at myself as the leader of the team, I am a small link in a long chain"

when Anthony Joshua gets the right hit and the [other] guy's on the back foot after that.

"We went to Hungary and we were not quick enough. [But] Hungary was a special weekend because the difficulties we went through, plus the scenario we had as a team [with Bottas and Hamilton twice swapping positions under instruction], really solidified the dynamics in the team, and sent such a positive ripple effect. It was like, 'OK, this is what we're here to do, this is how we're going to operate, these are our core values'. That was a very, very important weekend in that respect. So, while we didn't win, it was a huge win in terms of our unity."

Team unity has been a huge part of Hamilton's improvement this season, allowing him to cast off the mentally draining difficulties of being Rosberg's team-mate and managing the unique pressures of their exclusive internal battles for the world championship. Free of the shackles of doubt surrounding codes of conduct, factions supporting one driver over the other, collisions on-track, and management stress of trying to handle the fallout, Hamilton has devoted the extra headspace to fighting off the external threat from Vettel and Ferrari.

"From the Hungary experience, it really just added a good amount to the foundation of the relationship with the team, with the engineers as well," adds Hamilton, who describes 2017 — particularly the second half — as one of his most complete seasons in F1.

"We just worked better from then on. And my understanding

of the car... I did some studying during the summer, to analyse where I'd been with the car and just basically jotting down 'this is what the car wants, this is how I've got to drive it.' I just did that consistently throughout the season.

"You do try to step up, particularly in the second part of the season. But I think I've always been really consistent. Ultimately, you start a weekend with the potential you have and the potential the car has, and during the weekend you want to reach your potential and over-exceed [if possible]. You want to squeeze out those extra drops that no-one else can get. That's where I feel my value is.

"Often, if you go the wrong direction you don't even get to the car's potential. The car just won't allow you to squeeze out the extra bit. Understanding the car has really allowed me to get the potential, and a little bit more. So, even in the races where we've struggled, we've come out with more than we'd hoped. Consistency-wise, that's all been in the solidity of my mindset."

It is Hamilton's fresh and more-robust mindset that has most impressed team boss Toto Wolff this season. The two met in the kitchen of Wolff's Oxfordshire home last winter, to clear the air after a troubled end to 2016, when Mercedes interfered in the title showdown between Hamilton and Rosberg, having said before the race it expressly would not. This was the culmination of growing tensions inside the team. Rosberg's sudden retirement allowed both parties to hit the reset button.

"If you are at the office and your boss doesn't want you there, it's going to be a shit environment, isn't it?" says Hamilton of those clear-the-air talks. "That's just negativity drawing away from what you're great at. That meeting was really important to reset things, so when I arrive and the guys know I'm going to be giving it everything, they work that extra bit harder, and vice versa.

"If there's any negativity or question, it can only hold us back. It was almost a purification of the relationship, and a restart of the solid foundation we had already built years ago. I don't look at myself as the leader of the team, I believe I am a small link in a long chain. The key is making the link as strong as it can be,



# Previous number 1s

2002 Michael Schumacher

2003 Michael Schumacher

2004 Michael Schumacher

2005 Sebastien Loeb

2006 Fernando Alonso

2007 Kimi Raikkonen

2008 Robert Kubica

2009 Lewis Hamilton

2010 Sebastian Vettel

2011 Sebastian Vettel

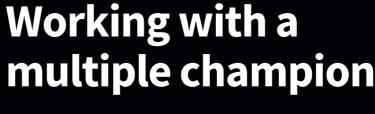
2012 Fernando Alonso

2013 Sebastian Vettel

2014 Daniel Ricciardo

2015 Lewis Hamilton

2016 Daniel Ricciardo



James Allison has been fortunate enough to work with several world champion Formula 1 drivers during his career, including Michael Schumacher, Fernando Alonso, Kimi Raikkonen and Sebastian Vettel. But, after leaving Ferrari in the middle of last year and joining Mercedes for 2017, this is the first time Allison has worked with Lewis Hamilton.

"He's got, as you can imagine, far more in common with the other great champions than things that are different," says the Mercedes technical director.

"His hunger to win, even after being on the right end of nearly all the records in the sport, is just astonishing.

"The most

remarkable thing about him [as a driver] is just his raw, raw speed. You don't get all those pole positions without being a pretty special controller of the car. I think I'm very lucky to work with a whole bunch of very good people, but his ability on a Saturday is second to none. And he rarely drops the ball on race day having put it on

# "The most remarkable thing about him is just his raw, raw speed"

pole on Saturday."

It's no surprise to hear a eulogy about Hamilton's obviously impressive driving skills, but the way he carries himself outside the car has also left a serious impression on Allison.

"His disappointment in himself when he makes very rare, normally quite small, errors is also very admirable," Allison explains. "I've worked with drivers who tend to lash out when they screw up; Lewis doesn't do that. That's a pleasurable aspect of working with him.

"When we screw up, and we have done on a number of occasions this year – most notably the headrest incident in Baku – he's been completely and utterly calm and reasonable about it, even though the points swing created by an event like that is big. Similarly, when we

were forced to ask him to take a gearbox penalty in Austria, same deal – it just didn't faze his approach to the weekend. Those are nice things when a driver's like that.

"Earlier in the year I'd spoken about the fact that he was impressive as a man. I imagine there'll be people hearing that who see the Instagram Lewis and the fashion Lewis, who'd be thinking, 'Really?' You've got to look at his career as a whole.

"Every great champion we've seen in recent years, in some way or another they've done something really ugly on the track that we'd all love to excuse somehow or another because we like our heroes, but you just look at it and go, 'No, that's just plain ugly.' He's not [done things like that].

"He just goes out and races with his huge gifts, and when actually he's called to do something that is the right thing to do, he steps up and does it – even when it is very, very difficult to do it and the whole world is watching. That's the sort of thing I mean when I say he's impressive as a man."





# "Pressure points, weak points – you just keep your foot down, keep the pressure on"

and that's what we have managed to do this year."

Mercedes has needed to pull together like never before. The Wo8 represented a fine attempt at meeting the challenge posed by F1's new wider Pirelli tyres and enhanced aerodynamics, but such a long car was overweight to start with, difficult to set up, tricky to drive, and ate its tyres.

Although Hamilton set pole position for five of the first nine races, he won only three as Mercedes ran into trouble and Ferrari took full advantage. But, crucially, Hamilton made sure he picked up solid points finishes on his bad days — crucial to winning any championship.

"Some of the issues we've had have been with us for years and we are only just realising we need to really do something," says Hamilton of the Wo8, which he describes as the "toughest" to understand of the F1 cars he's driven in his career. "I'm hoping next year some of those go. New car, being on a wider scale, magnifies the issue, I think. A different tyre dynamic — it has been the hardest in that respect; 2008 was a difficult one too; '09 was horrible. This is a great car, but it has been tricky getting it to work.

"Often to get that extra potential you have to overdrive a little bit, but it's a fine balance of getting into that region. This year people have talked about us having the best car, and for sure it's been good, but there are some fundamental issues with it that pop up that I've had to fight to overcome. I feel like in those moments I've been able to extract more than it was willing to do, and that's been a positive."

It is often said that world championships are won on the bad days as much as the good, and there is probably no better example of this than Singapore, where Hamilton won from fifth on the grid on Mercedes' least-competitive weekend of the season, while Vettel's title challenge imploded thanks to a startline crash with Ferrari team-mate Kimi Raikkonen and Max Verstappen.

Hamilton and Vettel both drove brilliantly at times this season, but arguably the key difference between them was how Vettel made mistakes at key moments under extreme pressure while Hamilton did not. This is another aspect to Hamilton's impressive evolution — he has become stronger than ever mentally, no doubt bolstered by the difficult experiences he had paired alongside Rosberg, and the remaking of the Mercedes team anew in Rosberg's absence.

Vettel lost his composure completely during a battle with Verstappen in Mexico last season, and that mental weakness resurfaced in Azerbaijan, where Vettel threw away a potential victory against the odds by misinterpreting Hamilton's safety-car-restart tactics as brake testing, then deliberately driving into his rival.

Further errors at the start in Singapore, and on the first lap in Mexico — where Vettel collided with Hamilton and Verstappen after losing the lead — suggest a residual lack of composure, or perhaps Michael Schumacher-esque clumsiness, from Vettel in wheel-to-wheel situations, which Hamilton can exploit.

"Pressure points, weak points — you just keep your foot down, keep the pressure on and when the other shows no sign of weakness... that's definitely difficult," says Hamilton. "Look at Roger Federer and Rafael Nadal, at some point in the game one will see a slight weakness in the other — even if just half a per cent, that's what they try to capitalise on and which makes the difference, and that's really how it has been this year [in F1]. The key for me is to be the most solid driver here.

"I'm not going to tell you what I've learned [about Vettel], but you can see it and I think you guys have learned about him."





He shouldn't shy away from that. He will learn from the experiences, as we all do. I have had years like that. He has had years of complete solidity, like [mine] this year, as well.

"I imagine next year he's going to be coming back guns blazing. But I don't feel there's anything I can't achieve if I put the work in. How I strategise over these next months into next season... When you watch [Usain] Bolt out the start blocks he's just a little bit slower than the others. He's just behind and then he creeps back. When he backs off at the end, that's always the goal for anyone. That's really how my season's been."

There has naturally been a lot of focus on Vettel as Hamilton's main rival this year, given the way the championship battle played out, but Hamilton also has eyes on a couple of other drivers as potential threats. Former McLaren team-mate Fernando Alonso is still operating at the peak of his powers, while Hamilton found himself pushed hard in several of the late-season races by the irrepressible force that is Red Bull's Max Verstappen.

If Renault can get its engine properly together over the winter, it would be great for F1 if Hamilton, Vettel, Alonso and Verstappen could all slug it out for championship glory.

"We're the four strongest drivers," says Hamilton. "You look at them all slightly differently. They all have different characteristics. Sebastian, this year you could say, 'give more space'; Max takes a lot of risks, also you have to give more space, but he is more inexperienced than the other guys; Fernando, toughest driver there is, so you have to keep that utmost respect for each other, but you've really got to play your cards right to utilise the racecraft. His racecraft is mighty, but Max's racecraft is [also] very impressive.

"He's doing wonderful things, but he is going to grow so much over the next 10 years. I don't think it will be a problem [for me], it'll just be freaking tough. Wouldn't that be a fight? Even I'd pay to see that. I really hope we are all in the fight next year. It would be friggin' amazing."

For now, Hamilton can simply reflect on a job expertly done in 2017. The manner in which he found a way to raise



# "I really hope we are all in the fight next year. It would be friggin' amazing"

his game to a whole new level, amid Mercedes' travails with its car, his own struggles extracting its potential, and Ferrari's relentless onslaught, was the most remarkable aspect of arguably Hamilton's best season yet in Formula 1.

He is now a four-time world champion, one of the all-time greatest drivers in the history of grand prix racing, yet he is still finding ways to get even better.



Lewis Hamilton is a global superstar, as well as an extraordinary Formula 1 driver, thus managing his time properly can be difficult. Rather than attempt to control this process, Mercedes has increasingly allowed Hamilton to follow his own nose, invest more of his own time in the things he wants to do, to train his own way, structure his life on his own terms, and both parties have reaped the rewards.

Hamilton is conscious of the need to balance his time properly between F1 and his other interests, and not allow these other aspects of his life to become a distraction. Outside the car he is still pushing as hard as ever, but also doing things more on his own terms.

"I just wanted to go back to my roots – up until F1 I didn't have a trainer and did all my training on my own," says Hamilton. "It was about trying to get back to finding that within myself, because when you have a trainer they're whispering, hanging around, they nag you, push you, which is all good, but you can get complacent and lazy because you rely on something and I wanted to get away from that."

Hands-off management seems to have helped Hamilton get more out of himself than ever this year, as has his decision to shift to a vegan diet, which he announced around the time of September's

# "It changes your life [being vegan]. I feel the best I've ever felt"

Singapore Grand Prix.
Adopting particular
diets can have a
transformative effect on
athletes. Tennis star Novak
Djokovic famously improved
his game significantly after
discovering he was intolerant
to gluten and adopting a
gluten-free diet.

"I do have more energy, but before I had more than enough energy anyway," says Hamilton of his decision to go vegan. "I just feel cleaner. I don't feel bogged down, don't have problems with my stomach like I used to have. It's hard to stay on the diet I'm on, [and] it's actually really weird, once you get across that side. The other day I was at dinner and my friends were eating meat and I look at it and I'm disgusted – and I used to love meat!"

There is moral as well as physical purpose in Hamilton's lifestyle choice, and what's good for the mind and soul can be just as beneficial as what's good for the body.

"I met people, friends, who were vegans, who exposed me to some of the things that were happening that I was completely oblivious to," Hamilton adds. "It affected me so much when I saw these things, so bit by bit I weaned [myself] off it.

"I came off red meat two and a half years ago, stopped eating chicken at the start of this year and was pescatarian, then the final thing was seeing this one documentary. I'd seen a couple, but this one was, 'OK, I'm done'. It does change your life. I feel the best I've ever felt."











# MOETEFINDT CONQUERS THE NORDSCHLEIFE

n October 23, Moetefindt trailers made its own small piece of history on the Nurburgring Nordschleife.
Compared to the 8m15s pole time for this year's Nurburgring 24 Hour race, a 12m06s lap of the 20.8 km 'Green Hell' doesn't sound especially fast, even allowing for the wet autumnal conditions that greeted Nordschleife circuit expert and TV presenter Patrick Simon, the man entrusted with driving duties.

But this was no ordinary lap. Set by a road-going Porsche Panamera Turbo Sport Turismo, towing a Moetefindt trailer loaded with a Porsche Junior Tractor 108 that weighs in at 985kg, it was the fastest time ever recorded by a car towing a trailer around Germany's most famous circuit.

Suffice to say, trailers are not designed to travel at great speeds, nor are they tested on the Nurburgring to optimise performance in the same way that cars are. The primary function of a trailer is to safely transport a load from A to B, without adventure or mishap – not to break lap records. Yet that is precisely what Moetefindt trailers has achieved, with Patrick behind the wheel.

The idea of Jens Moetefindt, CEO of Moetefindt trailers and a regular competitor in the Nurburgring-based VLN Endurance Series, the goal was to achieve the most impressive speeds possible and showcase

Moetefindt
Tailor-made trucks and trailers

the impressive technological capabilities of his product range that can improve safety on the road.

With Moetefindt's industry-leading air suspension system, which ensures a smooth ride while also spreading the load evenly across the axles to improve durability and tyre wear, Jens was confident that his bespoke trailer would be up to the task. But reality exceeded all expectations.

Despite towing a total weight of 2.2 tonnes, Patrick reached a maximum speed of 180km/h on the long Dottinger Hohe straight, helped by a three-dimensional nose section to improve aerodynamic performance.

# "THE FTP 235 TRAILER COPED IMPRESSIVELY, ENSURING A STABLE RIDE AT HIGH SPEEDS"

Through the tight and twisting corners – over 150 in all – the FTP 235 trailer coped impressively, its double-axle configuration allowing the trailer to tilt while simultaneously turning into the corner to ensure a stable ride through the high-speed run from Flugplatz through Schwedenkreuz. All the while, tethers over the tractor wheels ensured the 1959 classic remained in place through the bumpy Karussell and over the jump at Pflanzgarten 2.

With an unforgettable record achieved and its reputation for safety enhanced, this latest triumph of German engineering further positions Moetefindt trailers as a market leader in the transportation sector. Wait and see what is in store for next year...

















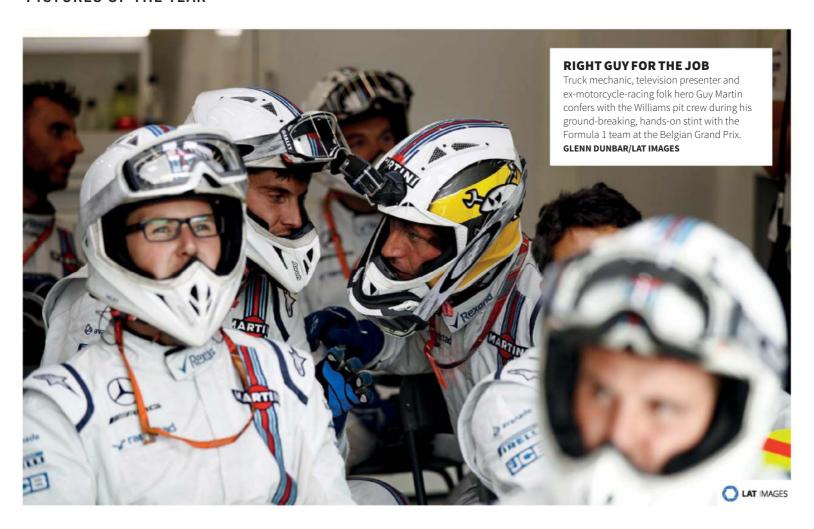
# **PICTURES OF THE YEAR**





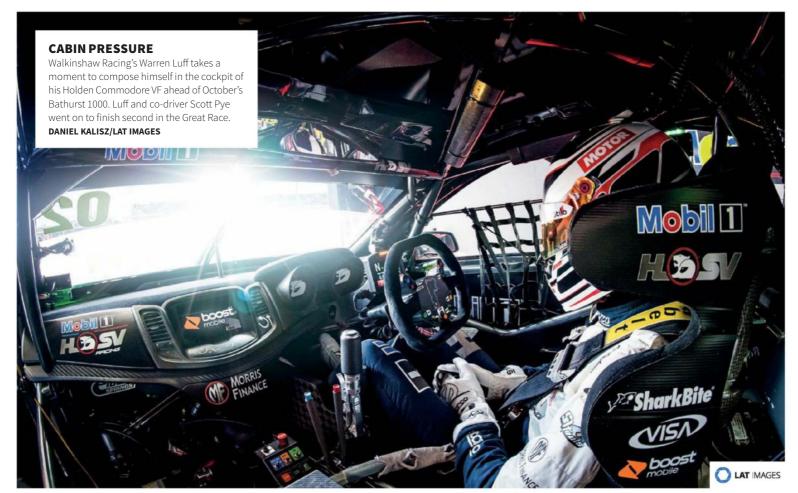


# PICTURES OF THE YEAR















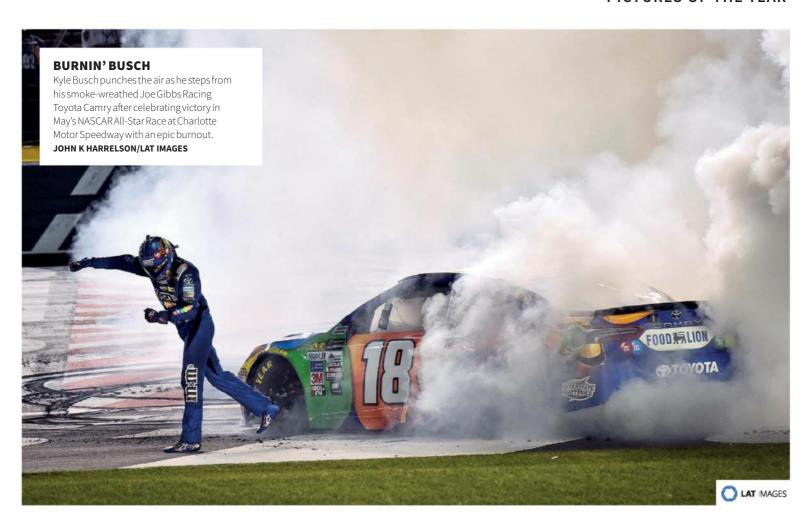
# **LEADER OF THE PACK**

Indy 500 rookie Fernando Alonso's distinctive orange McLaren-Honda-Andretti Dallara-Honda exits Turn 4 at the Indianapolis Motor Speedway at the head of the field – as confirmed by the track's scoring pylon.

F PEIRCE WILLIAMS/LAT IMAGES



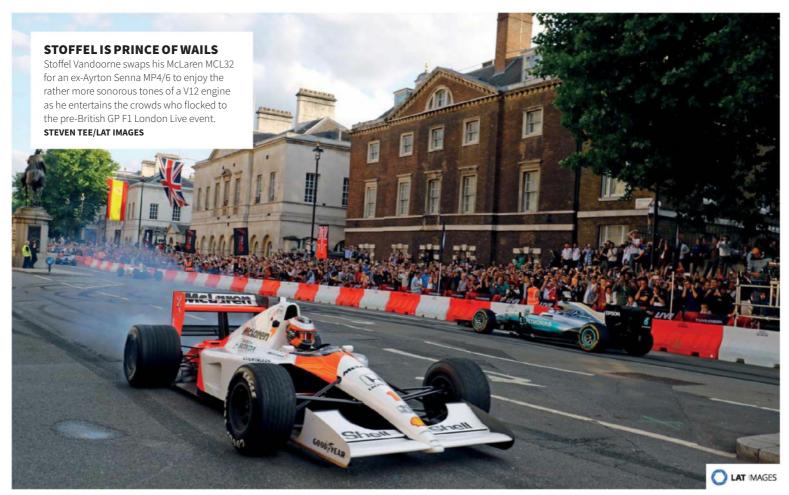
# PICTURES OF THE YEAR





# PICTURES OF THE YEAR













# Fastest laps of 2017

No prizes, just bragging rights. Our annual look at who set the fastest laps in car races on each circuit in the British Isles, plus some stories behind them

# **Compiled by Marcus Simmons**

Interviews by Jake Jones, Stephen Lickorish, Alasdair Lindsay and Rory Mitchell

### **KNOCKHILL**

Jamie Caroline "We were in the groove that weekend – we had four test sessions before the event and we were fastest in three of them and in the other one we used old tyres. [For race two] I had the pole from [the postponed race at] Oulton Park and just drove away. It's such a short track but in three laps I had something like a six-second lead. It's a shame the safety car came out because I was pushing and pushing to get a big lead. The team were telling me to slow down but I just wanted to rub it in! If you're coming into the hairpin and can't see a car behind you, you know you've done a good job. It's one of my favourite circuits and suits my driving style – you have got to be fully committed and take every inch of kerb and have confidence in the car." SL



# **DONINGTON PARK NATIONAL**

Cian Carey "My first weekend with Chris Dittmann Racing was at my favourite circuit so I was confident going into the meeting. Our driver coach previously held the lap record there with CDR so it was cool to beat it and have some bragging rights. Redgate is difficult because you need to carry good speed on exit and the twisty Craner Curves are all about scrubbing as little speed as possible. Climbing the hill towards Coppice is my favourite part of the lap; it's blind on entry, but where the corner opens up on the exit you can really get on the throttle early and when you get it right it's so sweet! I definitely had more time in the car; the lap record was set in traffic and on tyres that were getting tired after doing both races. I'm confident next year I'll be able to improve on that." JJ

# **CADWELL PARK**

Jeremy Timms "You just go for it! With the Cadwell Park one I was trying to break the outright lap record. With that circuit it's very undulating, and you're very close to the tyre barriers and trees. But the car is really suited to that with the bike engine, which allows you to dip in and out of the corners. The Dallara is a bit bigger than the Jedi [which Timms has raced], which holds the lap record there, but I think it's a case of when you're doing the lap record everything has to be right on the day with the temperature and no rain. It's difficult to get that year after year." RM

TRACK, DRIVER AND CAR	TIME	SPEED	DATE
SILVERSTONE GRAND PRIX			
Lewis Hamilton (Mercedes F1 W08)  ROCKINGHAM OVAL	1m30.621s	145.416mph	July 16
MarkWillis (SHP Pickup-Vauxhall)	40.240s	132.31mph	April9
SILVERSTONE HISTORIC GRAND PRIX Jonathan Kennard (Arrows-Ford/Cosworth A3)	1m51.192s	117.83mph	July29
SILVERSTONE NATIONAL Martin Short (Dallara-Judd SP1)	51.023s	115.64mph	November5
<b>DONINGTON PARK NATIONAL</b> Cian Carey (Dallara-Volkswagen F311)	1m01.760s	115.36mph	April22
<b>THRUXTON</b> James Clarke (Mallock U2-Vauxhall Mk27)	1m13.521s	115.36mph	September2
BRANDS HATCH GRAND PRIX Chris Dittmann (Dallara-Mercedes F312)	1m20.037s	109.44mph	September9
<b>OULTON PARK INTERNATIONAL</b> Jacopo Sebastiani (Dallara-Volkswagen F311)	1m29.433s	108.36mph	October28
SILVERSTONE INTERNATIONAL Duncan Williams (Juno-Honda CN2012)	1m01.515s	108.31mph	October14
<b>GOODWOOD</b> Simon Hadfield (Lola-Chevrolet T70 Spyder)	1m19.966s	108.04mph	March19
SNETTERTON 200 Chris Dittmann (Dallara-Mercedes F312)	1m06.572s	107.29mph	May 14
CASTLE COMBE Jeremy Timms (Dallara-Suzuki F301)	1m02.878s	105.91mph	October14
<b>DONINGTON PARK GRAND PRIX</b> Cameron Das (Tatuus-Cosworth F4-016)	1m25.165s	105.14mph	September24
SNETTERTON 300 Jacopo Sebastiani (Dallara-Volkswagen F311)	1m42.705s	104.06mph	August13
MALLORY PARK Paul Woolfitt (Lotus-RPE/Suzuki Exige)	47.811s	101.65mph	June4
<b>KIRKISTOWN</b> PeterDwyer(Lola-NissanT96/50)	56.151s	96.935mph	August26



# **SILVERSTONE NATIONAL**

Martin Short "Midway through the race [the Allcomers Closed Wheel race at the Walter Hayes Trophy, which Short contested in his V10 Judd-engined Dallara SP1], I decided I'd have a crack at just enjoying myself. I tried on a number of laps to get a fastest lap, but there was a lot of traffic. Coming down the National straight on the 24th lap I had a good gap in front, so came into Luffield and went for slightly more of a qualifying-lap entrance, going quite deep and turning the car and getting on the power early, rather than a tighter entrance. I probably braked the latest and carried the most speed through Copse. I got a little bit on the exit kerb. I came into Becketts and there was still no traffic. I got a really good drive out of the corner, a little bit over the exit kerbs again. Into Brooklands I had to overtake a car that was on the righthand side. I was a little bit compromised, but not massively. I had a good run through Brooklands and Luffield. I did think at the time, 'That one was all right'." AL

# **BRANDS HATCH GRAND PRIX**

Chris Dittmann "I was really pleased to set the lap record at Brands as I hadn't driven there for over five years. It's one of my favourite circuits and in an F3 car it's a phenomenal experience. With no testing there you need a lot of confidence to push to the limit, especially with small margins for error. My fastest lap was set towards the end of race one after a safety car period. I managed to get a fantastic restart and from there I worked really hard to build up a 7.5s gap, setting a new lap record in the process. I felt I got the maximum out of the car on that lap, but the conditions were slightly better at other times during the weekend. I was nearly a second faster in qualifying and there was potential to go faster; a sub 1m19s would have been more than possible." JJ

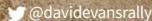


TRACK, DRIVER AND CAR	TIME	SPEED	DATE
OULTON PARK ISLAND Dan Cammish (Porsche 911 GT3 Cup)	1m22.878s	96.69mph	May21
CADWELL PARK Jeremy Timms (Dallara-Suzuki F301)	1m21.979s	96.03mph	April23
<b>BRANDS HATCH INDY</b> Lee Morgan (Jedi-Suzuki Mk6)	45.301s	95.99mph	April8
<b>BISHOPSCOURT</b> Peter Dwyer (Lola-Nissan T96/50)	1m09.432s	94.573mph	May6
<b>CROFT</b> Linus Lundqvist (Mygale-Ford/EcoBoost M14-F4)	1m21.444s	93.93mph	June11
ROCKINGHAM INT'L SUPER SPORTSCAR Cameron Das (Tatuus-Cosworth F4-016)	1m14.622s	93.59mph	April 29
OULTON PARK FOSTERS Brett Smith (Mini F56 JCW)	1m04.717s	92.00mph	August 19
KNOCKHILL Jamie Caroline (Mygale-Ford/EcoBoost M14-F4)	49.905s	91.39mph	August 12
ROCKINGHAM INT'L LONG Michael Watton (Jedi-Suzuki Mk6)	1m23.164s	88.74mph	September 16
<b>PEMBREY</b> Jason Davies (Ford Sierra Cosworth)	1m00.761s	86.26mph	April23
KNOCKHILLANTI-CLOCKWISE Kenneth McKell (Mitsubishi Evo 8)	53.680s	84.963mph	August 20
ANGLESEY COASTAL Stefano Leaney (Radical-RPE/Suzuki PR6)	1m05.78s	84.83mph	July8
ANGLESEY INTERNATIONAL Paul Rose (Saker-Subaru RAPX S1-400)	1m29.211s	84.74mph	April 23
<b>PEMBREY (WITH EXTENSION)</b> James Clarke (Mallock U2-Ford Mk18)	1m04.996s	82.52mph	May21
MONDELLO PARK LONG Cian Carey (Dallara-Volkswagen F311)	1m35.872s	81.734mph	September17
<b>LYDDEN HILL</b> Thomas Carey (Honda-BDG CRX)	44.841s	80.28mph	August 12
MONDELLO PARK SHORT Peter Dwyer (Lola-Nissan T96/50)	54.240s	76.297mph	April9

# The same but totally different

Sebastien Ogier took his fifth consecutive crown in 2017, but this was a very different campaign from his years of Volkswagen domination

By David Evans, Rallies Editor





# **WRC/SEASON REVIEW**



ew motor.
Different
threads.
Same story.
Sebastien
Ogier wins
another
World Rally
Championship,

and the high-five is done with one round to spare. Nothing had changed — but everything had changed around it.

Ogier, his co-driver Julien Ingrassia, and the whole M-Sport World Rally Team did a quite brilliant job this year. The Cockermouth-developed, built and run Ford Fiesta WRC won more rallies, set more fastest times and led for longer than any of its rivals through 2017.

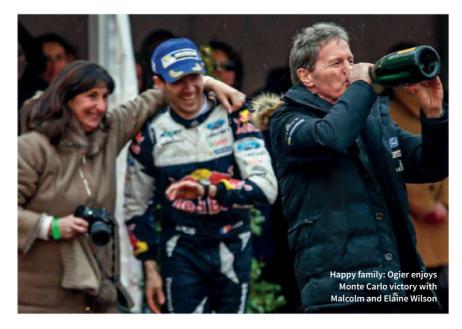
Watching the team celebrating, fittingly, at its home round of the world championship, it was impossible not to notice the look of slight bewilderment being passed around along with the bottles of champagne. 'How the hell did we do that?' pondered the collective voice. It's a fair question.

Rewind nine months and 12 rallies. Casino Square, Monte Carlo. M-Sport team principal Malcolm Wilson leans back in his seat in the Cafe de Paris and momentarily shuts his eyes. A second later, they're open again and he's smiling. Really smiling.

"What a year we're in for, eh?" he says. Having spent much of the previous three hours being asked the same question a hundred different ways, he admits for the 101st time that Ogier can end M-Sport's drivers'-title drought.

'Drought' is actually slightly misleading. Drought would intimate that this was a dry spell between showers. It's like saying the Atacama Desert suffers from a drought; drivers' titles at Dovenby have been as common as kagools in Chile's drier bits.

Of course Ogier could win the title. He's Sebastien Ogier. The bigger



question that January afternoon was M-Sport's chances in the makes' race. Could Wilson's team pick up its first world title in 10 years?

Wilson thought about his answer. Then thought some more. "I don't think so," he says. "I probably wouldn't want quoting, but it's going to be hard for us. Look at what we're up against: Citroen's coming back after a year of testing and Hyundai's looking very strong. As for Toyota, who knows?

"No, this year's about a drivers' title. I genuinely think we have a shot at that with Seb, but I think we'll struggle in the manufacturers".

Worrying about spilling that particular off-the-record chat seems a bit superfluous now. Ahead of the Monte Carlo Rally, nobody had much of a clue what to expect. The new year brought rallying's most exciting new cars in a generation, complete with plenty more power, torque and talk. Active transmission was back, and downforce was up and having a bigger impact on

corner speeds than at any time since Group B more than three decades earlier.

The one given was Ogier's potential. The Frenchman's speed and ability had guided him to the previous four world titles. There were plenty who pointed to Volkswagen's vast resources and sublime Polo R WRC; winning had been less complicated for Ogier when he'd been employed out of Hanover.

Prior to Volkswagen, Ogier had enjoyed — then endured — his time at Citroen. A time when Citroen was still spending in the fashion expected of a factory team. Driving for a private outfit hadn't been on Ogier's radar — until Volkswagen's diesel-emissions scandal broke. That, plus the lack of any offer from Citroen or Hyundai, and a reluctance to get back aboard a Toyota Yaris WRC anytime soon after a particularly wayward test, forced the WRC's very own garagistes onto that radar.

Impressed with the car on his first run at a test in Wales, he and Wilson shook hands on a one-year deal. It was a deal >>>



# ALL PICS:MCKLEIN RALLY BY RALLY

# Monte Carlo

# 1 Sebastien Ogier 2 J-M Latvala 3 Ott Tanak

Ogier makes a dream start, taking a fourth straight win in the French Alps, his first in a Ford Fiesta WRC. Early leader Thierry Neuville retires after he damages the suspension on his Hyundai. The Korean squad suffers a tough event, with Hayden Paddon withdrawn after a spectator is killed in his SS1 crash.

# Sweden

# 1 J-M Latvala 2 Ott Tanak

3 Sebastien Ogier Again, Neuville leads but retires with steering damage on the superspecial. Jari-Matti Latvala takes Toyota's first win with the Yaris and also the championship lead. A double podium for M-Sport strengthens an early advantage in the makes' race. Citroen is nowhere on the snow.

# Mexico 1 Kris Meeke

# 2 Sebastien Ogier 3 Thierry Neuville

Meeke leads as soon as the event hits the dirt, controlling the rally beautifully until going off the road and into a car park near the end of the last stage. He survives. Ogier retakes the championship lead with a third consecutive podium and Neuville scores his first top-three finish.

# Corsica

# 1 Thierry Neuville 2 Sebastien Ogier 3 Dani Sordo

Meeke leads from the start, but his hopes of backto-back wins are blown when the C3's engine lets go on SS7. Neuville moves into the lead and stays there until the finish, but it's Ogier who extends his advantage with second place despite hydraulic problems aboard the Fiesta.

# Argentina

# 1 Thierry Neuville 2 Elfyn Evans 3 Ott Tanak

Heartbreak for Evans, who misses out on his first WRC win by seven tenths of a second as Neuville becomes the first driver to win two rounds in 2017. Meeke retires after two big crashes. Tanak makes it two M-Sport drivers on the podium, but it's another tricky event for Ogier in fourth.

# Portugal

# 1 Sebastien Ogier 2 Thierry Neuville 3 Dani Sordo

M-Sport gives Ogier a brand-new Fiesta and he wins with it, looking much more like his old self. Neuville is second, but furious at being held up by Latvala, who rolls, then drives "slower than my grandmother", according to the Belgian. Popular podium for Sordo, with Tanak fourth adding to M-Sport's manufacturers' lead.



# Italy

## 1 Ott Tanak

2 J-M Latvala 3 Thierry Neuville Paddon leads early on, but labels himself a "dickhead" when he damages a driveshaft after hitting a bank. Tanak takes over and guides his Fiesta home for a maiden World Rally Championship win. Latvala is curiously subdued in second, the Finn happy to take points after a tough run.

# **Poland** 1 Thierry Neuville 2 Hayden Paddon

3 Sebastien Ogier Neuville and Tanak go into the final day three seconds apart. The Estonian moves into the lead, then crashes on the next test, leaving the Hyundai man to clinch his third win of the season and close the gap on Ogier. Paddon finally gets a break with second place after a solid, pacey drive.

# **Finland** 1 Esapekka Lappi 2 Elfyn Evans

3 Juho Hanninen Ogier crashes heavily in pre-event test, then even more heavily in the rally itself. Fortunately for him, Neuville can't find the speed to make the most of the championship leader's absence and finishes sixth the pair are now tied on points. Lappi wins his first top-tier event on only his fourth start

in a World Rally Car.

# **Germany** 1 Ott Tanak

2 Andreas Mikkelsen 3 Sebastien Ogier Mikkelsen stars on his second outing with Citroen (having first stepped into Meeke's C3 in Poland). He leads, but has to give best to Tanak, who takes his first asphalt win in the WRC. The championship moves back in Ogier's favour with third place, and retirement for Neuville after he

breaks a wheel.

# Spain 1 Kris Meeke

2 Sebastien Ogier 3 Ott Tanak Meeke bounces back from a nightmare firststage retirement in Germany with a win in Spain. He plays himself into contention with a sensible opening day on the gravel before flying through a weekend of asphalt. Ogier and M-Sport are on the brink of the title after second (and third for Tanak).

# 1 Elfyn Evans

2 Thierry Neuville 3 Sebastien Ogier M-Sport wins the manufacturers' championship, third is enough for the drivers' title for Ogier and – most importantly for the partisan home supporters - Evans becomes the first British driver to win at home in 17 years and the third M-Sport man to win in a Fiesta this season.

# **Australia** 1 Thierry Neuville

2 Ott Tanak 3 Hayden Paddon Mikkelsen, now in his third event as a paid-up Hyundai driver, leads in the hunt for backto-back wins down under, but his rally is ruined by a double puncture on Saturday morning. That leaves Neuville in the clear to dominate the rest of the event. Tanak takes an emotional podium on his final M-Sport event.

# WRC/SEASON REVIEW

that cost M-Sport millions; Red Bull and Ford both enjoy significant – and entirely disproportionate - space on the flanks of the Chris Williams-penned Fiesta WRC.

As you'd expect from a team with everything pared back to pay for car and driver, niceties were dispensed with. The creature comforts Ogier found on the team-only mezzanine level of Volkswagen's hospitality unit had largely gone. He and his team-mates Elfyn Evans and Ott Tanak would share a crew room with M-Sport's customers. The sight of up-and-comers Osian Pryce and Gus Greensmith tucking into an omelette at the table next to Ogier and Ingrassia took a bit of getting used to for all involved.

Such things were, however, on the periphery. Ogier maintained that his priority was the car and what could be done with it; money wasn't important only in that he wasn't expecting a pay rise (even if he was getting his M-Sport salary on top of a chunk of cash from Volkswagen following the early termination of his contract).

Fundamentally, M-Sport built a fast car. Of equal importance, it built a strong one that didn't suffer too many troubles. Ogier's round-one win in Monte Carlo confirmed that. And raised expectations. It would, after all, be business as usual for the #1 crew.



# "This year was about podiums and points. Ogier kept his score topped up better than anybody"

Fast forward nine months and, yes, the outcome was the same: an Ogier title with a round to spare. But after celebrating his first-round success, he would have to wait until round six before he topped the podium for the second time. And after that? Well, after that there were no more wins.

Preceding seasons with Volkswagen had him registering six, eight, eight and nine wins. If you'd told the champ he wouldn't win again once he departed Rally Portugal, it's fair to say he might have doubted even his own ability to take another title. Two things worked in his favour: his own consistency and the division of success.

That consistency was the real foundation of Ogier's fifth title. Here are some questions and answers you. Which M-Sport driver won the

Above left: Latvala won in Sweden for Toyota. Above right: Tanak hit the heights in Finland

most stages this season? Tanak. Second? Evans. Which of the Fiesta men led for longest? Same. Tanak then Evans. Those are the facts. Now the figures. Stage wins: Tanak, 30; Evans, 27; Ogier, 22. Stages completed as leader: Tanak, 40; Evans, 37; Ogier, 14.

But nobody scored as many podiums as Ogier in 2017 (nine from 13); he finished in the top five on every rally apart from Finland, where he retired after his only crash of the season (apart from the one he suffered testing in preparation for the event). Everybody knows that Ogier's quick, but what we also saw this year was just how clever he is. The new rules were always going to shuffle the pack in terms of who had the racier cars, and he knew his days of nine wins and another crown were done. This year was about podiums and points. He and Ingrassia kept their score topped up better than anybody else.

This was Ogier's street-fighting year. The gloves came off and the result remained the same. He will probably look back on this title with almost as much pleasure as the first one. Regardless of what was going on around him, Ogier showed his class this season.

That said, there's a school of thought that says Ogier didn't win this year's championship - Thierry Neuville lost it.

Talking after ending his season with a fourth win, the Belgian came up with the line that he wasn't a world champion, but he drove like a world champion. But a world champion doesn't hit a bridge in Monte Carlo. Or break his suspension on a Swedish superspecial. A world champion would have converted their German pace into a big score, not a



no-score. Most importantly, a world champion would have smashed the ball into the back of the net when confronted with an open goal in Finland. Neuville? He stuck it in row Z. Miles away.

The Neuville-Hyundai package was comfortably the quickest this season. Most fastest times? Neuville, 56. Most stages as leader? Neuville, 50. There can be little doubt that he will top the table soon enough, quite possibly next year. He's brave, overtly self-confident and eye-wateringly quick. But you need more than that to wear the crown. You need nous, guile and gumption. You need to know when it's not your day and when enough's enough. Once Neuville's got all that covered, he won't just drive like a world champion — he'll be one.

Coming into the season, Hyundai was the team that carried over most of its 2016 World Rally Car. In theory, that should have given it the edge in terms of reliability. It didn't. Neuville and his team-mates Hayden Paddon and Dani Sordo suffered a number of issues in what looked to be the year's most-fragile car. It was fragile but fast, and only fast for some. While Neuville hit the ground running and found complete comfort >>>



### ON THE RIGHT TRACK

THE HYPE AROUND THIS YEAR'S WORLD RALLY Championship was extraordinary. The new cars, the open competition, the returning giants. And it delivered on every level. Now, here's the thing: next year's going to be even better.

The teams have a far fuller understanding of what to expect from the cars, and the drivers know what's coming. Or do they?

How, for example, will Ott Tanak manage at Toyota? He's only ever known M-Sport, and the family atmosphere engendered by the Cumbrians is unlikely to be replicated. But does he need it? He will be surrounded by Finns, including Jari-Matti Latvala and Esapekka Lappi, but history has shown Finland to be only too aware of what an iron-willed Estonian can produce from the far side of the Baltic Sea.

Providing Toyota can build some more reliability into the Yaris, there's a real hope for Latvala. You might even go as far as to say it's his best chance yet (let's face it, nobody ever really believed he was going to beat Sebastien Ogier at Volkswagen); certainly Latvala feels that way. He's evolved as a driver through this season, getting quicker and more consistent. But he did all of that as the unquestioned team leader – a role many thought was beyond him – and now he has to do it with a challenge from within.

And if you think things may get a bit lively at Toyota, just wait for Hyundai to hit boiling point. It probably won't take long.

Employing Andreas Mikkelsen at the end of 2017 was a sharp move from the Koreans, but the honeymoon period of those last three rallies is all done now. It's time for business. And it has to be time for titles in the i20 Coupe WRC. Even before next season starts, the team is divided, but if the Mikkelsen-Neuville axis hits the rocks then stand clear. They're the best of buddies now – how many other crews arrived at the WRC awards in Sydney sharing a pink stretched

Hummer? Both talk about the fact that rallying's different and maintaining a friendship is easier when you're not fighting for the same apex.

Sorry boys, not buying that. The rivalry in rallying is just as fierce within teams, particularly when both driver feels they are number one. Hyundai's good-cop-bad-cop (Michel Nandan and Alain Penasse) management style will be tested to the extreme next season. Authority needs to be established early, and wayward drivers dealt with firmly.

And that's before we consider the Hayden Paddon-Dani Sordo input. Will they roll over and accept their limited programmes? Or will they become a thorn in the side?

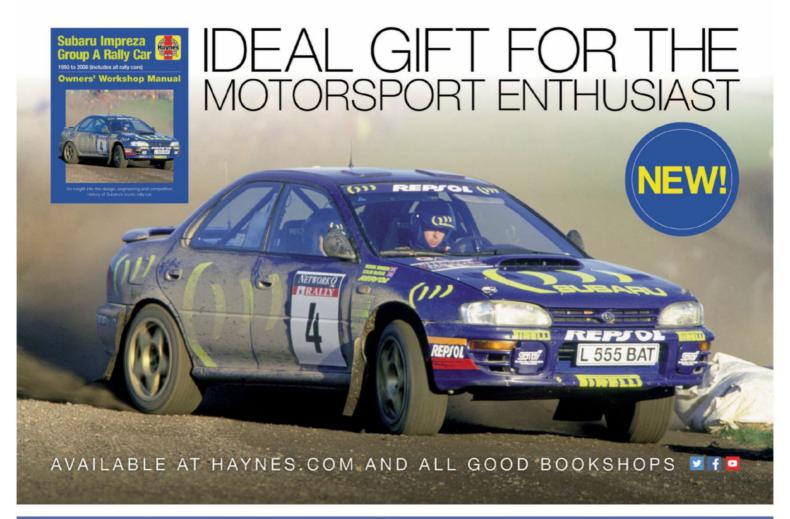
### "Just wait for Hyundai to hit boiling point. It probably won't take long"

Seeing Elfyn Evans back on Michelins next year will be interesting too. No disrespect to DMACK, but the Welshman's efforts through 2017 were underpinned by the constant question of, 'What if he was on the same tyres as us?' We'll soon see.

If there is an area of concern through what's been an exceptional year, it's the progression onwards from the lower categories. The Junior WRC, WRC3 and WRC2 categories need a major overhaul to bring back some meaning. Current WRC2 winner Pontus Tidemand is jobless for next season and Nil Solans's rampant win in the Juniors meant very little against some fairly sketchy competition.

DAVID EVANS





### TOTALLY MOTORSPORT BRING YOU ADVENTURES FROM -20°C TO +30°C



Ayrton Senna – The Final Picture The last recorded photograph at such close proximity of Ayrton Senna printed on toughened glass and framed to create an unrivalled finish - comes with a certificate of authenticity and a plaque reading the words.... Ayrton's Last Race Start of the San Marino GP - 1st May 1994 Ayrton Senna . Born 21st March 1960 died 1st May 1994

·Overall dimensions approx 95cm x 55cm ·Special pre Christmas offer - £250.00 inc VAT and UK postage (RRP £345.00)

Ice Driving is the Ultimate Driving Experience
Three courses available; Race Driver Training
Course Fun weekend Drive SkiPackage
Now in our tenth year and voted as the best value
Ice Driving Experience in Europe
www.icedriving.net



Feline Fields is an amazing Safari Lodge in Botswana and sponsors of one of our drivers - Ruben Del Sarte. Totally Motorsport can now offer exclusive and inclusive packages to this fabulous resort www.felinefields.com



FOR FURTHER DETAILS PLEASE CONTACT GRAEME@F1.CO.UK / 01625 427683 OR VISIT WWW.F1.CO.UK

and confidence in the i2o Coupe WRC, Sordo and particularly Paddon couldn't get the car hooked up consistently. Both struggled to show anything like the surefooted speed of their bespectacled team-mate (see column, p67).

The fortunes of the other two manufacturers, Citroen and Toyota, certainly for the first half of the year, couldn't have been in bigger contrast to what had been felt pre-season. Citroen: the return of the red army. As Volkswagen departed the winners' circle, it would apparently be holding the door open for Citroen to march back in after a year away from full-time competition.

It was a disaster. The first two rounds revealed significant shortcomings in the C<sub>3</sub> WRC's suspension and power delivery. As the year wore on, fresh budget cuts brought deepening disharmony and a still-unfathomable decision to bench Kris Meeke for Poland — just when he needed more time in the car, not to disengage completely.

But in among all this angst was arguably the strongest engine and some searing asphalt pace, both of which could be traced back to Citroen's time in touring cars. Ohlins dampers, the late-season return of former technical chief Christophe Besse, and the morale boost of seeing favourite son Sebastien Loeb back in the car have settled nerves and given some real hope for next season.

Toyota is, of course, another returning giant. But the Japanese team's WRC glory days are further in the past than Citroen's. And they're rooted in Cologne under the guidance of Ove Andersson. Now Tommi Makinen is in charge. And the cars are being built in his backyard in Puuppola, Finland — a place with two fewer windtunnels and dynamometers than the facility that spawned Toyota's F1 programme. It was, reportedly, that



Highs and lows: Meeke won on Mexico and Spain (above), but was stood down for Poland

association with failure (notwithstanding the success Toyota has enjoyed with its LMP1 programme) that redirected rally-car development to Finland.

The late-2016 loss of Volkswagen benefited Toyota most, with Jari-Matti Latvala landing the last seat at the top table when he got the nod just ahead of Andreas Mikkelsen. In December last year, Latvala set about the car in a critical fortnight, making vital, lastgasp changes before homologation. Latvala can't, however, take all the credit. The car was clearly nothing like as bad as many had feared courtesy of its hurried test effort last year.

Winning second time out silenced

the critics and Esapekka Lappi's breakthrough Rally Finland victory, allied to the arrival of Tanak for 2018, mark Toyota out as a genuine threat for next season.

It's hard to remember a season that enjoyed as much hype as the one just passed. But it's even harder to recall one that delivered so comprehensively. The new cars were everything the championship dreamed of, the sport needed and its future demanded.

When Volkswagen walked away from the WRC just over 12 months ago, the prophets of doom circled. We needn't have worried.

Yes, the WRC misses the benchmark competition, not to mention the massive marketing effort, but the passing of the Polo helped blow this season wide open.

The name at the top of the table may be the same, but everything else has changed. Changed for good. \*\*

P77 AUTOSPORT'S TOP 10 WRC DRIVERS

WO	RLD RALLY CHAMPIO	NEHID															
POS		TEAM	CAR	1	2	3	4	5	6	7	8	9	10	11	12	13	PTS
1	Sebastien Ogier (F)	M-SportWRT	Ford Fiesta WRC	1	3	2	2	4	1	5	3	R	3	2	3	4	232
2	Thierry Neuville (B)	HyundaiMotorsport	Hyundaii20CoupeWRC	15	13	3	1	1	2	3	1	6	43	R	2	1	208
3	Ott Tanak (EST)	M-SportWRT	Ford Fiesta WRC	3	2	4	11	3	4	1	R	7	1	3	6	2	191
4	Jari-Matti Latvala (FIN)	Toyota Gazoo Racing WRC	Toyota Yaris WRC	2	1	6	4	5	9	2	20	21	7	R	5	R	136
5	Elfyn Evans (GB)	M-SportWRT	Ford Fiesta WRC	6	6	9	21	2	6	R	8	2	6	7	1	5	128
6	DaniSordo(E)	HyundaiMotorsport	Hyundaii20CoupeWRC	4	4	8	3	8	3	12	4	9	33	15	10	-	95
7	Kris Meeke (GB)	Citroen Total	Citroen C3 WRC	R	12	1	R	R	18	R	-	8	R	1	7	7	77
8	Hayden Paddon (NZ)	HyundaiMotorsport	Hyundaii20CoupeWRC	R	7	5	6	6	29	R	2	43	8	-	8	3	74
9	Juho Hanninen (FIN)	Toyota Gazoo Racing WRC	ToyotaYarisWRC	16	23	7	R	7	7	6	10	3	4	4	R	-	71
10	Craig Breen (IRL)	Citroen Total	Citroen C3 WRC	5	5	-	5	15	5	25	11	5	5	-	15	R	64

11 Esapekka Lappi (Toyota Gazoo Racing WRC Toyota Yaris WRC) 62; 12 Andreas Mikkelsen (Citroen Total Citroen C3 WRC/Hyundai Motorsport Hyundai i20 Coupe WRC) 54; 13 Stephane Lefebvre (Citroen Total Citroen C3 WRC) 30; 14 Teemu Suninen (M-Sport WRT Ford Fiesta R5) 29; 15 Mads Ostberg (M-Sport WRT Ford Fiesta WRC) 29; 16 Jan Kopecky (Skoda Motorsport II Skoda Fabia R5) 7; 17 Nathan Quinn (Mitsubishi Lancer Evo IX) 4; 18 Pontus Tidemand (Skoda Motorsport Skoda Fabia R5) 4; 19 Eric Camilli (M-Sport WRT Ford Fiesta R5) 3; 20 Richie Dalton (Skoda Fabia R5) 2; 20 Stephane Sarrazin (Sarrazin Motorsport Skoda Fabia R5) 2; 20 Armin Kremer (Ford Fiesta WRC) 2; 23 Ole-Christian Veiby (Skoda Motorsport Skoda Fabia R5) 1; 24 Yohan Rossel (Citroen DS 3 R5) 1; 25 Dean Herridge (Subaru Impreza WRX STI) 1; 25 Bryan Bouffier (Gemini Clinic Rally Team Ford Fiesta R5) 1.

# SCHROTH RACING CHAMPIONS CHOICE





XLT CARBON NEW FIA Standard 8853-2016 available right now

Visit www.schroth.com/racing to learn more about our products.

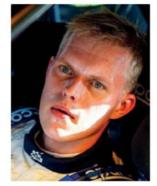


Follow us on Facebook www.facebook.com/schrothracing

### **AUTOSPORT'S TOP 10 DRIVERS**



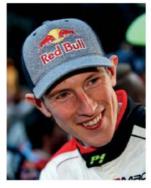
**SEBASTIEN OGIER** He wasn't the fastest. He didn't lead for the longest. He didn't win the most rallies. So what, you might ask, is he doing at number one? Simple. Ogier was still the best driver across the spread of the season. Yes, the pack has closed up considerably, but still he was the best. Points came consistently and wins were there when the opportunity arose, but most importantly the mistakes were kept to an absolute minimum. That is the mark of a champion. And that's why Ogier still tops this table.



**TANAK** Last year you still didn't know, still didn't completely trust him. Yes, Tanak had the natural ability to be faster than anybody on his day, but it remained a 50:50 gamble if he'd win or stick it in the trees. This year he came of age and dramatically lessened those odds in favour of finishing first. Somebody flicked a switch in Tanak, and that somebody was his team-mate Ogier. Following Ogier's lead, Tanak has won twice and become the complete driver. Not to mention a big threat for next year's title.



**THIERRY NEUVILLE** He was the fastest. He led for the longest. He won the most rallies. So what, you might ask, is he doing at number three? Simple. Too many mistakes. Admittedly, the car wasn't up to the job of making him world champion, but stupid errors, like when he damaged the steering in Sweden, can't happen if you're going to be best in the world. He was magnificent in Poland and Australia, but shocking in Finland, where he wasted the chance to take a clear lead in the drivers' championship.



**EVANS** Without a shadow of doubt the most improved driver in the past couple of years. A true gauge of Evans's performance remains slightly confused by him being the sole user of DMACK tyres, but as M-Sport team-mate Ogier said, you've still got to drive the car. And Evans did that superbly. His whole approach was different. Finally, he feels like he belongs, which he absolutely does. The pain of missing victory in Argentina by seven tenths was eased by the bliss of a home win.



**KRIS MEEKE** Meeke's speed was never in doubt. But his temperament had always been in question. Until now. Like Tanak, there's a degree more calm about Meeke these days and that's showing in the results. He learned some fairly tough lessons this season, but he's emerged a more complete driver. Taking him out of the car in Poland wasn't the right thing to do: the performance that followed in Finland was easily his worst of the year. But in Spain - like in Mexico and Corsica - he was untouchable.



**JARI-MATTI LATVALA** Reckoned to be drinking in the last-chance saloon when he stepped aboard the Yaris WRC, but the Toyota deal has been the making of Latvala. Gone is the look of a forever-number-two, and back is the sort of spark that's been missing for too long. Sweden win was superb, but what was more pleasing than anything about his year was his reaction to his Finland retirement: steering-wheelthumping fury. Save the tears, it's more of this that we need to see. The boy is back.



**ANDREAS** MIKKELSEN Left on the bench with only the occasional Skoda Fabia R5 outing to keep him busy at the start of the season, Mikkelsen never lost sight of his goal and, when he was thrown a lifeline by Citroen and then Hyundai, made the most of each opportunity and returned himself to the top of a sport that he should never have had to leave in the first place. Were it not for two punctures, a second consecutive Rally Australia win would have been the perfect way to end his season.



**CRAIG BREEN** Hard to believe this was Breen's first season with a factory team at the pinnacle of world rallying. He looked like he'd been there for years a consideration underlined by the fact that the Irishman was top Citroen driver in the points for some time. Like Meeke, Breen's fortunes were tied to the capricious C3 but, when everything worked, he was able to turn in some superb stage times. On top of that, he kept the car on the island and picked up six top-five finishes. Not had for a rookie.



**ESAPEKKA** LAPPI Such is the importance of Rally Finland to the WRC that it's impossible to compile a list of the season's top 10 drivers and not have the winner in here. Lappi's season didn't start until Portugal, but by the time he got to the final day in Porto he was showing some serious form. He continued that speed through Sardinia - where he posted his first ever scratch time in a car missing first gear! The highlight of the year was, however, at home, where he took his maiden WRC win.



HAYDEN PADDON/ **DANISORDO** Impossible to choose between these two. Both have struggled terribly for the sort of form that has marked them out as potential event winners in the past, but they're on the list because there have been flashes this season. A handful of fastest times and second overall in Poland was as good as it got for Paddon. For Sordo, the asphalt was disappointing – particularly his early bath at home in Spain – but a pacey Portuguese podium was the highlight of his year.

# SEASON REVIEWS • DTM • FORMUL/



DTM

### 'Stirling' Green loses out to rapid rookie Rast

JAMIE GREEN HAS TO BE DESCRIBED AS the Stirling Moss of the DTM - 13 seasons of almost constant competitiveness, yet he has still to win a title.

The 2017 campaign could almost certainly be said to be morally his, yet he fell short by just six points as the crown went to his Team Rosberg Audi team-mate, and DTM rookie, Rene Rast.

The versatile Rast's performance, after just one proper weekend as a DTM race driver at the end of 2016, was absolutely sensational and he can be counted as a worthy champion. But Green can look back at three moments over the final two race weekends, each of which would have given him the points swing to become title winner had they played out differently.

First, he conceded victory to the Abt Audi of Mattias Ekstrom in race one at the Red Bull Ring — at the time the Swede was leading the championship and still there was a perceived threat from BMW's Marco Wittmann and Mercedes' Lucas Auer.

Audi has been burnt before by not favouring one of its drivers — owing, quite often, to the equality between Green and Ekstrom — so this was perhaps understandable. But, with Ekstrom's form fading in the latter stages of the season, it cost Green seven points.

The following day at the Red Bull Ring, Green was heading for victory — this time with Ekstrom too far back to be helped — when a €1 spring failed in his gearbox with three laps to go. That left him stuck in gear, and he plummeted out of the top 10, with 25 more points lost.

At the Hockenheim finale, a typically robust defence of the lead by BMW's Timo Glock led to some highly entertaining fighting with Green, who, rather harshly, was issued a warning.

Green went on to win the race, but his fifth warning — on top of some previous somewhat petty and spurious 'misdemeanours' — gave him a 10-place grid penalty for the finale. He charged up to fifth, but second place for Rast meant the title was his.

"The kind of misfortune this guy has to bear is incredible," said Rosberg team boss Arno Zensen. "There's arguably no-one who would have begrudged him the title."

Audi had a narrow edge once the controversial performance-balancing concept was dropped before the season run-in, and it claimed a top-four sweep of the points with Rast, Green, Ekstrom and Mike Rockenfeller.

Closest to them was Wittmann. As quick as ever, the 2016 champion finished just 19 points adrift of Rast, yet lost 25 due to exclusion from an on-the-road Zandvoort win because his car yielded insufficient fuel for a post-race scrutineering check...

Mercedes' charge was led by Auer, but the youthful Tyrolean faded from title contention — thanks in part to a couple of errors — in the latter part of the season, at which point Robert Wickens and the evergreen Gary Paffett looked to be stronger.

MARCUS SIMMONS



**PORSCHE SUPERCUP** 

### Ammermuller holds off new challengers

AS THE MOST EXPERIENCED DRIVER IN the field, teamed with the crack Lechner Racing squad, it should come as no surprise that Michael Ammermuller won the 2017 Porsche Supercup. What was more surprising was the challenge posed by two rookies that stopped the former Red Bull junior from running away with it.

Ammermuller won four times and finished second twice across the first six races, but didn't win again as Porsche Juniors Dennis Olsen and Matt Campbell shared the rest.

Competing alongside his title-winning German Carrera Cup campaign, Olsen was the more consistent and took the title down to the wire in Mexico, where Campbell took his third and fourth wins — all the more impressive as the reigning Australian Carrera Cup champion had never raced outside his homeland before the season.

Double Carrera Cup GB champion Dan Cammish ended his rookie campaign fourth, with a best finish of second in Monaco.

JAMES NEWBOLD

### **SUPER GT**

### Cassidy/Hirakawa pip rivals to crown

NICK CASSIDY AND RYO HIRAKAWA pipped Super GT talismans Ronnie Quintarelli and Tsugio Matsuda to the title as youth triumphed over experience.

Key, as ever, to a successful bid was keeping the results rolling in as success ballast mounted over the season. TOM'S Lexus pair Cassidy and Hirakawa were only once outside the top six – despite reaching as high as 84kg ballast. Then, with ballast halved for the penultimate round and eliminated for the finale, they took a win and a second.

The NISMO Nissan of Quintarelli and Matsuda beat the new champions to the flag in the Motegi finale for their first win of the season, but they fell two points short. Andrea Caldarelli and Kazuya Oshima were also very much in the picture going into the final round, but the LeMans Lexus crew hit problems and finished outside the points. James Rossiter had a shot in the TOM'S Lexus he shared with Kazuki Nakajima, before contact in the early stages of the finale.



**EUROPEAN LE MANS SERIES** 

### **Team swap no stump for G-Drive**

G-DRIVE RACING USED ITS TEAM operations move from Jota to DragonSpeed as a springboard to claim its second consecutive title.

G-Drive's Leo Roussel and Memo Rojas (with Ryo Hirakawa, who missed the Austrian and French rounds) finished second best to title rivals Filipe Albuquerque, William Owen and Hugo de Sadeleer of United Autosports at the Silverstone season-opener. But a win at the Monza 4 Hours was followed by three second places, capitalising on poor races for United at Paul Ricard and Spa.

That meant Roussel and Rojas ultimately secured the LMP2 drivers' title, with G-Drive taking the teams' prize, with fourth place at the Algarve season finale.

United had some joy as it claimed the LMP3 title with Sean Rayhall and John Falb, while Jody Fannin and Rob Smith walked away with the GTE crown for JMW Motorsport after the team upgraded its venerable Ferrari 458 for a 488 after the Monza round.

JOE HUDSON

### THE CHAMPIONS



**JAPANESE FORMULA 3**Mitsunori Takaboshi



**GERMAN FORMULA 4**Juri Vips



ITALIAN FORMULA 4
Marcus Armstrong



**SMP & SPANISH FORMULA 4** Christian Lundgaard



**JAPANESE FORMULA 4** Ritomo Miyata



**US FORMULA 4**Kyle Kirkwood



**WORLD SERIES FORMULA V8 3.5** 

### Fittipaldi wins world title for Lotus

PIETRO FITTIPALDI PUT HIS NAME IN the history books as the final Formula V8 3.5 champion, claiming six wins and a record number of pole positions as he blitzed the field in the series' last season.

Fittipaldi's ability to recover from self-described "difficult" weekends — notably at the Nurburgring and at Austin — and bounce back was key to the Lotus driver's success. After two poor races in Germany, where he was rear-ended by Alex Palou in the first race, he claimed a pair of wins in Mexico City — his first appearance at the circuit — after spending all summer on his physical training and doing simulator work.

But after the highs of Mexico, a brake failure at Austin allowed Fittipaldi's nearest rival Matevos Isaakyan to close to within 10 points ahead of the season finale, where the series travelled to Bahrain for its first, and last, night race.

While Isaakyan had ridden his luck at the Nurburgring, where he took a win and a second to jump ahead of Fittipaldi in the points, no one had good luck for long in 2017. After being on the Lotus driver's coat-tails in practice and

qualifying in Bahrain, the Russian suffered a transmission failure on the green-flag lap for race one.

Isaakyan's non-score gifted Fittipaldi the title. He'd heeded the advice of his double Formula 1 world champion grandfather Emerson to "keep his eyes on the bigger prize" and not make mistakes trying to push for victories.

The Brazilian, in his second FV8 3.5 season, praised the Charouz-run Lotus team for being "a family". While his speed was evident all season, Fittipaldi's dominance coincided with Isaakyan's inconsistent form. The bearded Muscovite couldn't string two good results together at times, with second in Mexico race one being combined with fourth place after a last-lap crash in the second race.

Isaakyan also lost ground in the championship's first appearance in the United States, as a collision with Konstantin Tereshchenko in race two at the Circuit of the Americas cost him points and allowed Fittipaldi a reprieve following his second DNF of the year.

Egor Orudzhev was in with a chance

of the title, as his form in the European rounds had him nipping at SMP Racing team-mate Isaakyan's heels as the series started its long-haul leg. Unfortunately for him, a double retirement in Mexico was compounded by tonsillitis, which stopped him travelling to Bahrain. He slipped to sixth in the standings as Alfonso Celis, Rene Binder and Roy Nissany all capitalised on his non-appearance in the Middle East.

For Celis, third place in the points was little reward as a number of minor issues scuppered his opportunities to build a proper title tilt. Exhaust problems in Germany, ride-height issues in the USA, and overheating problems in Bahrain took the spark out of his season after a win and two podiums in the first four races had marked the Fortec driver out as one to watch.

The same could be said for Binder. The Lotus man took a double victory at Monza to be the main threat to his team-mate's dominance, but an "unexplainable" lack of pace at the Nurburgring was followed by an engine failure in Mexico. He took a third win of the season at Austin, but a loose ignition cable in the second race derailed his championship bid.

Nissany had a strong first half of the season, but in the second he kept struggling with issues his RP Motorsport mechanics couldn't fix. He thought it was an anti-rollbar problem in Texas, but continued difficulties led his mechanics to believe the car's chassis was broken. Despite that, he nursed it to a podium on FV8 3.5's final weekend.

JOE HUDSON





**WORLD RALLYCROSS** 

### Kristoffersson's mint Polo crown

SEVEN WINS AND A PLACE IN 11 OUT OF 12 finals shows how dominant Johan Kristoffersson was on the way to his maiden WRX title.

Add in team-mate Petter Solberg's solitary win at the final Lydden Hill WRX round, and Solberg's PSRX Volkswagen squad took two thirds of the wins over the season. No wonder Sebastien Loeb, who finished fourth in the championship, put pressure on Peugeot to match the not-quite-factory effort of VW.

Reigning champion Mattias Ekstrom managed to

end the season in second, despite missing his home round in Sweden due to DTM commitments. His runner-up spot was likely aided by Solberg's injuries in Latvia, but Audi man Ekstrom beat away a stern challenge from Solberg when the Norwegian returned in Germany after surgery.

With Ekstrom hoping for further works support from Audi, and Peugeot reaffirming its commitment after Loeb's comments, Kristoffersson may have a new challenge in 2018.

TOM ERRINGTON

### **EUROFORMULA OPEN**

### Scott wins race to the poles and wins

HARRISON SCOTT DOMINATED Euroformula Open in 2017, and even ended his season early to concentrate on being a McLaren Autosport BRDC Award finalist.

Scott won both openers at Estoril for RP Motorsport, then duly signed with the team for the full season. From here on, he would miss out on victory in just two races and take his season tally to 12 out of 14.

He lost to Ameya Vaidyanathan (Carlin) in the first race at Spa, while a track-limits infringement in Hungaroring qualifying scuppered Scott, with the race won by Campos Racing's Thiago Vivacqua.

None of these drivers finished

as runner-up. That went to Nikita Troitskiy, the Drivex School-run Russian taking nine podiums.

With Scott absent, Devlin
DeFrancesco took a win at the
Barcelona finale (the other went
to Formula 4 graduate Felipe
Drugovich) to win the intra-Carlin
scrap for third with Vaidyanathan.





### **SCANDINAVIAN TOURING CAR CHAMPIONSHIP**

### **Dahlgren scores first STCC success**

ROBERT DAHLGREN CLAIMED HIS MAIDEN title in 2017, 11 years after his series debut.

The championship's switch to TCR regulations meant Dahlgren's former Volvo squad was missing for the first time since 2012, and another of its ex-drivers, Fredrik Ekblom, pushed him all the way.

Dahlgren got off to a great start with two wins in his PWR Racing SEAT at Knutstorp, but then the Kristoffersson Motorsport Volkswagen squad got in on the act. There were wins for Ekblom as well as Johan Kristoffersson, who in between his World Rallycross title-winning commitments did a part-season in STCC and scored five victories in a row across Alastaro and Solvalla.

A jumped start at Solvalla, a puncture while leading at Falkenberg and a controversial clash with Dahlgren's team-mate Daniel Haglof at Anderstorp ultimately unravelled Ekblom's charge.

After seven wins, Dahlgren was crowned at the Mantorp Park finale, with Ekblom second and Kristoffersson VW pilot Fredrik Blomstedt third.

STEPHEN BRUNSDON

### THE CHAMPIONS



INTERNATIONAL GT OPEN Giovanni Venturini



MICHELIN LE MANS CUP LMP3 Alexander Toril/Jean Glorieux



MICHELIN LE MANS CUP GT3 Emanuele Busnelli/Fabio Babini



PIRELLI WORLD CHALLENGE Patrick Long



ITALIAN GT Alex Frassineti/Michele Beretta

**SUPER FORMULA** 

### Ishiura takes title, typhoon halts Gasly

IT WAS TYPHOON LAN THAT DECIDED the outcome of the Super Formula Championship. Fans and drivers were denied a dramatic end to the season when the double-header at Suzuka was cancelled after qualifying, leaving Cerumo-Inging's Hiroaki Ishiura champion, and Red Bull junior Pierre Gasly no opportunity to beat his rival.

Despite a tricky start to his rookie season, Gasly became a championship contender after taking his maiden win at Motegi, which was quickly followed by his and Honda-powered Team Mugen's inspired use of the newly introduced soft tyres to claim victory at the next round at Autopolis. At Sugo, the 2016 GP2 champion nearly made it three on the bounce, trailing Yuhi Sekiguchi by a mere 0.24 seconds across the line. His run of form seemed set to continue at the Suzuka finale, where he was to start just half a point behind points leader Ishiura.

If Gasly had taken pole position for either race at the double-header the title would have been his, but those vital points instead went to Andre Lotterer and Jann Mardenborough. Gasly had given up the chance to race in Formula 1 for Toro Rosso at Austin that weekend, but the weather meant that it was all for nothing.

Ishiura had become the man to beat through his consistency rather than a dramatic sweep of victories. He took just one win, but was the only driver to finish in the points at every race. The 2015 champion took victory at Fuji after his team-mate, Yuji Kunimoto, retired. Kunimoto ended the year eighth, while Toyota squad Cerumo-Inging retained the teams' title.

Third in the championship went to Formula E star Felix Rosenqvist, who claimed three podiums during his rookie campaign with Team Le Mans. Sekiguchi took victories at Okayama and Sugo, but too many non-scores scuppered any hope of a title bid for the Team Impul star.

The TOM's pairing took a win apiece, with opening-round victor Kazuki Nakajima finishing in fifth overall and Lotterer in sixth.

ANNA DUXBURY





WORLD TOURING CAR CHAMPIONSHIP

## Bjork and Volvo end final TC1 season on top

IN JUST ITS SECOND YEAR IN THE WORLD Touring Car Championship, Volvo walked away with both the drivers' and manufacturers' titles. The cyan-blue S60 will go down in the record books as the final title winner of the TC1 era, but that doesn't tell the full story — for although Volvo had the speed to justify its success, there's just as much reason to argue that Honda lost both titles through a mix of misfortune and mistakes.

All appeared rosy for Honda in the first part of the season. There were hairy moments — Norbert Michelisz being collected by Mehdi Bennani while moving for the lead at Monza, or Tiago Monteiro scoring just two points at the Nurburgring — but Monteiro had the points lead by 12 from Thed Bjork by the lengthy break, with three months to rest and test before the next round in October.

But disaster was lurking around the (first) corner at Barcelona. Three days of testing in September ran without issue, save for 10 or so minutes on the final day. Monteiro was towards the end of the main straight when the brakes failed on his Civic at close to 160mph. Trying to avoid a head-on impact, Monteiro took to the grass and that put him into a spin, before crashing backwards into the wall. As more information about the incident gradually trickled out, the gravity of the situation became clearer, and Honda was ultimately forced to draft in veteran Gabriele Tarquini for Ningbo after Monteiro was ruled out on medical grounds — something that also occurred at the other remaining rounds.

After the Chinese round, Bjork was now the new series leader, but Michelisz had closed to within four points and Honda seemed to have a very realistic title shot once more.

And then, at Motegi, disaster struck. Honda lost its Ningbo results after its fuel injectors were deemed to be non-compliant with the championship's regulations. The offence that led to the exclusion was tiny, but had significant consequences: back Michelisz went to his original pre-China total, as the gap between him and Bjork ballooned to 32.5 points.

Honda needed another reaction from Michelisz and it got just that at Motegi. The Hungarian's pole position clawed back more ground, and victory a day later meant his points deficit was halved over the weekend. Another solid weekend in Macau — despite his involvement in a race-one crash that produced a red flag — narrowed the gap further. Michelisz had ridden his luck, but with Bjork's lead whittled down to 6.5 points the title was very much in reach.

But disaster struck again in the finale in Qatar. Master-cylinder failure in qualifying restricted Michelisz to 11th on the grid for both races, while Bjork qualified fourth. Honda's pain wasn't quite over, for the almost inevitable still had to be confirmed. Bjork did all he needed, with Michelisz resigned to ninth and eighth-place finishes. The Swede wrapped up the title, and Volvo also sealed the manufacturers' crown, despite Guerrieri — who had become the Monteiro understudy at Honda for the final three rounds after starting the season in a Campos Racing Chevrolet — winning the finale.

Guerrieri had also taken victory in the Chevy in the Marrakech opener, and he took fourth in the points, right on the tail of Tom Chilton, who won three races in his Sebastien Loeb Racing Citroen in his best season to date in the WTCC.

Also close at hand in the points were Volvo's Nicky Catsburg (winner on the Nurburgring Nordschleife), Chilton's team-mate Bennani and Munnich Motorsport Citroen racer Rob Huff, who was winless until his almost-obligatory Macau Guia success. They all overhauled Monteiro's score.

The 2017 WTCC season was genuinely the most open for years, but that wasn't enough to stop the lack of interest in the high-tech but expensive TC1 cars from driving the existing championship towards extinction. Now, a new era awaits for top-line global touring car racing.

JACK COZENS



**TCRINTERNATIONAL** 

### Vernay victorious in tin-top classic

SIX WINNERS FROM THE FIRST SIX RACES, 11 in total and six winning makes. With plenty of panel-bashing to boot, the 2017 TCR International Series ticked most boxes for tin-top aficionados.

It also marked a year of change, as 2015-16 dominator Stefano Comini was denied a hat-trick by '16 team-mate Jean-Karl Vernay, who took his Leopard Volkswagen Golf GTi to the title.

Vernay only won two races, but his consistent and tidy approach — backed by Rob Huff — paid off. Honda's charge was led by Hungarian teenager Attila Tassi, driving for Norbert Michelisz's M1RA squad. A Hungaroring double win vaulted Tassi into the points lead, but a solitary podium from the final eight races stunted his charge.

Comini, driving an Audi RS3, ended the year tied with Tassi's team-mate Roberto Colciago for most victories (three), while SEAT driver Pepe Oriola, Gianni Morbidelli (WestCoast Racing Golf) and Dusan Borkovic (Romeo Ferraris Alfa Romeo Giulietta) also won multiple races.

**JACK COZENS** 

### **AUSTRALIAN SUPERCARS**

### Whincup edges it after last-lap action

JAMIE WHINCUP HAD TO WAIT until the final lap of the Supercars season to secure his seventh title.

The Red Bull Holden driver spent the season locked in a pulsating battle with DJR Penske Ford man Scott McLaughlin.

It was McLaughlin who enjoyed the car-speed advantage throughout the season too – the young Kiwi took a record-breaking 16 poles for his new team on his way to eight wins.

Whincup managed just two poles and four wins in comparison but, thanks to McLaughlin's hit-and-miss conversion rate from pole, and Whincup's consistency, it all boiled down to an epic final-day battle on the streets of Newcastle. Ultimately, it was all decided on the last lap when McLaughlin eased Whincup's team-mate Craig Lowndes into the wall while fighting over the 11th place he needed to seal the title.

He crossed the line equal on points with Whincup, but ahead on a countback, only to be slapped with a post-race penalty and dropped out of contention.

ANDREW VAN LEEUWEN



### **BRITISH RALLY CHAMPIONSHIP**

### Cronin seals crown by a single point

AFTER A DRAMATIC FINALE ON THE ISLE OF Man, the British Rally Championship was won by a tenth of a second and a single point in favour of now four-time champion Keith Cronin.

The Irishman — in a Ford Fiesta R5 — didn't take his first win until round four (the series' first trip abroad, to Ypres in Belgium), and then added the Ulster and both legs of the Isle of Man to take the title ahead of Fredrik Ahlin.

The returning Ahlin won the first two rounds on gravel in his Skoda Fabia, but struggled to match M-Sport driver Cronin on asphalt. A retirement with a broken radiator on the last stage while leading the RSAC Scottish Rally proved to be the difference. David Bogie won that event.

Matt Edwards sealed a brilliant first full season in an R5 Fiesta with second on the Isle of Man, which gave him third in the championship.

Callum Devine was crowned the Junior British Rally champion and earns £60,000 in cash towards his rallying in 2018.

**JACK BENYON** 

### THE CHAMPIONS



**BLANCPAIN GT SERIES ASIA** Hunter Abbott



**EUROPEAN RALLY CH'SHIP** Kajetan Kajetanowicz



BRAZILIAN V8 STOCK CARS
Daniel Serra



**EUROPEAN TOURING CARS**Petr Fulin



**ADAC GT MASTERS**Jules Gounon



**INDY LIGHTS**Kyle Kaiser



NASCAR CUP

### Truex triumphs, top stars bow out

WITH A NEW TITLE SPONSOR AND the introduction of the stage format, along with breakout seasons for several of its young stars and the crowning of a brand new champion, 2017 heralded something of a sea change in the dynamic of the NASCAR Cup. Martin Truex Jr took centre stage to win his first title, while the curtain fell on Dale Earnhardt Jr's racing career.

After winning the 'regular season' title with consummate ease, Truex continued his imperious form through the playoffs, finishing out of the top five just once in the final 10 rounds.

The 37-year-old helped his own cause by demonstrating the greatest understanding of the new stage format, which offered points to carry forward into the playoffs. At the season's end, Truex had accrued 19 stage victories to add to his eight overall wins, taking a hefty advantage in points over his fellow playoff competitors into the round of 16.

Truex's Furniture Row Racing team understood the new-for-2017 Toyota Camry earlier than technically aligned sister team Joe Gibbs Racing, which took until the 19th round to win a Cup race, courtesy of Denny Hamlin. Kyle Busch later brought himself into the title fight, winning at Pocono and Bristol, and added three wins in the playoffs.

Joining Busch and Truex in the playoffs was Brad Keselowski, who looked good early in the season to win at Atlanta and Martinsville. The 2012 champion's form tailed off just as the Toyota runners began to get into their stride, but having won at a characteristically chaotic Talladega to take a spot in the round of eight, Keselowski got through to the championship finale on points. Kevin Harvick was also fortunate, but arguably took advantage of the strengths of his Stewart-Haas Racing's Ford package to get into contention.

Two Fords and two Toyotas contested the 'championship four', leaving the final shootout without a Chevrolet runner for the first time since the format was introduced in 2004. It wasn't for the lack of trying, and Chevrolet had Kyle Larson, Chase Elliott and last year's champion Jimmie Johnson battling in the playoffs.

Larson had been one of the favourites for the title, taking four victories in the first 26 rounds, but his season came undone with some bad luck. Two crashes and a spate of engine issues in the playoffs threw him out of the running.

Johnson never quite hit the heights of his consistent run to last year's title, his Hendrick team having fallen into something of a slump. Elliott was the team's leading light this year and came alive in the playoffs, but a possible first Cup win proved elusive — most notably when Hamlin dumped him out of the lead late-on at Martinsville.

The Homestead-Miami finale was an enthralling and tense encounter. Although Harvick and Keselowski huffed and puffed, neither could match the Toyotas of Busch and Truex. Busch undoubtedly had more pace than Truex in the late stages, but, ironically, a caution thrown for 2017 Daytona 500 winner Kurt Busch spinning left his brother's title ambitions in tatters. Truex crucially held the lead, and absorbed every single challenge thrown his way by Busch to lift the Cup — with a little help from crew chief Cole Pearn.

Earnhardt's swansong season was rather muted on-track, with fifth place at Texas his best result as he ended his 19-year Cup career. He was joined at the exit door by NASCAR stalwarts Matt Kenseth and Danica Patrick, with the Cup set to add Xfinity champion William Byron and Alex Bowman to its everimpressive list of future stars for 2018.

JAKE BOXALL-LEGGE





**BLANCPAIN GT SERIES** 

### **Grasser grabs overall victory**

GRASSER RACING LAMBORGHINI PAIR Mirko Bortolotti and Christian Engelhart made up for missing out on the Blancpain Sprint Cup title by taking the overall Blancpain GT Series title, and the Endurance Cup with Andrea Caldarelli.

In the Lamborghini Huracan GT3's third season, the factory-blessed Grasser car was the class of the field in the early rounds, sweeping Monza (Endurance), Brands Hatch (Sprint) and Silverstone (Endurance), but lost ground in the Sprint Cup with opening lap incidents in qualifying races at Zolder and the Nurburgring.

The chief beneficiaries were Robin Frijns and Stuart Leonard, who gave the crack Team WRT Audi squad a second Sprint title in as many years. Frijns and improving Brit Leonard were a consistent presence in the top five for most of the year and took their only feature race win at a tense Nurburgring Sprint finale after their main rivals fell by the wayside.

Dries Vanthoor and Marcel Fassler emerged as late contenders after dominating the penultimate round in Hungary, but a pitlane violation cost them dearly when they had looked set to take victory and title at the Nurburgring. That came after the HTP Mercedes of pre-event favourite Maxi Buhk had run into the gravel while chasing Vanthoor, picking up a puncture and knocking himself and team-mate Franck Perera out of contention.

Misano (Sprint) double winners Buhk and Perera had also been in the hunt for the overall title and Endurance Cup, until a crash from co-driver Jimmy Eriksson at the Spa 24 Hours forced their retirement.

Bortolotti, Engelhart and Caldarelli didn't finish there either due to a throttle damper problem and were made to sweat as Paul Ricard 1000Km winners Andy Soucek, Maxime Soulet and Vincent Abril (M-Sport Bentley) racked up solid points by finishing second at Spa to the Sainteloc Audi of Markus Winkelhock, Christopher Haase and Jules Gounon.

But, when gearbox issue forced the Bentley out at Barcelona (it took consolation from winning the Endurance teams' title), third in the enduro finale was enough for the Grasser crew.

TF Sport Aston Martin pair Jonny Adam and Ahmad Al Harthy won the Endurance Pro-Am division, taking a class win at Monza.

**JAMES NEWBOLD** 

### FORMULA RENAULT EUROCUP

### Fenestraz finishes season strongly

SACHA FENESTRAZ TURNED A LARGE deficit into a 69.5-point advantage with a string of podiums in the second half of 2017.

Initially, the 18-year-old Josef Kaufmann Racing driver's consistency was not enough to stay in touch with his main rival, R-ace GP's Will Palmer, who began the season with two wins in the first four races.

But after Fenestraz scored his first win of the season in Monaco, he unleashed his full potential, taking a further six wins and, across the whole season, only missing the podium four times in the races he finished.

He lucked into a win at the first Spa race

due to a red flag for foggy conditions, which rescued him from a broken exhaust, but lost what surely would have been another win at Paul Ricard when Robert Shwartzman rolled him out of the race one lead on the final lap.

Palmer could not keep up his early-year consistency and a string of poor qualifying performances and non-points finishes in the middle of the season cost him. Shwartzman faced similar issues, with a time penalty (for rolling Fenestraz) and a race two disqualification on technical grounds at Paul Ricard ending his title charge.

**CHRIS STEVENS** 

**IMSASPORTSCAR** 

# Taylors' title in first year of new DPi regs

RICKY AND JORDAN TAYLOR, DRIVING for their father's Wayne Taylor Racing squad aboard a Cadillac built to IMSA's new Daytona Prototype international regulations, were the dominant force in 2017.

The Cadillacs were the class of the field, and WTR and its drivers were a step above the identical machines of Action Express Racing and Whelen Engineering, winning the first five races on their way to the title. After a controversial late-race collision with Action Express at Daytona, WTR won at Sebring, Long Beach, Austin and in Detroit (from the back after Ricky Taylor's qualifying shunt).

First-lap contact at Watkins Glen and a big crash for Jordan Taylor at Mosport was followed by a string of strong points finishes, and even an engine failure early in the Road Atlanta 10-hour Petit Le Mans season finale wasn't enough to stop them claiming the crown.

Dane Cameron and Eric Curran were second in the points for Whelen, with their sole win coming in a Mosport thriller as they fended off JDC-Miller Motorsport's ORECA.

A week earlier at the Glen, Action Express (with Joao Barbosa and Christian Fittipaldi third in the points) had taken a breathtaking victory after passing the same ORECA in the final laps.

It took until August for Cadillac's stranglehold to come loose as Extreme Speed Motorsports won at Road America with their Nissan DPi, a feat they went on to repeat in a dramatic PLM. Spirit of Daytona switched from Riley to a Ligier chassis mid-season and its win in the penultimate round at Laguna Seca, 14 days after Hurricane Irma battered its workshop, came thanks to a sensational pass by Renger van der Zande on Cameron going into the Corkscrew.

The ultra-competitive GT Le Mans class title was sealed by Corvette Racing, with Jan Magnussen/Antonio Garcia beating BMW Team RLL's Alexander Sims/Bill Auberlen.

Scuderia Corsa won the GT Daytona class for the second year in a row with its Ferrari shared by Alessandro Balzan and Christina Nielsen. Prototype Challenge honours went the way of Performance Tech duo Patricio O'Ward and James French.

**FERGUS REED** 



# ARMCHAIR ENTHUSIAST

A selection of motorsport-themed Christmas gifts if you're stuck for last-minute ideas

### **CALENDARS**

Photo agency McKlein is offering a range of 2018 calendars. The 25 action shots in *The Wider View 2018*, which is the official calendar of the World Rally Championship, feature a panoramic perspective (95x48cm) of this year's WRC machinery's aggressive designs. The *Rally History 2018* calendar presents 25 images of classic rally cars, from Mini Coopers and Renault Alpines to Audi Quattros, measuring 67x48cm. If your space is limited, there's a smaller *Desktop Rally 2018* calendar, which comes in

at 11.5x14cm and includes 55 images. Also available from McKlein is the

Motorsport Classic 2018 calendar, covering Formula 1, sportscars and touring car machinery from the 1950s to the '70s.

- 1 | MOTORSPORT CLASSIC 2018 RRP £34.99
- 2 | **RALLY HISTORY 2018 RRP** £34.99
- 3 | **DESKTOP RALLY 2018 RRP** £8.99
- 4 | THE WIDER VIEW 2018





### SEASON REVIEW DVDs



### FORMULA 1 WORLD CHAMPIONSHIP

Relive all 20 races of Formula 1 2017 with his season review, which runs to 300 minutes. Ferrari fought Mercedes before it all went wrong late in the year and Lewis Hamilton waltzed away with his fourth world title. Available from Duke



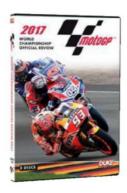
### WORLD RALLY CHAMPIONSHIP 2017

The new-for-2017 WRC cars' aggressive designs gave the series a shot in the arm. The title might have gone to the driver who's won it every year since 2013, but Sebastien Ogier's fifth crown was not a forgone conclusion after VW's sudden departure last year. Available from Duke



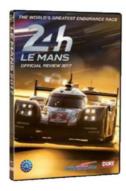
### BRITISH TOURING CAR CHAMPIONSHIP

Rewatch all 30 races of the 2017 British Touring Car Championship, which was won by Team BMR Subaru Levorg racer Ash Sutton. At a running time of almost eight hours, this is certainly an in-depth recap of a season that featured 13 different winners. Available from Duke



### 2017 MOTOGP WORLD CHAMPIONSHIP

The Marc Marquez versus Andrea Dovizioso title battle raged all year (after they'd dealt with early leader Maverick Vinales). This review, which runs to 180 minutes and includes lots of behind-the-scenes action, covers the story of Marquez's fourth title triumph. Available from Duke



### LE MANS 24 HOURS 2017

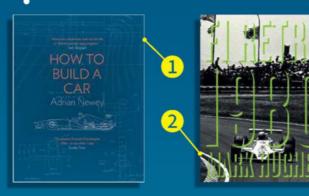
Each Le Mans 24 Hours is special, but this year's was something else. All LMP1 contenders suffered problems and an LMP2 car nearly won, but the Porsche 919 of Brendon Hartley, Timo Bernhard and Earl Bamber fought back to victory, as this 240-minute DVD recalls. Available from Duke



### 2017 WORLD RALLYCROSS CHAMPIONSHIP

This review covers all the action from the 2017 World Rallycross season, which was won in dominant fashion by PSRX Volkswagen Sweden driver Johan Kristoffersson. Two DVDs are included, featuring more than seven hours of material. Available from Duke RRP £16.99

### BOOKS





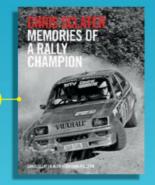














### 1 HOW TO BUILD A CAR Adrian Newey

Legendary Formula 1 designer Adrian Newey's memoir covers the story of his life via some of his favourite racing cars. Offering the reader a behind-the-scenes look at motorsport design, Newey (a winner of 10 F1 constructors' titles) has also "used the opportunity to exorcise a few 'demons'". RRP £20 ISBN 978-0008196806

......

### **F1 RETRO 1980s**

The second book in Mark Hughes' F1 Retro series details the many stories of the 1980 Formula 1 season. Featuring a race-by-race analysis of the year, with technical insights, the book also has interviews with many of the drivers and engineers that took part in the championship, including Alan Jones and the creator of his title-winning Williams FW07B, Patrick Head.

### 3 LE MANS HISTORY 1930-39

......

This book, from an officially sanctioned series covering the history of the Le Mans 24 Hours decade-by-decade, features the nine years spanning the end of the Great Depression up to the start of the Second World War. Accompanied by 400 contemporary images, the stories of 331 starts made at Le Mans during that period are told.

.......

### 4 MILLE MIGLIA PORTRAITS

Written by Leonardo Acerbi, this book is made up of a series of portraits, presented in alphabetical order, of the legendary drivers and characters that took part in the famous Brescia-based race between 1927 and '57. RRP £60 ISBN 978-88-7911-673-2

.....

### 5 GREAT CARS Jaguar trio

These three books on the Jaguar XK120, C-type and Lightweight E-type form part of the *Great Cars* series from Porter Press International. The history of the C-type, winner of the 1953 Le Mans 24 Hours, is illustrated with more than 300 images; the story of the Lightweight E-type's modification over the winter of 1963-64 includes its aero and engine development by Dr Sami Klat and Prof Harry Watson.

### YK120

**RRP** £30 **ISBN** 978-1-907085-56-7 **C-TYPE** 

RRP £60 ISBN 978-1-907085-46-8 LIGHTWEIGHT E-TYPE

RRP £60 ISBN 978-1-907085-20-8

......

### 6 ALAN MANN RACING F3L/P68

This tells the story of the Ford P68, which was powered by Ford's legendary Cosworth DFV engine. When the FIA changed its regulations for the world sportscar championship at the end of 1967, Ford's seven-litre GTs were no longer permitted, so Alan Mann, in charge of the company's European racing programme, organised the building of a new sportscar around the DFV...

RRP €79.90 ISBN 978-3-927458-97-0

......

### 7 FORD FOCUS WRC The autobiography of a rally champion

Written by Graham Robson, this charts the 12-year history of the Ford Focus in the World Rally Championship. It includes the competition history of each of the 97 WRC cars that were built, the events those cars competed in between 1999 and 2010, and features analysis of its design and evolution over that period.

### CHRIS SCLATER Memories of a rally champion

This book covers the career of rally driver Chris Sclater, who won the 1971 British Rally Championship and went on to have works drives with Datsun, Chrysler and Toyota. It features a foreword by John Davenport and contributions from many of Sclater's co-drivers, mechanics and friends, plus more than 180 images.

RRP £25 ISBN 978-1-912420-31-5

### MARION AND ROMAIN GROSJEAN Cuisine and Confidences

.....

Haas Formula 1 driver Romain Grosjean and his wife Marion share their passion for cooking in this book, which includes 46 recipes that help give an insight into the French couple's life. From 'Grandparents stuffed cabbage' to '300km per hour meringue', the dishes are accompanied by studio and personal images. RRP €29.90 ISBN 978-2-9562872-0-9

### **THE ULTIMATE REVIEW OF 2017**

Whilst rival F1 annuals come and go, AUTOCOURSE - The World's Leading Grand Prix Annual - is proud to have reached its 67th year of publication as the indisputable leader in its field.

The 20-race Formula One World Championship season is covered in its usual full depth, with hugely experienced paddock insiders Tony Dodgins and Maurice Hamilton dissecting the drama and intrigue that is always an intrinsic part of any F1 season. Their race commentaries are backed up by detailed results spreads, including lap charts and tyre strategies.

Mercedes-Benz again proved the class of the field, with Lewis Hamilton and Valtteri Bottas taking the lion's shares of the victories, however they did not have it their own way.

Sebastian Vettel and Ferrari returned to winning form in 2017, and the German driver took the title battle to Hamilton in a feisty and often controversial manner. In addition, the ever-resourceful, Red Bull Racing with Daniel Ricciardo and Max Verstappen also scored dramatic victories to deny the Silver Arrows total domination.

Renault and McLaren Honda endured a challenging year as they sought a return to past glories, whilst Sahara Force India showed the independents how to go racing as they led the race to fourth place in the constructor's championship for a second successive year.

The highly respected Mark Hughes, in his Team-by-Team review, looks at the technical development of every team, the feature is enhanced by Adrian Dean's beautiful F1 car illustrations.

As well as Formula 1, the sport's other major categories are all afforded ample coverage. The Formula 2 and GP3 championships, the key rungs on the professional single-seat ladder to the top are chronicled, as is the rise of Formula E, which is gaining big manufacturer support.

In Sports car racing, Porsche, won Le Mans once again, and then swept to a WEC title triumph over Toyota, before taking their leave from the sport. Also covered are the door-banging exploits of leading Touring Car series comprising of the WTCC, DTM and BTCC.

From the other side of the Atlantic, Gordon Kirby provides his always insightful analysis of the United States racing scene.

AUTOCOURSE traditionally wraps up the year with the most complete record of results published anywhere in a single volume.

At 408 pages, this lavish yearbook is essential reading for all fans of global motor-sport.



To order visit:
www.autocourse.com
or call our hotline: +44 (0)1753 689693

FREE and SECURE
pre-Christmas delivery!
Last UK order date:
18th December\*

\*Delivery times dependent upon order destination – see website for full details ONLY £45.00\* INCLUDING FREE UK Secure post and packing \*RRP £55.00

### MICK GARDNER RACING



Factory Trained Technicians // Large Stocks of Shocks, Springs and Parts // Official Sales and Service Centre // Fast Turnaround on Servicing, Revalving, etc. // Bespoke Shock Absorbers Built to Customer Spec // Mick Gardner Racing developed electronic suspension Mechatronics package proven successful in a number of different applications



E-mail: russwalton@mickgardnerracing.com Website: www.mickgardnerracing.com Telephone: 01226 240 099



### REVIEWED: AERODYNAMICS GUIDE

### **COMPETITION CAR AERODYNAMICS** A Practical Handbook

When I was given this to review, I had a quick skim through and my immediate reaction was that this would have been such a useful book to have had when I started in motorsport.

Then I read the first chapter and realised this history of race car aerodynamics pretty much covered my 35 years in the sport. I lived through a period of amazing development and I can confirm that we have come a very long way in our application of aerodynamics to racing machinery. I remember my early days in the 1/4-scale tunnel at Imperial College as we added downforce to our cars completely oblivious to sensitivities - how could we have been so naive?

**Competition Car Aerodynamics** - A Practical Handbook, by Simon McBeath, is exactly what it says it is: a practical guide to the application of aerodynamic understanding in regards to racing cars. This 305-page third edition comprises 10 chapters plus five appendices and includes a foreword by Willem Toet, a

Formula 1 aerodynamicist with more than 30 years' experience.

This book is comprehensively illustrated, with clearly labelled diagrams, graphs and pictures. What makes it a great read, whether you are just starting your motorsport career or are simply an armchair enthusiast wanting to understand more, is that it assumes you know very little about aerodynamics. But it doesn't dumb the subject down - instead it walks you steadily through each topic, building up your understanding. It's not heavy on the mathematics side and some understanding of simple equations would be useful if you want to apply the theory to your vehicle.

It gets started with the basics what is the effect of downforce and drag on your car, and what will it cost you in terms of horsepower versus the gain in cornering speed? - before moving on to discuss where these magical forces come from. The chapters cover various topics, from a brief flirt with CFD (computational fluid dynamics), to wings and underbody aero. The practicalities of measuring these aerodynamic forces are also explained before McBeath

moves onto case studies including F1 examples, drafting stock cars, sports-prototypes and the effect of yaw and zero downforce in single-seaters.

The book concludes with McBeath's final thoughts and advice on how the reader can use their new knowledge. Although he breaks down the various appendages into chapters, McBeath always reminds the reader to remember to view a racing car holistically. It's a complicated animal and solutions don't always transfer from one vehicle to the next.

I enjoyed reading this book. The complexities of race car aerodynamics are often alluded to but never allowed to burden the narrative. Typically, aerodynamic development at the highest levels of motorsport is focused on sensitivities as well as downforce and efficiency. Driveability is key, good entry stability and minimal mid-corner understeer and excellent traction are the utopia of vehicle handling. But no-one is going to write that book - it's all too current. **MARK WILLIAMS** RRP £37.50 ISBN 978-1-787111-02-8

### **FILMS**



RRP £5.99 (Amazon)

### **WILLIAMS**

Directed by BAFTA winner Morgan Matthews, this not an encyclopaedic telling of the Williams Formula 1 story, but a moving and thoughtful story of the family behind the famous team. The honesty of those recounting their experiences – the movie includes audio recordings of Ginny Williams from her book A Different Kind of Life - holds the film together.



RRP £10 (Amazon)

### **FERRARI** Race to Immortality

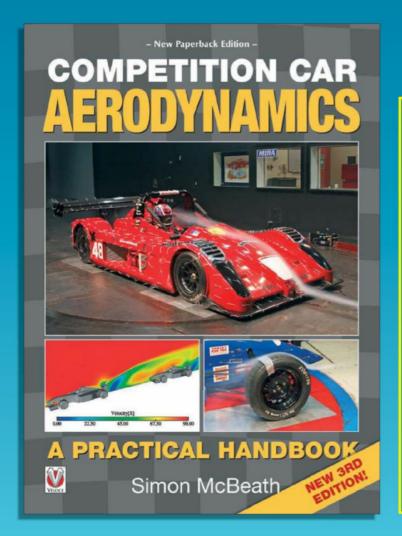
This documentary tells the story of five racing warriors who were pitched into Enzo Ferrari's team in the second half of the 1950s. The film's main focus is on Mike Hawthorn and Peter Collins, and is inspired by the celebrated book of the same name by the late Chris Nixon.



RRP £6.99 (Amazon)

### **McLAREN**

This documentary recounts the life of Bruce McLaren. The knowledge of his impending mortality is suspended by the joyful recollections of friends and family of the well-loved New Zealander. His contemporaries, including Sir Jackie Stewart and Dan Gurney, offer their thoughts on the team founder.



### **WHO IS MARK WILLIAMS?**

It seemed sensible to get someone with real engineering experience to review this book, and Mark Williams more than ticks the box.

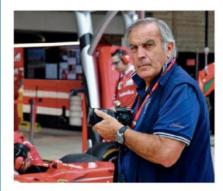
After spells at Ensign and Ricardo Engineering, Williams joined Lola Cars and quickly became involved in the design of sportscars, Indycars and Formula 3000 machines, penning the T90/50 with which Erik Comas won the 1990 title.

Following time spent in the US, and Super Touring, Williams moved to McLaren's F1 programme and became one of its key engineers, working alongside some of the best drivers including Mika Hakkinen, Kimi Raikkonen, Fernando Alonso, Lewis Hamilton and Jenson Button.

He's been involved in McLaren's GT project and has been a McLaren Autosport BRDC Award judge since 2008.



### **WATCHES**



### **GIORGIO PIOLA**

Legendary Formula 1 illustrator Giorgio Piola has launched a range of F1-inspired watches, drawing from his career of intensive research and illustrations from grands prix around the world.

For more than 40 years, Piola has profiled every change in design and engineering for every car on the F1 grid with detailed illustrations highlighting the latest innovations. He joined Motorsport Network in September 2015 and his archive of more than 8000 illustrations and animations is now available exclusively on Motorsport.tv, Motorsport.com and Autosport.com.

Piola's new Swiss-made timepieces – the G5, the Strat-3 and the Strat-3 Blue – use F1-inspired materials including carbonfibre and titanium. The watch collection has now been made available via www.GiorgioPiola.com, which also has exclusive prints of Piola's work and other F1-inspired merchandise.

To celebrate the launch of the collection, Motorsport.tv showcased the legendary illustrator's work with *Giorgio Piola – Illustrating Speed* a new documentary produced by Allen Content. It is now available to view on-demand online via Motorsport.tv.

"My years of illustrating Formula 1 machines have given me a unique insight into the finest design minds in the world," says Piola. "We've taken inspiration from that in creating this timepiece collection. We've looked at materials, design trends and examples from the world of Formula 1 and transformed the concepts into these beautiful watches.

"Time is the critical factor in Formula 1. Whether it be running against the clock in qualifying, creating new components or building a new car – time is constantly on the forefront of everyone's mind in the sport.

"These watches have taken inspiration from that and I am delighted with the end result. Usually, I am illustrating other designer's work to showcase it to the world – with the Giorgio Piola timepiece collection I have had the opportunity to take these inspirations and create my own finished product."

1|**G5** 2|**STRAT-3** 3|**STRAT-3 BLUE RRP** \$2985 **RRP** \$590 **RRP** \$590



### **GAMES**

### **GRID AUTOSPORT iOS**

Codemasters' hit console game Grid Autosport has been released for mobiles and tablets by developer Feral Interactive. Available on iOS devices with a tagline of 'consolequality racing', this is a game to buy with any App Store vouchers you might get in your stocking. RRP £9.99



### **MOTORSPORT MASTER**

This managerial racing game is available for Android and iOS and comes from Motorsport Network's gaming division, Motorsport Gaming. So if a new mobile device is under your Christmas tree, you can call the shots from your fingertips as a team boss building your own race squad. Free-to-play



### **MOTORSPORT MANAGER** Endurance Series

This downloadable content (DLC) updates the Motorsport Manager racing game by adding an Endurance mode. Players manage six drivers per team and work with a new stamina system throughout the action.

RRP £5.99 on STEAM





### A FORMULA 1/SINGLE-SEATERS IN 2017

- Who drove with more than one team on Formula 1 race weekends during 2017?
- Which F1 race drivers from 2017 were born in cities or towns that have hosted world championship grands prix? Also, name the cities/towns.
- Who was the only Formula 2 racer this year to have raced in the previous era of F2?
- What is the connection between the ATS Penske F1 team of 1977 and the Lotus World Series Formula V8 3.5 squad of 2017?
- How many GP3 Series drivers this year formerly raced in the Formula 3 European Championship, and who were they?

- Which European F3 race winners of 2017 also fulfilled DTM 'taxi-ride' duties this year?
- Which drivers led more laps than race winner Takuma Sato in this year's Indy 500?
- How many different drivers led IndyCar races during 2017, and who led the most?
- Who scored the final point to be awarded in this year's Super Formula championship?
- Based on Formula E races run during the 2017 calendar year, 2016-17 champion Lucas di Grassi would still have won the title. But who would be his closest rival and how far adrift of di Grassi would he be?

### B TOURING CARS IN 2017

- For what non-compliant part was the Honda World Touring Car Championship team excluded from October's Ningbo round?
- Rene Rast claimed the DTM title in his rookie season. Since the series relaunch in 2000, how many other drivers have achieved that feat?
- How many manufacturers won races during the 2017 TCR International Series season?
- Which driver claimed the most BTCC poles this year?
- Name the three BTCC drivers this year who didn't score a championship point.

- Who did Scott McLaughlin clash with in the Supercars season finale in Newcastle in the move that earned him a post-race penalty that cost him the title?
- Before 2017, when was Gabriele Tarquini last without a full-time drive in the WTCC or its predecessor the European Touring Car Cup?
- Who were the DTM's nonpodium finishers in 2017?
- 9 What do the 2017 Scandinavian Touring Car series and 2001 British FFord have in common?
- Which makes of car did Esteban Guerrieri win races in this season?



























### MOTOGP IN 2017









- Who was the last winner of back-to-back MotoGP races on a Ducati before Andrea Dovizioso, and which season/races?

  Pictured above left
- 2 How many Moto2 races had 2017 champion Franco Morbidelli won before the start of this year?

  Pictured above middle
- LCR Honda expands to two bikes in 2018 when did it last run a second bike, and who were its two riders?
- Which two riders on this year's MotoGP grid will step down to Moto2 next season?
- Which Tech3 Yamaha rider secured sixth position in the standings in

2015, two years before Johann Zarco?

- Who did Aleix Espargaro equal in taking Aprilia's best-ever MotoGP result this year with sixth position?

  Pictured above right
- Which 500cc legend did Dani Pedrosa draw level with in taking his 31st premier-class win at Valencia?
- Jorge Martin scored only one Moto3 win this season, but how many poles did he get?
- Name every MotoGP rider who scored a podium finish this season.
- Pol Espargaro was KTM's highest scorer this year. In which position did he end up in the championship?

### (E)

### **SPORTSCARS IN 2017**

- Name the three teams with which Brendon Hartley won major endurance races in 2017.
- Jeff Gordon was part of the victorious Daytona 24 Hours-winning line-up, but when was his previous road-course win?
- In the final season for the IMSA SportsCar Series' Prototype Challenge class, which former Indy 500 winner finished third in the standings?
- Ben Hanley raced an ORECA 07 with four different teams across the season. How many teammates did he have, and who were they?
- At which races in the European Le Mans Series did three different chassis constructors finish on the LMP2 podium?
- Two drivers became the first of their nationality to win an ELMS race outright

this year. Who were they, and where are they from?

- How many different manufacturers scored fastest laps in the five Blancpain GT Series Endurance Cup rounds this season? Name them.
- Andre Lotterer enjoyed a reunion with Marcel Fassler and Audi at the Spa 24 Hours, but who was the third driver?
- Porsche stalwarts
  Patrick Long, Romain
  Dumas and Jorg Bergmeister
  shared a car for only the
  second time in their careers
  at the California 8 Hours at
  Laguna Seca. When was the
  previous occasion?
- Jonny Cocker, Jody Fannin and Rob Smith gave JMW Motorsport's storied Ferrari 458 Italia a fond farewell with victory at Monza in the ELMS round. Who joined Cocker to score the car's first success at Paul Ricard six years before?























### G RALLYING IN 2017



- Aside from the World Rally Championship title, which performance milestone did Sebastien Ogier achieve at this year's Rally GB? Pictured above
- How many fastest times were set by Finns on this year's Rally Finland, and who set the most?
- Only one factory driver scored points on every World Rally Championship event he started this season. Name him.

- Which two rallies have formed a round of an FIA World Rally Championship every year since the series' inception in 1973?
- Which make of car won this year's FIA R-GT Cup?
- With which manufacturer has Stephane Peterhansel enjoyed the most Dakar victories?
- How many times has Nasser Al-Attiyah won the Middle East Rally Championship?
- Which driver won the most rounds of this year's European Rally Championship?
- Who was the top non-Scandinavian in the 2017 World Rallycross Championship?
- Which World Rallycross venue would you travel through purgatory to get to?

### WINNERS' GALLERY? See if you can work out who these 2017 champions are







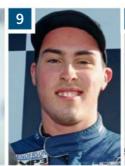
















Send your answers via email to autosport@autosport.com and include Christmas Quiz as the subject line or send in your answers on a sheet of paper to:

Autosport Editorial Autosport Media UK Ltd 1 Eton Street

Richmond TW9 1AG



### **ENTRIES CLOSE**

### Friday January 5 2018

In the event of a tie, the winner will be drawn by random from the correct entries

### **YOUR DETAILS**

Must be completed (block capitals please)

FIRST NAME						

ADDRESS		

POSTCODE		
TELEPHONE		

EMAIL			

If you would like to receive emails from us containing news, special offers and service information please include your email address above

### **TERMS AND CONDITIONS**

No entries will be accepted from employees of Autosport Media UK Ltd or their families, or any other companies associated with this competition. The judge's decision is final and no correspondence will be entered into. There is no alternative cash prize and the prize is non-transferable.

	We'd like to send you great offers and other
	information on products from Autosport Media
UKLto	d. Please tick box if you don't want to receive
these	offers.

Very occasionally we may pass your contact details to another company whose products we think you'd love to hear about. Please tick box if you don't want to receive this information.

 $\label{lem:datacontroller:datacontroller:autosport.com. For full terms and conditions, please see autosport.com.$ 

# THE TOP 10 CARS NEVER TO WIN

Remember last Christmas, when we picked out the worst cars to win a world championship grand prix? This time we're looking at the best that never won

By Kevin Turner, Editor



any good Formula 1 cars got their day in the sun, even if they weren't the benchmarks of their time. But there are other deserving machines that were prevented from crossing the line first by bad luck, poor timing or unusual circumstances.

There have been some very good F1 cars that failed to win a world championship grand prix, and it was a tough task to finalise this top 10. To do so we took into account many factors, including the overall level of the contenders, how close they came to winning a grand prix, and what stopped them succeeding. We also spoke to some of the key figures involved.

Here is the verdict...

### **SUPERTIMES**

Supertimes have been used for this list. These are based on the fastest single lap by each car at each race weekend, expressed as a percentage of the fastest lap overall (100.000%) and averaged over the season. This provides a guide to how cars stack up against each other on raw pace.

### 10 WILLIAMS FW06

BEST RESULT 2ND 1978 UNITED STATES GP

BEST QUALIFYING 3RD SUPERTIME POSITION 8TH DESIGNER PATRICK HEAD

THIS WAS A BREAKTHROUGH DESIGN FOR WILLIAMS. New signing and solo entrant Alan Jones was a points-scoring threat in the neat DFV-engined machine and took 11th in the 1978 drivers' table.

Jones grabbed everyone's attention at Long Beach, charging up to second before a misfire struck, and another highlight came at Watkins Glen. Jones qualified third and finished second behind Carlos Reutemann's Ferrari.

The FW06 provided the launchpad for Williams, Head and Jones to become grand prix winners – and ultimately champions – with the FW07.



Q&A
PATRICK HEAD
WILLIAMS
CO-FOUNDER

### Where does the FW06 rank when you consider all the F1 cars you designed?

The FW06 ranks fairly high in my memory, as it was a car designed in our very early days. Part way through the design, Neil Oatley joined me. He had no previous car-design experience, but we were the only two in the design office. It was a very simple car, limited by our resources and knowledge. No windtunnel time supported the design.

I knew that it would not be fast enough to win races – we

had seen the [ground-effect] Lotus of 1978, but I had no knowledge of how it functioned. I thought that the FW06 would be close behind. We were in race-winning positions, either actual or potential, a number of times, but they were not achieved due to unreliability.

### How pleased were you with it, particularly given it was the first F1 car you designed?

I suppose I was pleased that it mostly put us midfield or above, as in the previous year we had often not qualified. The target is always to win, so I could not be too pleased, but it served its purpose for our embryonic team.

### What were its strengths and weaknesses?

The FW06's strengths were simplicity, overall structural integrity, light weight and sound systems. Drivers commented that it was well balanced and enjoyable to drive. Our quality-assurance systems and standards within the factory were not sufficiently developed to provide reliability. The front wing had excessive curvature, resulting in partial separations at low rideheights, but we only realised late in the car's development.

How important was the FW06 to Williams, given the success



### of the subsequent FW07?

When we started Williams Grand Prix Engineering in late March 1977 we had eight employees. By the start of 1978, when we ran one FW06, we had less than 20 employees; this to design, manufacture and build the FW06, and then operate it in the field. When the team went racing, there were probably four people left back in the factory. The FW06 was a simple car, not costly to make and fitted the requirements of the team well at that time. Budgets were very small – in 1977 with a purchased March and operating a single car, the complete budget including purchase of car and engines was £180,000! This might fund a current GP team for a couple of days now.

LAWRENCE BARRETTO





BEST RESULT 2ND 1997 BELGIAN GP

BEST QUALIFYING 2ND SUPERTIME POSITION 5TH DESIGNER GARY ANDERSON

We almost picked the Jordan 191 for this list, but former Jordan designer Gary Anderson reckoned the team's 1997 contender was a better choice:

The Jordan 197 was strong right out of the box and was good enough to win on the right weekend if everyone did a good job. At the initial Jerez test the car wasn't quite ready, so Ralf Schumacher, who was a rookie for 1997, got some mileage in the '96



car. Then he got in the 197 and, after the shakedown laps, on his first proper run he found it was a massive improvement in terms of performance and driveability. When he came in he had a massive smile on his face. Alongside him, we had Giancarlo Fisichella.

We never ran the car on low fuel and fresh rubber, so when we got to the first race in Australia we struggled in qualifying. But we tested at Silverstone afterwards and sorted out the balance in that trim and after that the car was a joy to work with. Giancarlo finished second at Spa and third in Canada, with Ralf third in Argentina after they collided with each other. But we didn't quite get the win, which was a shame.

The German Grand Prix was the best race we did.

Fisi started second and led after the stops, but spent too much time looking in his mirrors and Gerhard Berger passed him. Then he got a puncture from running over a piece from Jan Magnussen's Cosworth engine and tore up the sidepod.

Had Rubens Barrichello stayed with the team, it's possible we might have got that win. It's not that he was more talented, but he was ready. He wouldn't have had the Argentina collision and would have handled leading in Germany well.

The car was good in high-downforce too – in Monaco we qualified fourth and sixth. Rubens finished second that year for Stewart, so just maybe in the Jordan he could have gone one better.

### F1/BEST LOSING CARS



### **LOLA MK4/4A**

BEST RESULT 2ND 1962 BRITISH AND GERMAN GPS

POLES 1
SUPERTIME POSITION 4TH
DESIGNER ERIC BROADLEY

NOT MANY CONSTRUCTORS WIN A WORLD championship grand prix with their first F1 design, but Lola nearly managed it in 1962. Reg Parnell commissioned Lola to build cars for John Surtees and Roy Salvadori, run under the Bowmaker Racing Team banner.

Salvadori struggled and suffered poor reliability, but Surtees was competitive immediately. He took pole on the car's debut at the Dutch GP (though the time was disputed by some), but crashed out when the suspension broke.

Chassis flex was a problem on the spaceframe car, but extra tubes were added around the cockpit during the campaign. The final car built had body panels welded to the chassis, creating a semi-monocoque.

"Lola beat

Porsche and

Ferrari in the

championship"

After Zandvoort in May Surtees scored points in the next five GPs, including two second places in the German and British GPs. At Silverstone the Lola was the only car to finish within a minute of Jim Clark's revolutionary monocoque Lotus 25, while at the

Nurburgring Surtees was narrowly beaten by Graham Hill's BRM after a titanic struggle in tricky conditions.

Surtees did score an F1 victory with the car, the non-championship Mallory Park 2000 Guineas, an event that included Clark, Hill and Jack Brabham.

The team's form – and, perhaps more importantly, its budget – disappeared thereafter, but Lola still beat Porsche and Ferrari to fourth in the constructors' table and Surtees was fourth in the drivers' standings.





# MATRA MS120

**BEST RESULT 3RD** 

1970 MONACO, BELGIAN AND ITALIAN GPS 1971 SPANISH GP 1972 FRENCH GP

### POLES 2

SUPERTIME POSITION 1970 7TH; 1971 4TH; 1972 4TH

**DESIGNERS** GERARD DUCAROUGE AND BERNARD BOYER

AFTER PARTING COMPANY WITH KEN TYRRELL AND Jackie Stewart, a combination that had dominated 1969 with Matra chassis and Cosworth DFV power, the French concern ran its own team in' 70. Various iterations of the MS120 were used over the next three seasons and it should have been a winner.

In fact, it was. After a solid 1970 season and three podiums with Jean-Pierre Beltoise and Henri Pescarolo, Matra signed Chris Amon for '71 and he promptly won the non-championship Argentinian GP, albeit against limited opposition in a combined F1/F5000 field.

More impressive was third at the Spanish GP, but the



MS120B's best chance to win came at the pre-chicane Monza, where the V12 could stretch its legs. Amon beat Jacky Ickx's Ferrari to pole by 0.42 seconds and, having stayed in the lead pack early on, moved to the front on lap 37 of 55. He looked strong, only to accidentally remove both his visors instead of one and get hit in the face by the high-speed airflow. He lost the lead, and fuel-vapourisation issues meant he finished sixth.

The stiffer MS120D for the 1972 French GP should have provided the team with a long-awaited first victory. Amon took pole, held off Denny Hulme (McLaren) and Stewart (Tyrrell) while the thirsty

V12 burned off its extra fuel load, then edged away.
"The MS120D felt very good straight out of the box,"
Amon told Autosport in 2011. "Right from early on
I knew we had a pretty good chance."

But then Amon suffered a puncture. A slow tyre change left the Matra eighth, but Amon charged through the field. Lapping two seconds faster than eventual winner Stewart, Amon rose to third.

"I really felt nobody could touch me that day," he rued. "I had a clear margin over everyone."

Amon would never lead another GP and Matra withdrew from F1 at the end of 1972.





### **MARCH 711**

**BEST RESULT 2ND** 1971 MONACO, BRITISH, ITALIAN AND CANADIAN GPS

BEST QUALIFYING 5TH
SUPERTIME POSITION 7TH
DESIGNERS ROBIN HERD AND FRANK COSTIN

ARGUABLY THE UGLIEST CAR ON THIS LIST, THE March 711 is probably the only one that could be said to have overperformed. Given that March was only the seventh-fastest team on supertimes and

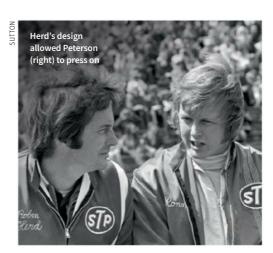
failed to score a pole, despite having rising star Ronnie Peterson on its books, fourth in the 1971 constructors' championship must be considered a success.

must be considered a success.
Crucially, the car was reliable,
allowing Peterson to benefit from
his spectacular press-on style. Often
a major threat in races, Peterson scored five
podiums on his way to the runner-up spot.

than any other
car on this list"

And so the
than the 701,

The 711 has the distinction of coming closer to a GP victory than any car on this list, Peterson losing



out to Peter Gethin's BRM by 0.01 seconds in the famous five-car finish in the Italian GP at Monza.

Peterson also starred in the wet Canadian GP at Mosport, charging up from row three to battle

"The 711 came

closer to a win

the Tyrrell of Jackie Stewart for the lead. They swapped places several times and were still together when Peterson tripped over a backmarker at half-distance, damaging the March. He continued to finish second, but there was no chance of catching Stewart.

And so the 711, almost certainly a better car than the 701, failed to follow in the GP-winning wheeltracks of its predecessor. It would be another four years before March won again.

### F1/BEST LOSING CARS



### **LOTUS 95T**

**BEST RESULT 2ND** 1984 DETROIT GP

**POLES 2** 

**SUPERTIME POSITION 3RD DESIGNER GERARD DUCAROUGE** 

### **RENAULT RE50**

**BEST RESULT 2ND** 1984 BELGIAN, FRENCH AND BRITISH GPs

**POLES** 1

**SUPERTIME POSITION 4TH DESIGNERS MICHEL TETU AND BERNARD DUDOT** 

THESE TWO 1984 MACHINES BELONG TOGETHER. Not only did they achieve similar performance, but they were powered by the same turbocharged Renault EF4 engine and both probably deserved to be winners.

"It felt right.

We knew we

to win races"

had the chance

The 95T, driven by Nigel Mansell and Elio de Angelis, was more reliable, helping to explain why Lotus finished third in the constructors' table, two spots ahead of Renault. Mansell famously crashed out in the wet in Monaco, shortly after taking the lead, and Lotus even locked out the front row in Dallas. But the Renault came closer to winning a GP.

"I think I could have won three or four races in that car," reckons Derek Warwick, who picks out the RE50 as one of the three best cars of his long career. "Same for [team-mate] Patrick Tambay we just had too many mechanicals."

Warwick was only running at the end of four of the 16 races and each time he was on the podium, underlining the car's pace. He also nearly won the season opener in Brazil, retiring from the lead in the closing stages thanks to suspension failure,

probably the legacy of a clash with Niki Lauda's McLaren.

Tambay scored a pole, but the poor reliability record stifled Renault and the car's consumption was also an issue in an era of fuel restrictions.

And yet Warwick remains a fan of the RE50: "When I first drove it out of the pitlane I thought,

'Wow, what is this?' It just felt right, it felt smooth, and we were instantly quick. It was a good engine with good power right the way through the range, and the chassis was very responsive to change. We knew we had the chance to win races."

# THE TEAM THAT NEVER GOT LUCKY ARROWS

SELECTING THE CARS FOR THE MAIN list was tricky, but it's not difficult to pick the top team that never scored a world championship victory. With nine podiums and a pole, Arrows should have scored several wins.

Only BAR and Toyota recorded more podiums and poles without winning, but BAR became Honda, which did win, while Toyota was a giant operation that underperformed.

Arrows was longer-lasting than either and was an F1 regular from its debut in 1978 until its demise in 2002. Even its first car – the controversial FA1 that landed the team in court due to its similarity with the Shadow DN9 – could have been a winner.

The FA1 suffered from a fuel-system problem that meant it had to run more fuel, but that didn't stop Riccardo Patrese starring at the 1978 South African GP from seventh on the grid.

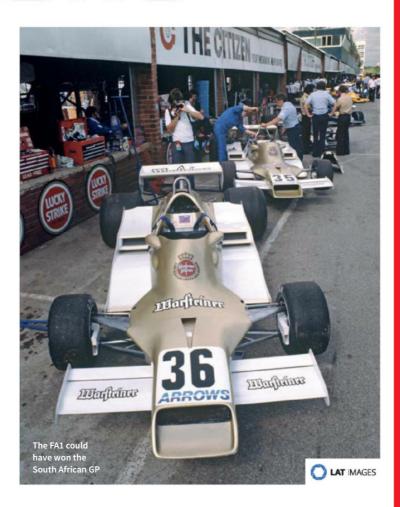
"He crept up, took the lead and pulled away," remembers designer Tony Southgate, who was one of the key figures to leave Shadow to form the new team. "He went charging off and just before the end the engine quit.

"It was the driver's fault for pushing too hard. Riccardo used the engine to stop the car so he could go super-late into the corners and he did it the whole time." Patrese would later give the car its best finish – second – in the Swedish GP, an event Southgate still isn't happy about: "The car that won was the fan car [Brabham's BT46B], which certainly wasn't in the spirit of the regulations. If that hadn't succeeded we'd have won – Riccardo just beat Ronnie Peterson and drove well."

The 1981 A3 of Southgate and Dave Wass also got close. Patrese led at the Long Beach season opener before being hampered by a blocked fuel filter. The Italian then took third in Brazil and second at Imola.

"That was a nice, conventional car," says Southgate. "There was only one problem with it – the [ground-effect] skirts were a bit too flimsy. It flexed and I didn't realise for a while, and it wasn't an easy fix."

Arrows was a regular points challenger over the next few years, with the A10B driven by Derek Warwick and Eddie Cheever securing fifth in the constructors' table in 1988. But it's the Ross Brawn/James Robinson-penned A11 the following year that Warwick picks out as one of the best cars he ever raced: "It had strong aero, was stiff and had good low-speed grip. It had a bog-standard [Ford] V8 – the performance was down to the team, the chassis and Ross."





Warwick took five points finishes (in an era when only the top six scored) and Cheever was third in the United States GP, but the A11 could have achieved more. Warwick was running behind only Ayrton Senna's McLaren, later to retire, in the wet Canadian GP when the engine blew.

The final Arrows to lead a GP was the Frank Dernie/John Barnard A18. After passing Michael Schumacher's Ferrari, Damon Hill left the field behind for much of the 1997 Hungarian GP. His Bridgestone tyres had an advantage over the Goodyears of the regular frontrunners and Hill was 34 seconds ahead with three laps to go.

Then a hydraulic failure caused gearbox and throttle issues. Jacques Villeneuve's Williams went by on the final lap as Hill crawled to second.

Arrows' last and best chance to win a GP had gone.

# LAST CHANCE FOR 6 MONT THE COVER

Buy a subscription to Autosport for the race fan in your life and they will receive six months' access to the best motorsport content. Autosport editors have access-all-areas in the pitlanes of the world's best racing series. The recipient of your gift will be able to access this great content on the go as well as receiving the print magazine each week with our digital and print bundle.

### GIVE THE GIFT THAT KEEPS ON GIVING



- ✓ Full access to autosport.com
- ✓ Autosport iPad edition subscription
- ✓ Great saving of 65%

Subscribe today to ensure the subscription starts with the first issue in January.

# www.autosportmedia.com/offer/ASPXMAS172

QUOTE THE PROMOTIONAL CODE P1712XMAS

CREDIT CARD ONLY OFFER. EXPIRES JANUARY 4 2018



### **SHADOW DN5**

BEST RESULT 3RD 1975 AUSTRIAN GP

POLES 3
SUPERTIME POSITION 5TH
DESIGNER TONY SOUTHGATE

THIS IS THE ONLY CAR ON OUR LIST THAT SCORED three pole positions, and it was also an F1 winner, thanks to Tom Pryce's victory in the non-championship 1975 Race of Champions at Brands Hatch. Across the season, Shadow was faster than both March and Hesketh, which took a win apiece.

"The car worked aerodynamically – it was better than the opposition," asserts its designer Tony Southgate. "It was the first car I developed on a rolling road. It made the centre of pressure more accurate and when it got to the track it just worked.

"At Interlagos Jean-Pierre Jarier was the only one who could go flat through the first corner. It was high-downforce so it was no good at high-speed tracks. It was competitive but we let ourselves down with reliability."

Jarier took pole for the first two races of 1975.



Crown-wheel-and-pinion failure prevented him from even starting in Argentina, but he dominated in Brazil, having been 0.8 seconds clear of reigning champion Emerson Fittipaldi's McLaren in qualifying.

Jarier was eight laps from home when the cam arm of his fuel metering unit seized. "No-one had ever had that before and it would be us!" says Southgate. "After the race the car started up and it never happened again."

Shadow also suffered with Hewland's new TL gearbox, which was supposed to be stronger, but suffered teething problems.

It wasn't just unreliability that hurt the DN5, though – having two inexperienced drivers didn't help on occasion. "At Monaco we were super-quick, although Niki Lauda beat us to pole, and then both guys crashed," says Southgate. Pryce then spun out of the British GP,

after taking pole, though he was not alone in making an error on a day when a sudden shower arrived.

"It was a bit like that all the way through the year," adds Southgate. "We had silly problems – some of our making, some not.

"If Lotus had the cars they'd have done much better. They had more than twice the budget and got the best engines you could get.

"We also got distracted at Shadow. We did F5000 and Jarier convinced [team founder] Don Nichols to put a Matra V12 engine in the DN5 [to create the DN7]. There had to be more cooling and a bigger fuel tank. It was heavier and bigger so it went the same speed. Jarier did two races and then decided he wanted to go back to the Cosworth car.

"We lost the edge because of other distractions."



**BEST RESULT 2ND** 2004 SAN MARINO, MONACO, GERMAN AND CHINESE GPS

POLES 1
SUPERTIME POSITION 2ND
DESIGNER GEOFF WILLIS

IN ALMOST ANY OTHER YEAR, THE CAR FINISHING second in the constructors' table could be expected to win several races. But the BAR-Honda 006 had the misfortune to come up against Ferrari's F2004, one of the greatest F1 cars of all time. That meant team leader Jenson Button took a pole and 10 podiums but no wins.

Michael Schumacher and Rubens Barrichello won all but three of the 18 races for Ferrari. In terms of supertimes, the BAR was closer to the pacesetter than any other car on this list – 0.218% – but that is misleading. Ferrari's Bridgestone rubber, specially developed for the F2004, was not at its best early on in a stint. That made Ferrari's qualifying performance weaker relative to its opposition than its race pace. This was also the era of qualifying with fuel loads required to start the race, further skewing the figures.



Imola, scene of Button's pole, provided a fine example. The BAR was 2.8 seconds ahead at the end of lap one. Schumacher then closed in and unleashed the Ferrari's pace during the pitstops.

"I came in on lap nine, Michael stopped two laps later, and when he came out I could barely see him!" said Button in the official F1 season review. "On pure pace, Ferrari was around a second a lap quicker than us."

It was a similar story at Monza, where Schumacher spun on lap one and Barrichello started on wets, which was the wrong call. After making up for a poor start, Button thus led almost half the race, but could do nothing about the recovering Ferraris demoting him to third. The best F2004 lap was 1.2s quicker than anything else and 1.6s faster than Button's.

All bar one of Button's podiums came in races Ferrari

won, perhaps the best being the charge from 13th to second at Hockenheim. The Ferrari slip-up came at Monaco, where the BAR finished within half a second of winner Jarno Trulli. Button caught the Renault in the closing stages, but could not find a way by.

Takuma Sato suffered a few reliability problems, but such was Button's score – he was 26 points clear of fourth-placed Fernando Alonso in the drivers' standings – that BAR took second anyway.

The 960bhp machine wasn't without innovation, either. BAR arrived at the German GP with a torquetransfer braking system, which was immediately banned. The 006 was stable under braking, forgiving, and competitive at most circuits, even if it wasn't always strong off the line. It was just unfortunate to be a very good car that came up against an extraordinary one.



### **BRABHAM BT45B**

**BEST RESULT** 2ND 1977 FRENCH GP

POLES 1
SUPERTIME POSITION 3RD
DESIGNER GORDON MURRAY

"FERRARI WAS GETTING VERY COMPETITIVE WITH its 12-cylinder engine and Bernie and I thought we needed a 12," summarises designer Gordon Murray on Brabham boss Bernie Ecclestone's move from Cosworth DFV to Alfa Romeo power for 1976.

"It was a massive challenge going from the Cosworth as a stressed member [in the 1975 BT44B] to the flat-12, which couldn't be a stressed member. It was also much heavier and an awkward shape, and much thirstier. It was a culture shock."

The BT45 ended up with five fuel tanks and had a very mediocre season in 1976, but the car's successor was much more competitive. The BT45B featured engine, gearbox, suspension and aero revisions. It was still heavy – 615kg, around 25-35kg heavier than its main rivals – and had to start with more fuel than its opposition, but it was fast.

"It was just learning about the issues, optimising

the engine and tidying up the aero," recalls Murray. "It wasn't a bad car, but then ground-effects came along."

The ground-effect Lotus 78 was the quickest car of 1977, but the technology wasn't yet perfected and constant problems with the development Cosworth engines allowed others to win races. Based on supertimes, Brabham was the third-fastest team of the season. Ferrari, which ended up taking both the drivers' and constructors' crowns, was fourth...

Brabham favourite Carlos Pace put the BT45B on the front row on its debut at the 1977 South African GP. The Brazilian was then killed in a plane accident, but Penske refugee John Watson became a frontrunner thereafter, joined in the team by Hans Stuck.

Watson's first chance of victory came in Monaco, where he took pole by 0.41 seconds but lost the lead to Jody Scheckter's Wolf at the start. "I then overdrove trying to push Jody into a mistake and pushed the car too hard," admits Watson, who retired with gearbox problems.

Next time out, Watson jumped poleman Mario Andretti to lead the wet Belgian GP at Zolder, only to be hit out of the race by the Lotus on the opening lap. But the closest near-misses were yet to come.

At Dijon for the French GP, Watson quickly overcame

fast-starter James Hunt and started to pull away. Eventually polesitter Andretti made it by Hunt's McLaren M26 and the Lotus closed in. Andretti pressed for a way by, but Watson seemed equal to the task. "The Lotus was more nimble, but when the Brabham got to the straight I was able to stretch my legs enough and pull away," recalls Watson. "It must have been very frustrating for Mario – tough!"

That was until the final lap, when the Alfa engine spluttered briefly for reasons "never fully explained". "Mario got alongside me and that was that," adds Watson. "It was disappointing because we'd done the nine yards. I should have won the race."

Two weeks later at Silverstone, fuel-pick-up problems again cost Watson the chance of victory. Hunt's McLaren had beaten Watson to pole, but the Brabham grabbed the lead at the start. Once he had recovered from his poor getaway, Hunt caught the Brabham, but he could not prise an opening.

Then, after 49 of the 68 laps, the fuel issue struck the BT45B and Watson pitted. More fuel was put in, but the trouble soon returned and the Brabham retired.

Watson ended the campaign with one podium and just nine points, but he should have scored at least three times that many.



# THE UNKNOWN INNOVATOR

ONE MORE GORDON MURRAY innovation could have made the Brabham even better. The BT45 had introduced carbon brakes to F1 racing in 1976, but cooling problems and a big crash for Carlos Pace at the Austrian GP meant they were generally confined to testing thereafter.

John Watson was nevertheless impressed when he tried the material, which showed the future of F1 braking. "The difference was mega straight away," he recalls. "You couldn't believe the difference. At the end of

"You couldn't believe the difference – ridiculous!" the straight at Kyalami I was so much later on the brakes with carbon that it looked like I wasn't braking. It was a whole new world – ridiculous!

"When you get an advantage like that you are reluctant to give it up, but the technology was very new."

For Murray, the innovation tried on the Martini-liveried cars would bear fruit much later, when the technology was sufficiently perfected to start winning in 1982. "It was two years of pain, but it gave us a six-year advantage," says Murray. "We got rid of all the problems on the BT45."

Nelson Piquet and the BT52 finally won titles in 1983 with the technology Murray had first spotted in the airline industry so many years earlier.



Above: Watson takes the lead in Belgium before contact with Andretti's Lotus

> Right: Alfa Romeo packaging issues became apparent on the 1976 BT45





"There were a number of opportunities in 1977," concludes Watson. "Gordon did a brilliant job with the packaging and the car didn't have any vices. It was essentially a good car and was very quick with low fuel. At certain circuits the heavier fuel load [for races] was less noticeable – fast, flowing circuits such as Dijon and Silverstone."

Stuck's season was less impressive, but he saw the finish more often, scoring two podiums and ending up two places higher (11th) in the standings. His best chance of victory came at Watkins Glen, where the rainmaster dominated the early wet stages of the United States GP (East), despite clutch failure. He was leading comfortably after 14 laps when the Brabham jumped out of gear and spat him off.

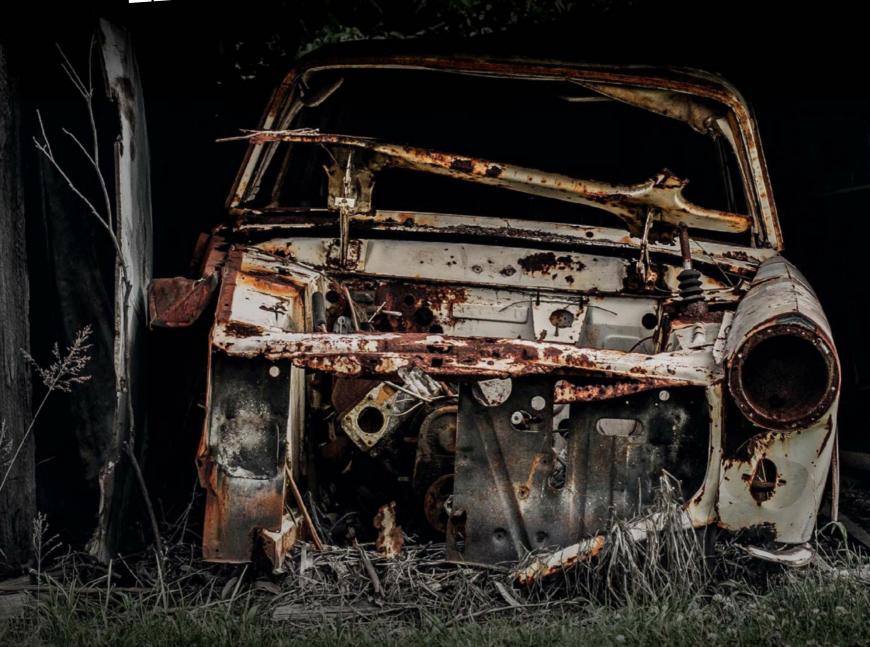
Despite the questionable advantages of the Alfa powerplant – and the fuel-system problems – Watson thinks Ecclestone's engine deal was a risk worth taking.

"The Alfa was a brilliant engine, but it was heavy and it didn't have as low a centre of gravity as the DFV," says the 71-year-old. "Alfa also messed around with them – there was meant to be a pool of identical engines, but you were never 100% sure they were always the same.

"There was a variety of reasons Ferrari had won in 1975, only one of which was the engine. It was probably a bit lighter and smaller than the Alfa, but overall Ferrari came up with a really competitive package. The Alfa wasn't a wrong gamble."

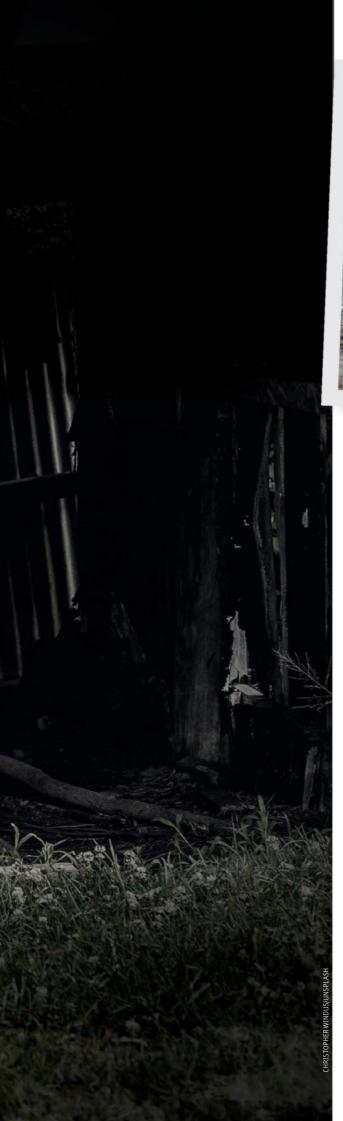
Niki Lauda obviously didn't think so either, as he left Ferrari to join the Brabham-Alfa squad for 1978...

# When racing cars meet their demise



Many racing cars are loved and cherished long after their days as contemporary machines are over, but some — even successful ones — suffer far worse fates

By Gary Watkins, Special Contributor





### The Sebring winner that didn't survive

FORD GT/110

You may think that a car that won the Sebring 12 Hours, played a role in McLaren's early Can-Am history and featured in a nationwide press campaign in the United States would be resting serenely in a museum or a private collection somewhere. There was, however, to be no happy retirement for this illustrious Ford GT40. Chassis GT/110 was destroyed at the end of its useful life.

Ford GT/110 was one of a small batch of GT40 roadsters built and, most likely, the only one built in aluminium rather than steel. It started life as a Group 7 contender, assembled by McLaren in the UK, and raced as the Ford X-1 with a seven-litre V8 in 1965.

### "It was nicknamed 'Big Ed', referring to the disastrous Edsel"

It wasn't successful in a handful of outings in the category that would spawn Can-Am the following year, even with the talents of Chris Amon behind the wheel. That explains the nickname 'Big Ed', a reference to Ford's disastrous Edsel sub-brand of the 1950s.

The car was handed over to Shelby American, given a Ford MkII nose and tail, and entered at Sebring for Ken Miles and Lloyd Ruby. They won the race, though only after team-mates Dan Gurney and Ken Grant broke their engine on the final lap.

Autolite, Ford's supplier of spark

plugs, celebrated the success in the press, but GT/110 wasn't feted like the champion she was on her return to Shelby American headquarters at LAX airport in Los Angeles. Instead, the car was stripped and the chassis shuffled into a corner.

"The chassis wasn't as strong as a steel car," remembers Charlie Agapiou, one of Shelby's crew chiefs. "After Sebring, the aluminium was cracking out in so many places. It was repairable, but no-one saw the point. We were never going to run it at the Le Mans 24 Hours."

There are any number of tales surrounding the fate that befell this famous car. The most grizzly ones have been made up, reckons Agapiou.

He dismisses the idea that the car sat around in the Shelby workshops until 1970 when US customs finally caught up with it. This story suggests that a car imported from the UK on a temporary carnet was destroyed to avoid duties having to be paid. It has even been suggested that, after being destroyed once, it had to be tackwelded back together, so the process could take place in the presence of the man from the revenue.

"That's not true," says Agapiou. "It was cut up and put in the dumpster pretty quickly, possibly even before we went to Le Mans that year. The thing actually became a bit of joke; I remember someone deliberately driving into it with a forklift truck at one point.

"The other one I've heard is that the chassis was cut up into tiny pieces and dumped in a nature reserve up out at Playa del Rey. That isn't true either."

### CARS IN THE CRUSHER



### Where is the real thing?

### **NISSAN GT-R LM NISMO**

If you were among the pilgrims at Le Mans back in June and happened to visit the museum, you might have believed that you'd got to rest your eyes on a real Nissan GT-R LM NISMO. Any American readers might have had the same thought if they've taken a trip to the Lane Motor Museum in Nashville recently. Both sets of museum-goers would have been labouring under a misunderstanding.

The two examples of Nissan's 2015 front-wheel-drive LMP1 contender on display are most definitely showcars. Which begs the question, what happened to the real things? Of the four monocoques produced, only one survives. Nissan says it's at the Zama heritage centre in Japan, but it appears that right now it isn't on display.

The Japanese manufacturer has confirmed that three of the four tubs built were destroyed for what Nissan global motorsport boss Mike Carcamo says were "legal reasons". The GT-R LM that survived the crusher was the car that raced in the 24 Hours in blue-and-red livery, driven by Lucas Ordonez among others.

There's a good reason why anyone might have been fooled by the cars on display at Le Mans and in Nashville. They were built by Bob Salisbury Engineering (whose business has since been taken over by KS Composites). The sometime Formula 3000 entrant was one of the leading constructors of showcars, with a client list including Red Bull Racing.

They do look like the real deal, even from within the cockpit, as this writer can attest after sitting in one. We can be thankful, however, that both showcars still exist. One was rescued from the P1 team's Indianapolis headquarters in a midnight dash, reputedly by Nissan USA motorsport boss Rick Kulach, after the programme was halted in December 2015 and staff locked out of the building.



#### The 'lost' Brabham

#### **BRABHAM BT51**

Brabham had reintroduced refuelling to Formula 1 in 1982 with the first of its line of BMW-powered machines. The obvious next step for the team's designer, Gordon Murray, was to produce a car purposedesigned to accept a small fuel load. The result was a car that not only didn't race, but didn't even survive for posterity.

The Brabham BT51 was a victim of a late rule change for 1983. The British *garagistas* had been lobbying against the proposed ban on ground-effect underfloors, and Brabham boss Bernie Ecclestone had assured Murray that it would never go through. But go through it did late in 1982 on the personal diktat of FISA boss Jean-Marie Balestre, by

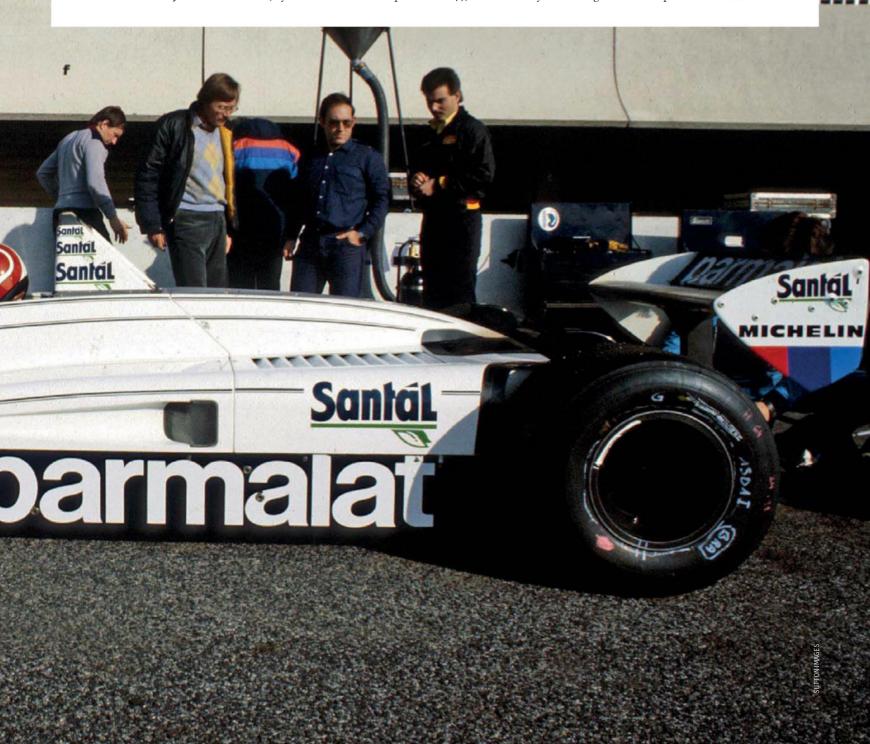
which time Brabham was already up and running with what it was expecting to be its 1983 F1 contender.

## "Ecclestone ordered the two chassis to be broken up"

Not just a contender, actually, but a world championship winner.

"The BT50 was really a modified version of the Cosworth-powered BT49," recalls Murray. "The BT51 was a different motor car. There was quite a bit of a shuffle around in terms of weight distribution because of the small fuel tank. The reason I started the BT51 three or four months early was because I knew that, with pitstops and BMW's engine development, we could walk the championship."

A car that had tested at Donington Park and Paul Ricard was already obsolete. Ecclestone ordered the two finished chassis to be broken up. So, if you are lucky enough to get an invite to that special hangar at the Biggin Hill airfield owned by Ecclestone, you won't find a BT51 among nearly every other Brabham built during his ownership of the team.



### A sportscar sold for scrap

#### **PILBEAM MP84 CHASSSIS #01**

The Jota Sport squad of the early 2000s was a far cry from the ultra-successful LMP2 operation of today with two class wins at the Le Mans 24 Hours to its name. It was a tiny team with a tiny workshop — and resources to match. That explains why it scrapped the original chassis of the Pilbeam with which it had made its first foray into the world of sportscars in 2002.

Jota, started by drivers Sam Hignett and John Stack, had moved out of the Renault Clio V6 Eurocup into the FIA Sportscar Championship with a Nissanengined MP84. They purchased the first chassis that had done the rounds with a number of teams and taken a heavy frontend hit at some point in its life. For year

two of their sportscar adventure, Hignett and Stack decided to re-tub their SR2 class contender.

"I seem to remember Mike Pilbeam talking us into buying a new chassis," recalls Hignett, "but then ours did have a significant repair at the front."

A new monocoque was a big investment for a young team struggling for finance, which is why Hignett loaded up the old chassis, #01, and drove it to the local scrapyard.

"We had no money, we were on our uppers, and no space to keep the thing," he continues. "I weighed it in at the local scrapper and got £92. I still have the receipt somewhere."





### Made in Britain, destroyed in Germany

#### TOM'S TOYOTA LMP

Toyota never really went away from Le Mans after its 3.5-litre TS010 Group C car was legislated out of the race in 1993. It kept its toe in the water with a series of low-key projects through the mid-1990s, but by the end of the decade was looking to make a proper return.

TOM'S GB was given a small amount of seed money — reportedly just £500,000 — to produce a generic LMP prototype that ran for the first time in July 1996. Designed by Andy Thorby, the open-top car, known as the TOM'S Toyota LMP, was powered by a 2.1-litre four-cylinder turbo Group C engine of 1980s vintage.

"That was the only engine we could get," recalls Hiroshi Fushida, who ran the British TOM'S operation. "But we thought a lightweight car with a fuel-efficient engine could result in a package that could be competitive overall."

The car tested twice before Toyota decided its full-house Le Mans return would be run from Toyota Motorsport GmbH in Cologne. Andre de Cortanze, designer of Peugeot's 905 Group C car, was recruited to head up the project, and the TOM'S Toyota was sent to Germany.

Exactly what he made of the car nicknamed 'Lumpy' isn't known. But he almost certainly didn't spend too much time on it as he began work on what became known as the Toyota GT-One.

John Litjens, now technical director on Toyota's LMP1 project, was a young engineer with TMG when the project started in January 1997, and suggests that de Cortanze's belief in original thinking meant he wouldn't have been interested in someone else's design.

"Andre was an innovator," says Litjens. "He didn't even like his engineers looking at Giorgio Piola drawings in the pages of Autosport and *Autosprint*. He wanted his engineers to be creative and not copy other people's ideas."

Litjens and others confirm the car was quickly forgotten and ultimately crushed.

#### A Rover lost in the sands of time

#### **ROVER 800 DAKAR PROJECT**

There must have been innumerable motorsport projects that were well under way before chassis, engines and whatever were destroyed long before making it onto the race track or rally stage. Or, in the case of this interesting tale, the desert.

Austin Rover had a Paris-Dakar Rally car on the stocks over the winter of 1986-87 based on, of all things, a Rover 800. The project had started life as a feasibility study for the stillborn Group S category, which ended up as collateral damage when Group B was axed three days after Lancia superstar Henri Toivonen and co-driver Sergio Cresto lost their lives on the Tour de Corse in May '86.

Austin Rover Motorsport boss John Davenport came up with a plan to follow Peugeot's lead by switching from the World Rally Championship to the rally-raid arena. The seven-eighths scale

rear-engined Rover 800 silhouette car would become an off-road special.

Bernie Marcus, who led the design on the project, remembers a car that was to be powered by the Austin Rover 6R4 V6 (right) getting a long way down the line.

"There was definitely a chassis and work was under way on the body at a place in Bicester," he recalls. "We were working with Xtrac, I think, on a new transmission and Bilstein on the suspension.

"The plan was to do the Paris-Dakar in 1988 and some events like the Pharaohs Rally beforehand. Tony Pond was going to be one of the drivers."

The project came to a shuddering halt when Davenport suddenly left Austin Rover at the end of March 1987 at the beginning of the sorry tale that resulted in his incarceration. New management moved in and the Austin Rover



competitions department was reduced to little more than a stores department for 6R4s and Metro Challenge cars.

Marcus had left by the time the curtain came down in mid-1987, but he learned that everything to do with the 800 Dakar car was destroyed. "I know they collected the chassis from the composites place and crushed it," he says. "It all got destroyed."

### A love affair broken up

#### PORSCHE 911 GT3-R CHASSIS WP0ZZZ99ZYS692079

A Yorkshireman he may be, but sportscar stalwart Tim Sugden is a big softie with a deep passion for motorsport. He fell in love with a car in which he enjoyed a lot of success over multiple seasons. That's why he bought it — and why he still sheds a tear when he thinks of its ultimate fate.

Sugden raced Porsche 911 GT3-R — chassis number WPoZZZ99ZYS692079 — every year between 2000 and '05, starting out in the FIA GT Championship with the EMKA Racing team. He came close to the GTO title in British

GTs in '02, before notching up two impressive FIA GT class wins in '03 at Enna and Anderstorp with Martin Short and Emmanuel Collard respectively. He also raced the car at the Le Mans 24 Hours in '04 after its sale to Ian Khan and the death of EMKA boss Steve O'Rourke.

"If it hadn't had to be reshelled, I'd still have that car"

The following year, 'Suggie' ended up buying his old 911 GT3-R, which had undergone a series of updates, including the seam-welding of the shell, by Ricardo Engineering early in its life. He'd played a key role in the establishment of Kenny Chen's GruppeM team, which was going to contest the Le Mans Endurance Series as well as running Porsche's factory squad in FIA GTs.

"I bought it because we needed an extra car for the LMES and because it was a nice thing to have," recalls Sugden. "I really wanted to own that car because of my history with it."

The Porsche met its demise during a dank and miserable Silverstone 1000Km day-night race in an innocuous-looking accident at Luffield that still frustrates Sugden to this day. He was momentarily blinded by TV pictures being shown on a giant StarVision screen.

The chassis was irrevocably damaged, meaning the car had to be reshelled. Porsche's policy

in such cases is to demand the return of the original shell for destruction for both reasons of safety and to prevent 'ghost' cars leaking onto the market.

That means that a Porsche 911 GT3-R, chassis number WPoZZZ99ZYS692079, is out there, but as far as Sugden is concerned it's not the car he came to love.

"If it hadn't had to be reshelled, I'd still have that car today," says Sugden. "It wasn't the same car as far as I was concerned."



# Loeb's two new challenges

He's more relaxed than during his World Rally days, but Sebastien Loeb has two big targets for 2018

#### By David Evans, Rallies Editor

**y** @davidevansrally

part from a little more salt-and-pepper in the stubble, Sebastien Loeb hasn't changed a bit. Behind the contractually placed sunglasses, those blue eyes still seek one thing: coffee; espresso.

Short, punchy, powerful — that's the fresh-roasted Kenyan beans as much as the nine-time world champion. Loeb looks as ready as ever to take on

a new challenge. Nineteen years on from his first manufacturer involvement in world motorsport, he's back for another season-long, factory-backed title shot. Back then it was Citroen and rallying. Now it's Peugeot and rallycross.

The 43-year-old has been competing in World Rallycross for the past two years with Peugeot Team Hansen, but now everything's changing. Now Peugeot is really coming to the table.

Peugeot CEO Jean-Philippe Imparato outlined the Parisian firm's intentions in October, confirmed the commitment and added: "Our ambassador Sebastien Loeb will be coming with us in this daring new adventure. The goal of the 2018 season will be to win the title."

It's what Loeb wanted. Before the deal was announced, Loeb was frustrated at the semi-works team's inability to cope with the all-conquering alliance of Petter Solberg's team and Volkswagen Motorsport.

# "I want to win the Dakar, of course I do, it's why I'm going, but it's tough"

Put plain, if Peugeot didn't sign, Loeb would walk.

Peugeot wasn't about to make the same mistake its PSA stablemate made two years ago almost to the day, when Loeb was dropped from Citroen's World Touring Car Championship team. A seething Sebastien had told Autosport he was as surprised as anybody at the decision not to retain him for the expected third season in the WTCC.

"For me," said Loeb at the time, "it was natural to continue with Citroen. We already spoke about it with [team principal Yves] Matton. But then they changed their mind...

"If they [Citroen] would have asked me to do one or two rallies, then yes, why not? If they ask me now, I don't think so."

Loeb's return to a Citroen World Rally Car at two tests earlier this season signalled a softening in that line. Indeed, there's much chatter about Loeb competing for the reds from the other side of town again in 2018. Mexico and Corsica are the current favourites for his return.

Loeb smiles, he's heard all of this before. And anyway, he's got plenty on his plate to be thinking about for the time being — the Dakar Rally's looming large again.

"I think it could be the last one [for me]," he says. Certainly, it will be for Peugeot, and Loeb's unlikely to find another manufacturer so ready to wrap a programme around him.

Next month will be his third attempt at the South American marathon. He's certainly left his mark on the first two. Setting a pace few could hope to keep up with on both events, he crashed first time out and hit mechanical trouble last year.

Loeb's not the kind of driver who gets hugely animated about the prospect of a win — that may have something to do with the 78 World Rally victories he's already tucked under his belt — but you can tell a Dakar victory would mean something special. "I want to win," he says, "of course I do, it's why I'm going, but it's really tough."

More tough than he expected? "No," he says. "I knew it would be difficult. I know in the rhythm of driving I am quite good and usually faster than my team-mates, but then we lose some time in the navigation. Daniel [Elena, co-driver] does well, but last year Stephane Peterhansel's co-driver [Jean-Paul Cottret] has so much experience. Last year he did maybe no mistakes. But then we had our problem when the car stopped for half an hour."

Loeb's run in to next month's Dakar hasn't exactly been trouble-free. He led on the Silk Way Rally debut for Peugeot's 3008DKR Maxi, but rolled end over end when he was caught out on a dried river bed in China. In Morocco,

October's final competitive dress rehearsal, Loeb was leading again, only to fall foul of a broken damper.

"So much of Dakar is about experience," he says, with just a hint of frustration. "Every time you make a mistake, you have this experience and you can take this experience on to the next time — but it takes so long and so much time to get this experience. Some of the guys competing have been here for more than 10 years and they know so much about it."

Peterhansel is just that man. Nobody knows the Dakar like Loeb's countryman. Off-road racing is a unique discipline in which patience regularly pays great dividends.

The 13-time Dakar winner can understand Loeb's frustration. "He is so fast," says Peterhansel. "We can see, when the road is like the WRC in places like Argentina, he is so fast, we cannot compete with that. But this race is long..."

There's no fast-tracking here. You serve your time or the Dakar bites you. Time and again.

"We've only done six rally raids, which means that we are always going to be lacking in experience compared to the others," adds Loeb. "But the Peugeot has evolved and myself"







and Daniel have made progress as well. We're better in every way. The Dakar is by nature unpredictable, so we're giving ourselves every advantage we can to try and win it."

This not-winning thing is so alien to Loeb. On his full World Rally Championship debut in a factory Citroen Xsara WRC, he came within 11.4 seconds of beating Gilles Panizzi on the 2001 Sanremo Rally.

A few months later he lost the Monte in the stewards' room after Citroen illegally changed his tyres. But that summer, he won in Germany. And the year after he won three times and missed the world championship by a single point. And then won the next nine in a row.

For a career winner, not winning must hurt. "No," he smiles, toying with his espresso cup, pondering another. "It doesn't hurt me because I enjoy what I am doing. For sure, I prefer it when I win, but it's a bit different now. I enjoyed the challenge of touring cars and it's the same with the rallycross. I enjoy what I do. I spend some good weekends fighting with the other guys, but I accept that today I drive because this is my passion."

Loeb endured something of a baptism of fire last year, when his fellow World RX racers seemed desperate to find a way around — or even over — his Peugeot. Everybody had a point to prove with Loeb. Since then, two things have changed: he's become (as much as he ever can become) just another face in the paddock; and the organisers have clamped down on driving standards in the series.

"It's definitely better now," he says. "Competing in touring cars helped me a little bit with the racing, but rallycross there was much more contact. For sure, in rallying it was easier for me to win; you do your job yourself: you are fastest, you win. You don't have to fight with the other guy in the same corner and the other guy cannot destroy your race."

In another world, could Loeb have won nine rallycross titles? "When I started in rallying, rallycross wasn't at the same level that it is now," he says. "I don't know. For the reasons I said, it's maybe harder to win in rallycross. I think I have the potential to win [the title] in rallycross, but if you lose one second then your race can be finished. Everything is so close to the limit in rallycross. When we were in rallying, if you lose one second because you brake too late for one corner, then OK, you can make this time back later in the stage."

Rallying remains Loeb's first love. His recent Rallye du Var outing in his own Peugeot 306 Maxi is testament to that. He was a man completely at one with his surroundings in Sainte-Maxime. The naturally aspirated front-wheel-drive racer screamed its way along France's south coast, to the delight of Loeb and the thousands who had turned out to watch.

The odd WRC outing with Citroen next season would be nice and would, no doubt, give him a kick. But these days, the real buzz comes on the line waiting for the start of another RX race.

"The adrenalin on the line is still amazing," says Loeb. "You have all of these cars going for one corner and the acceleration





Loeb could be back in the WRC part-time next year. His last win was in Argentina in 2013



is incredible. You don't get this feeling on a rally - when you go from the line you are alone."

Most importantly these days, rallycross gets the seal of approval from Loeb junior. His daughter Valentine is a fan of her father's move from rallying to rallycross.

"I think it's more exciting for the fans," says Loeb Sr. "My daughter, for example, she prefers the rallycross because she can be in one place and be with me for part of the day. Then she's stressed and excited during the racing and she can see some action. For people who have the passion, they enjoy the rally car sliding around on the stage, but for the little girl it's more exciting for her to see the cars fighting, then one car wins and it's over."

One person who's not getting stressed is Loeb himself. He's rarely looked so relaxed. Naturally, he wants to win and there's part of his motorsport process that means it still feels quite alien not to be standing on the top step of the podium every other week. But he's moved on. Today it's about the thrill of competing and the buzz of going into corners doorhandle to doorhandle. Yes, there are airports involved for him in a 12-round world championship, but he's arriving on a Thursday and out of there on a Sunday. With no recce and less testing, the time he's spending staring at the inside of an aeroplane is much more acceptable.

Loeb's relaxed demeanour allied to factory-level support from Peugeot will make him a very much more potent threat in World Rallycross next season.

And it could be enough to mark the end of his time away from the world championship winners' circle. \*\*



#### LOEB ON HIS F1 SHOT

A SIXTH WORLD RALLY Championship title had just been clinched, yet all anybody wanted to talk to Sebastien Loeb about was Abu Dhabi and the chance for him to make his competitive Formula 1 debut.

Having tested a Red Bull, Loeb was invited to drive a Toro Rosso vacated by Sebastien Bourdais at the final race of the 2009 season. Ultimately, the powers that be wouldn't allow it and declined Loeb a superlicence. But, even if the paperwork had come through, Loeb admits he still wasn't keen.

"I wasn't prepared to drive a car which wasn't capable of winning," says Loeb. "I didn't have a specific ambition.

"I'm not sure that would have been the best thing. Without the full preparation, it's not easy. You see today with a lot of young drivers who are talented, but not in the best team or the best car and not getting the full test before the race, to be at the end it's not easy. I don't think this race would bring anything too important to my career.

"I'm more happy that I had the opportunity to test this [Red Bull RB4] car and I still believe driving

in rallies suits better to my personality and my driving; I have no regrets about not going to Formula 1."

After running the RB4 at Silverstone in 2008 and winter testing at Barcelona the following year, Loeb admitted it was the stopping – not the starting – that really excited him.

"People talk about the power of a Formula 1 car," he says, "but you forget about the power after two laps. It's not that which is most impressive. The power of the Pikes Peak [Peugeot 208] going up the hill is more impressive than the Formula 1 car on the track. What was impressive in the Red Bull car is to ask yourself, 'Where are the limits? Where is the limit in the really high-speed corners? Where's the limit for the braking?'

"I remember the braking point at the end of the straight at Barcelona is at 80 metres [from the apex] and you are arriving at 320km/h, you feel like the corner is just here, right in front of you and yet you are still flat on the throttle. The sensation to get this feeling in the mind and to know the limit is there was just so impressive."



# WEB DIRECTORY

Inconel & Stainless Steel Specialists

Tel: 01753 532222

Exhausts

#### AWNINGS



No1 for Inflatable Structures. With you from the Paddock to the Podium. www.aireshelta.com

#### **HELMET GRAPHICS**

### Mike Fairholme Designs

Sole approved painter of Arai helmets. Silver Birches, Corby Birkholme, Nr Grantham, Lincs NG33 4LE. Tel: 01476 550630. Fax: 01476 550029. email: fairholmedesigns@btconnect.com

www.fairholmedesigns.co.uk

#### **MOTORSPORT LEGAL ADVICE**

MOTORSPORT CONTRACTS AND LEGAL ADVICE (NATIONAL AND INTERNATIONAL)

> **CALL JAMIE CHAMPKIN** 07880 96500

info@champkin.uk.com - www.champkin.uk.com

#### **RACE RADIO**



**MEMORABILIA** 

www.simpsonraceexhausts.com



**GEARBOXES** 

<u>Gearboxman.com</u> COMPETITION TRANSMISSION SERVICES

Gearboxes & Axles for Road, Race, Rally and more

Telephone: 01582 840008 Fax: 01582 840007

#### **MOTORSPORT LEGAL ADVICE**

**Motor Sport Legal Advice** Tudor Alexander, Ll.B Solicitor tudor@fletcherday.co.uk 07887 713512 Fletcher Day 56 Conduit St Mayfair London W1S 2YZ

#### **RACE PARTS**





#### **RACING**





#### RACING

# www.mcrracecars.co.uk MCR's for sale arrive & drive packages

#### **RACING**



# PORSCHESHOP

10% off with website voucher code **AUTOTEN** 

Or Call: 0121 585 6088

#### **RACEWEAR**





www.demon-tweeks.co.uk

#### **TRAILERS & TRANSPORTERS**



#### **TRAILERS & TRANSPORTERS**



**BRIAN JAMES TRAILERS** >> Connected to you

www.brianjames.co.uk





TO ADVERTISE IN THE WEB DIRECTORY PLEASE CALL **0203 405 8109** OR EMAIL ads@autosport.com



# Speed is of its essence

Built to outperform, the Race Transporter 6 has been designed around your race weekend.

Light-weight materials and clever design provide strength throughout. Combined with a proven wheels under the bed chassis and advanced suspension your journey with a Race Transporter will be competent and comfortable.

In the paddock the Race Transporter 6 includes many specific race weekend orientated features providing a comfortable work environment. Tyre and equipment storage is available in several places, with enhanced options also offered. Interior lighting, remote controlled electric winch and a full set of side doors with hatches all contribute to making loading effortless and speedy.

Race Transporter trailers are available from £ 7,499 + vat

Race Transporters are available ex-stock at many UK dealers Please visit our website or call us for further details.



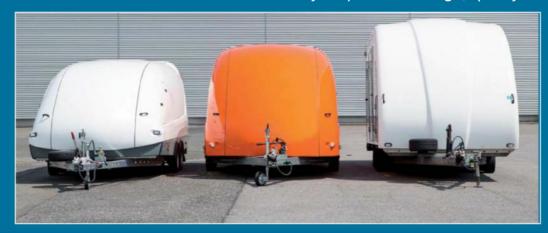


T +44 **(0)1327 308 833** 

For more information and details on the Brian James Trailers range, please contact our head office

# **QUALITY THAT WE ARE PROUD OF**

Woodford GRP covered trailers - Value for money. Superior in design, quality and finish



#### DEALERS WANTED - All Woodford Trailers have full European Type Approval







#### **WOODFORD TRAILERS DEALERS UK**

#### **POTHSMOUTH**

BLENDWORTH TRAILER CENTRE Tel: +44(0)2392 412731 E: sales@blendworthtrailers.co.uk W: www.blendworthtrailers.co.uk

#### LONDON

**VINTAGE & PRESTIGE FINE** MOTORCARS Office ++44 (0) 1442 236711 Mobile ++44 (0) 7967 260673 E: richard@vandp.net W: www.vandp.net

#### LONDON-KENT

SOUTHEAST TRAILERS 498 London Road me206bz Tel: 07933842719 E: ellisviner@btinternet.com W: www.southeast-trailers.co.uk

#### **SOUTH LONDON**

SOUTH LONDON TRAILER CENTRE Hackbridge Station Depot London Road Wallington, Surrey, SM6 7BJ Tel: 0208 647 0110 Mob: 07836 224250 E: steve@sltc.co.uk

#### **WINCHESTER**

TRAILERTEK LTD Warren Farm Micheldever Station Winchester, Hampshire SO21 3AS E: info@trailers.co.uk

#### **SLOUGH**

BERKSHIRE COUNTY TRAILERS
Mobile: 07853263484 Tel: 01628 559782 E: sales@berkshirecountytrailers.co.uk W: www.berkshirecountytrailers.co.uk

1 STOP TRAILERS Tel: +44 (0)1787 249737 Tel: +44 (0)7850 554776 E: 1stoptrailers@mail.com W: www.1stoptrailers.co.uk

#### **BRIGHTON**

HALF MOON BAY (LEISURE) LTD Smart-Trailers.co.uk Monastery Lane Storrington, West Sussex RH20 4LR Tel: 07950 968348

> E: Alan@Smart-Tow.com W: www.smart-tow.com

#### **LEICESTER**

MARSDEN BARN TRAILERS Unit 1 Marsden Barn Huncote Road Stoney Stanton Leicester LE9 4DJ Tel: 01455641367 Mob: 07968888624 E: marsdenbarntrailers@gmail.com

#### **NOTTINGHAM**

APPLEYARD TRAILERS The Kennels Strelley NG8 6PD Te:.01159293901 Mob:0785075014

#### MID WALES **HUMPHREYS & FOULKES**

Unit 6

Lion Works Pool Rd, Newtown Powys SY16 3AG Tel: 01686 628144

#### **LEEDS**

ROTHWELL TRAILERS 126 Wakefield Road Rothwell Leeds LS26 OSB Tel: 01132887179 E: sales@rothwelltrailers.co.uk W: rothwelltrailers.co.uk

#### READING

LOVELL TRAILERS James Farm James Lane Grazeley Green Reading RG7 1NB Tel: 01183240403 E: sales@lovelltrailers.co.uk W: www.lovelltrailers.co.uk

#### **NORTHERN IRELAND**

MONTGOMERY MOTORSPORT Tel: 0044(0)2885549851 W: www.montgomery-motorsport.co.uk



HIGH QUALITY TRAILERS FOR CLUB, PRIVATE AND PRO MOTORSPORTS

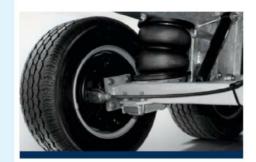
Woodford Trailers Limited • 14 Great Central Way • Daventry • Woodford Halse • Northants • NN11 3PZ Telephone: 01327 263384





# TAILORMADE TRAILER FOR THE U.K.

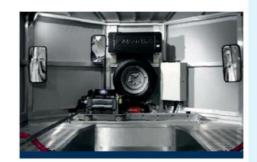
Each trailer is tailored made to each customer's requirements, the dimensions and configuration are bespoke. We are able to create payloads up to 2500 kg – available as tarpaulin or solid construction. Moetefindt has over 35 years experience in building individual trucks & trailers.



AIR SUSPENSION SYSTEM
The trailer tilts automatically and the system is maintenance-free.



ALUMINIUM CONSTRUCTION
Complete alloy chassis giving the system the lowest empty weight.



INDIVIDUALLY EQUIPPED

Extensive variety of options to build the perfect solution to meet all requirements.

www.moetefindt.co.uk www.facebook.com/moetefindt



W.HOPKINSMOTORSPORT.COM



Telephone (44)1179 509 294



NEW & USED RACE
TRANSPORTER & HOSPITALITY
VEHICLES FOR ALL FORMS
OF MOTORSPORT

SALES • BUILD • RENTAL • REFURBISHMENT

Bespoke designs to your requirements







In build for March 2018 delivery, identical trailer to above.

Multipurpose Race transporter that will carry two of most sized Sports or Touring cars. c/w Large office with two slide out pods. Fully fitted workshop. Generator and compressor as required.

PRICE FROM £235,000+VAT

TRAILERS & TRANSPORTERS



#### **Available March 2018**

3 Identical new build race transporters. Top deck carrying capacity 3 cars max height 1500mm. Lower deck carrying capacity 2 cars or equipment as required. Lower deck that converts to engineers andmanagement offices at the race circuit. 9kw silent generator, 2,500kg Dhollandia lift, Stegmeir Awning. Price £210,000 +vat each.





Lower deck as engineers room



Lower deck as bulk storage/ car carrier



3 Car top deck



#### **BESPOKE TRANSPORTERS**

Built to suit your requirements and budget, orders being taken now for builds on new and used chassis.

WWW.HOPKINSMOTORSPORT.COM 0117 950 9294

### **IMMEDIATE AVAILABILITY**

A unique opportunity to purchase a Brookland Speed trailer solely used since new by Stuart Leonard, 2017 Blancpain Sprint Champion. Built to a high bespoke specification this trailer was maintained and operated by Pro-Drive in 2015 and WRT in 2016 & 2017. This transporter has not been used other than with these teams and it has been maintained to the highest standard as expected for participants in the Blancpain Championship. This trailer is currently at Brookland Speed for its annual MOT and year-end overhaul to include removing the current team graphics so as to return external and internal paint work to an as new all-white condition.

The SP3000 is a full EU VCA-approved trailer, meaning that the transporter does not have to be approved for individual European markets. Brookland Speed trailers carry a whole vehicle homologation and are supplied with a certificate of conformity.

The SP3000 is capable of carrying up to three vehicles of up to 1,500mm in height, and comes with a fully platformed tail lift capable of lifting up to 2,500kg. The luxuriously appointed transporter includes twin electro-hydraulically assisted slideout pods with flat floors. The enlarged pod area can be used as an air-conditioned office space with leather seating, storage spaces, large flat screen televisions, a central table and fridge. The office is also pre-wired for a trackside data link.

£185,000 + VAT if applicable



In the first instance, please contact Derrick Rowe at DPR Motorsport for further details and to arrange a viewing.

T: 01736 906666 / derrick.rowe@dpr-motorsport.com

# TRAILERS & TRANSPORTERS



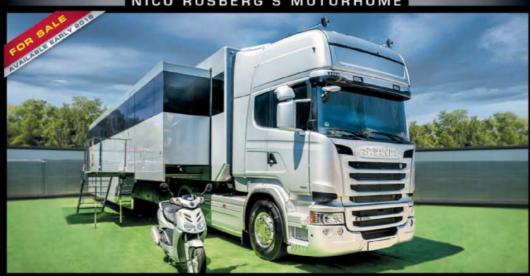


Large Selection Of Both New & Used RVs Serving The Motorsport Industry For Over 26 Years.

# LUXURY MOTORHOMES VISIBLY LOUD

#### FOR SALE! 2016 FORMULA 1 WORLD CHAMPION

NICO ROSBERG'S MOTORHOME I







PRICE AND ADDITIONAL INFORMATION UPON APPLICATION FULL SIZE IMAGES FACEBOOK.COM/LUXURYMOTORHOMES

ARTICULATED DREAM · GENERATION II
BESPOKE MANUFACTURED LUXURY MOTORHOME





CUSTOM BUILT CHASSIS • TAILORED DESIGN & FLOORPLANS
2, 3 or 4 SLIDEOUTS • FINISHING TO THE HIGHEST OF
STANDARDS • FINEST FIXTURES & FITTINGS • PRIVACY GLASS
GAGGENAU KITCHEN APPLIANCES • WALK-IN WARDROBES
IMAGES & INTERIORS # FACEBOOK.COM/LUXURYMOTORHOMES

HAVE A MOTORHOME? WE PROVIDE TAILORED MOTORHOME MANAGEMENT SOLUTIONS TO RACING DRIVERS.



TEL: +44 3333 44 55 15 • WWW.LUXURY-MOTORHOMES.EU • 2017@LUXURY-MOTORHOMES.EU

# **MARKETPLACE**



# **MAUTOSPORT**

If you wish to advertise
your products and services
with Autosport in print
and online please contact
Ben.kavanagh@
motorsport.com
or call
0203 405 8109





#### **RACE PREPARATION**



Historic Engine Specialists

Ford Cosworth BDA/BDG,

Lotus Twin Cam, BMW MlO



Craig Beck Racing Ltd T: **07876 221 932** 

E: craig@craigbeckracing.co.uk

www.craigbeckracing.co.uk



#### **RACE PRODUCTS**



#### **RACE PRODUCTS**



# **MARKETPLACE**







**PROPERTY** 



**PAINT PROTECTION** 



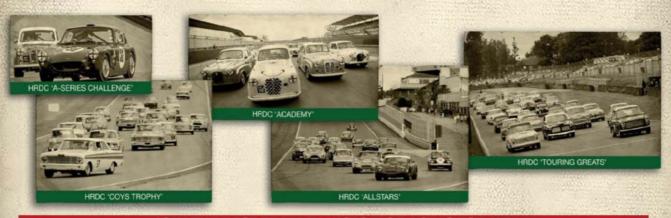


# HRDC 2018 RACE CALENDAR

HRDC 2018 SEASON
PROVIDES THE THRILL
WITHOUT THE FRILLS!



The state of the s			The second section of the second second	ALA PROPERTY.	the state of the s	and the second	THE VICTOR	TO STATE OF THE ST			- 10 CONTRACTOR
Date	Venue	Event	Content	Duration	Invited Touring Greats	Invited TC65	Invited TC63	Invited Coombs	Invited Academy	Invited Alistars	Invited A-Series Challenge
26-Mar	Goodwood Track Day	Track Day	HRDC	Full Day	<b>(D)</b>	65	693				
06-Mar	Goodwood Track Day	Track Day	HRDC	Full Day	0	695	693		0	(a) (m)	
01-Apr	Silverstone Club	Race Day	Coys Trophy	45/25	8	6=5	693		9		
01-Apr	Silverstone Club	Race Day	Allstars	30/15	8	625	693		0	(C)	
4-6 May	Donington Festival	Race Day	Coys Trophy	45/25	8	625	693		0		
4-6 May	Donington Festival	Race Day	Touring Greats	45/25	8		683		0		
03-Jun	Brands Hatch	Race Day	Touring Greats	45/25	0		693		0		- 4
03-Jun	Brands Hatch	Race Day	Allstars	30/15	8	625	683		0	<u>6</u>	
08-Jul	Snetterton	Race Day	Coys Trophy	45/25	8	625	693		0	tanan tan	
08-Jul	Snetterton	Race Day	Allstars	30/15	8	685	693		0		
02-Sep	Mallory	Race Day	Allstars	30/15	8	695	693		0		3=
02-Sep	Mallory	Race Day	Academy / A-Series Challenge	30/15					0	64.000	
14-0ct	Donington	Race Day	Touring Greats	45/25	8		693		0		
14-0ct	Donington	Race Day	Allstars	30/15	8	625	693		0		
14-0ct	Donington	Race Day	Coombs	30/15		The state of					



#### JOIN THE BEST TEAM IN HISTORIC RACING TODAY!















**COMPETITION ENQUIRIES** Email: direct@juliusthurgood.co.uk • Tel: 07850 361159 • www.hrdc.eu



# **EUROPE'S MOST INNOVATIVE MOTORSPORT SHOW**

INFLUENTIAL GROUNDBREAKING ADVANCED



11TH-14TH JAN 2018

REGISTER NOW

11TH-12TH STRICTLY TRADE-ONLY DAYS



# Various positions available for F1 experts to strengthen our future-focused traditional team!

To further expand and strengthen our team and to reach our ambitious targets, we are looking for experienced, passionate and highly motivated new colleagues and team players with a corresponding Formula 1 background in the following areas:

- Aerodynamics
   Senior Aerodynamicists / Aerodynamicists / CFD Engineers
- Design Office (Design & Calculation)
   Mechanical & Composite Design / Structural Engineering
- Vehicle Performance
   DIL Simulator Experts

We are looking forward to receiving your application via hr@sauber-motorsport.com

Sauber Motorsport AG Rolf Matsch, Human Resources, CH-8340 Hinwil hr@sauber-motorsport.com / www.sauberf1team.com

# **MOTORSPORT JOBS**

# MAUTOSPORT

Want to advertise a motorsport job? If you are recruiting in motorsport and wish to advertise with Autosport in print and online please contact Jonathan.King@motorsport.com or call 0203 405 8110

For all current vacancies advertised please visit our website www.autosport.com



INTERNATIONAL LIMITED

Stanwell, Middlesex, TW19 7AU England. Tel: +44 (0)1784 247407

Unit B, 201 Long Lane,

Fax: +44 (0)1784 244266

#### The World of Sports Promotion

Organisation of International Sports Promotion and Events at the highest level requires knowledge, commitment and professionalism. Procar has these qualities and a proven track record, which makes it a leading consultant within this specialised field.

Whatever and wherever the sport, whatever and wherever the promotion.

#### Rigger, Operators for Promotions / Exhibitions / Events

We are currently looking for enthusiastic Riggers with experience at events, a LGV Class 1 Driving Licence and 35hrs Drivers CPC Accreditation to assist in the transportation, setup and operation of hospitality and promotions vehicles in the UK and continental Europe.

You will be a responsible rigger and driver, self motivated, versatile, very fit, smart and willing to learn new systems, able to work alone or supervised, to communicate at all levels, have a pleasant and approachable nature and a good sense of humour. You will be attending prestigious events and promotions, with periods away from the UK.

The Position is seasonal

The ideal candidate will have been involved in rigging at events and have a current clean LGV Class 1 licence Knowledge of electrical & AV systems / equipment and experience in the transport/promotions field would be an advantage.

Please reply in writing, enclosing current CV to: Procar International Ltd., Unit B, 201Long Lane, Stanwell, Middlesex TW19 7AU.

Or email your CV to kathy.rogers@procar.co.uk

www.procar.co.uk

No agencies and no previous applicants need apply.

Procar International Ltd. Registered in the UK Reg No:





### WE WANT YOU ON OUR TEAM

At McLaren we are totally committed to one objective.....To Win

Within the inspirational McLaren Technology Centre we are constantly striving to develop a high performance culture. This focus and passion to encourage innovation, and the uncompromising commitment to achieve extraordinary things has enabled is to create one of the most successful and prestigious race teams in world motorsport.

**AERODYNAMICS PERFORMANCE ENGINEER CONTROL SYSTEMS TRACKSIDE ENGINEER GEARBOX TECHNICIAN RACE TEAM MECHANIC** SENIOR AERODYNAMICIST SENIOR ENGINEERING SYSTEMS ANALYST SENIOR STRESS ENGINEER SIMULATOR CONTROL ENGINEER

To apply please visit http://bit.ly/RacingCareers



Mercedes-Benz has been setting the standard in racing for over 100 years, and the Mercedes-AMG Petronas Formula One™ Team continues the proud history of the legendary Silver Arrows. We have some exciting opportunities at our Championship winning team within our Aerodynamics and Simulation and Modelling Departments.

MODEL DESIGNER

We are looking for a Model Designer to work alongside our Aerodynamicists and other skilled specialists, turning ideas into reality within tight timescales. The main responsibilities include designing model parts and / or the surfacing of concepts under the guidance of Aerodynamicists. Applicants should have established competences in wind tunnel model design, ideally using CATIA v5 in a motorsport environment or similar.

Closing Date: 29 December 2017

SIMULATION AND MODELLING ENGINEER

Reporting to the Head of Simulation and Modelling, the successful candidate will be responsible for developing and maintaining our vehicle models and simulation toolset. We are looking for pragmatic engineers with the appropriate mathematical, modelling and vehicle dynamics skills along with the ability to write quality code

Closing Date: 28 January 2018

We invest in our greatest asset: people. They embody our values: Passion, Respect, Innovation, Determination

We succeed when everyone delivers their tenth of a second. No matter which area of the team you work in, you will determine how we perform on and off the track.

Every person here takes immense pride in playing their part to the highest standards. Each and every day. Working here is fast. It demands technical excellence and teamwork. And it calls for great reserves of motivation and resilience.

Own your tenth of a second. Play your part. Join us.

To find out more, visit: http://careers.mercedesamgf1.com/vacancies



# <u>AUTOMOTIVE</u>

THINKING of all our customers this Christmas From everyone at Think Automotive, Merry Christmas & a Happy New Year



www.proshift.com
The Pro-Shift team wish
all our past, present

all our past, present and future customers a successful racing season for 2018.



Cartek Motorsport
Electronics would like to
wish Merry Christmas to
all of our distributors and
customers. We look forward
to having another
successful year
in 2018!



Wishing all our customers & suppliers past, present & future a very merry Christmas and a successful new year!



#### MARDI GRAS MOTORSPORT

Mardi Gras Motorsport would like to wish all of their customers and suppliers a Merry Christmas and Prosperous 2018



Thank you to all our customers for a great year.
Merry Christmas & a Happy New Year.



A big thank you for an amazing year.
Wishing you all a very merry Christmas and a winning 2018!



GLENCOE thanks all our Customers, and wish you and Motorsport Enthusiasts a Happy Christmas & New Year!

#### **WAUTOSPORT**

Merry Christmas and a Happy New Year from everyone



Merry Christmas and a Happy New Year



Would like to wish all their customers a Happy Christmas and a successful 2018 racing season.



All at Xpel thank our customers for a great 2018. Merry Christmas & a Happy New Year



The management and staff at GPR wish all their customers and friends a Merry Christmas and a Successful 2018!



Merry Christmas and a Happy New Year!



Best wishes for a Happy Christmas and a Prosperous New Year from all at ATL

### G/NETTA

Ginetta Christmas and Championship Winning New Year





AUT OSPORT XMAS BOX

#### DRIVER PROMOTION



#### **PROFILE**

AGE

FROM London

#### **RESULTS**

2017 Super One Junior X30, 2nd

> **Kartmasters Grand Prix:** OK Junior Class, 3rd

Super One MiniMax, 12th

**Kartmasters Grand Prix:** MiniMax, 4th

2013 Super One Comer Cadet, 7th

Super One IAME Cadet, 8th

ABkC '0' Plate Comer Cadet, 3rd



IN ASSOCIATION WITH **MAUTOSPORT** 



# Sean Butcher

THE 2017 SEASON HAS ESTABLISHED SEAN Butcher as one of the top talents in British junior karting.

Facing sturdy competition, with more than 50 drivers lining up to take on the Super One Junior X30 class at some rounds this season, Butcher's achievement of scoring second place in the championship is even more impressive given his return to the sport following a two-year absence.

Butcher's success since joining the junior ranks has been swift, culminating in a comfortable victory in the final race of the Super One season at PF International, on slick tyres on a damp track.

London-based Butcher first got a flavour for karting aged six after visiting the Bluewater Shopping Centre. The youngster enjoyed his first experience of driving at the Kent circuit in an electric kart, before progressing to a Bambino machine and a small class of drivers that included 2015 Formula Kart Stars Junior champion Tom Wood, who was quickly establishing himself as one to beat.

In 2010, aged seven, Butcher progressed to the stronger Honda Cadet class at non-MSA events held at venues including Buckmore Park, Bayford Meadows and Red Lodge.

It was 2005 world karting champion Oliver Oakes who persuaded Butcher to move into the Comer Cadet class following a training session at Ellough Park, and he made the switch into Super One for the first time

following his eighth birthday in 2011.

Competing alongside future British and World champion team-mates Dean MacDonald, Dexter Patterson and Lando Norris, Butcher began scoring podium finishes against older opposition in Wood and future British F4 race winner Alex Quinn. Butcher's top-three finish alongside both at Larkhall in 2013 marked him out as a future race winner.

With racing commitments leaving precious little time for anything else at such a young age, Butcher, who has dual British and Australian nationality, opted to focus on school and a two-year break from the sport.

But with the racing bug well and truly returned, his success with the Mick Barrett Racing team this season has elevated him to be a serious contender as he graduates into next year's Senior X30 class.

Butcher's car-racing aspirations are a refreshing change to those aiming for the limited seats available at the pinnacle of single-seater racing. A touring car fan, he is targeting a move into Formula Ford 1600 in 2019 before a long-term career in tin-top racing, with an ultimate aim of competing in touring cars in the UK or Australia.

With Australian parents, family loyalties are presently divided when it comes to other sports, particularly in cricket, which Butcher enjoys playing while attending London's Dulwich College.

#### **CONTACT DETAILS**



# CLUB AUTOSPORT

NATIONAL RACING • HISTORICS • HILLCLIMB • TRACK TESTS • FEATURES



**BRITISH G1** 

# **Ex-champ Cocker in British GT return**

FORMER BRITISH GT CHAMPION Jonny Cocker will return to the series as part of an expanded Barwell Motorsport line-up next year that also features 2006 GT3 title-winner Leo Machitski.

Mark Lemmer's team will add a third Lamborghini Huracan GT3 to its traditional two-car entry for the domestic GT3 campaign, with all three cars enjoying the continued technical support of Lamborghini factory team Squadra Corse.

This year's championship runners-up, Phil Keen and Jon Minshaw, will return to race one car, while the second will be crewed by Machitski and rising Finnish driver Patrick Kujala. The team's third car will feature 2004 champion Cocker sharing with racing novice Sam De Haan.

Cocker, who still holds the record as the youngest outright British GT champion at 18, has a long relationship with Barwell. He raced in the team's Aston Martin line-up in 2007 and



more recently stood in as a sub for Alexander Sims during its '14 campaign with the Ecurie Ecosee BMW Z4s.

"Jonny has been coaching Sam and they share a common love for supercars, so this is ideal," said team boss Lemmer. "Sam will be completely new to it, and still has some signatures to gain, but we've got loads of testing planned for him and he's a very smart lad; he knows Cocker (r) last raced in British GT in 2014 when he stood in for he's got a steep learning curve ahead.

"Leo and Patrick will be interesting as Patrick is a superstar in the making in my eyes and pushed the factory Lambo drivers all the way in Blancpain [GT Series] in Europe this year, but a lot of the British tracks will be new to him.

"Phil and Jon deserve a title by now. They're so proven and they'll probably be the pairing to beat, purely down to their experience. But we've got three really strong cars for 2018."

Lemmer added the team would start next season on a strong base because the Huracan is not due any performance upgrades until the end of the year.

"The Huracan is a great car and this year all of our data and set-ups will be relevant, so we know where we stand," he said. "There will be a slightly new-construction rear tyre from Pirelli, but we've got plenty of testing planned to dial that in. We want a drivers' title next year to add to our teams' championship from this year."

#### Comprehensive motorsport insurance products to keep you on track;

- Accident damage On Track
- age On Track 🛮 🗸 Liability
- Rally damage On Event
- Personal Accident
- Storage and Transit
- Track day

Log on to www.ryanmi.com to obtain your online quote

Email – info@ryanmi.com Tel – +44 (0) 1799 524202

Ryan Motorsport Insurance Limited is an appointed representative (557405) of Independent Broking Solutions Limited who are authorised and regulated by the Financial Conduct Authority, Its Financial Services Register number is







**ROAD TO INDY SHOOTOUT** 

# Donegan wins USF2000 scholarship

FORMULA FORD 1600 RACER KEITH Donegan has won the 2017 Mazda Road to Indy Shootout and a \$200,000 scholarship to compete in the USF2000 series next year.

The 20-year-old beat 16 other drivers from nine countries to the prize at the Bondurant Racing School last weekend. A two-day assessment was held using Formula Mazda cars on the 1.6-mile Wild Horse Pass Motorsports Park track, with the competitors whittled down to five finalists who then competed in a 30-minute race.

"It really hasn't hit me yet," said Irishman Donegan, whose second place at the Formula Ford Festival secured his place in the contest. "Throughout the weekend we were consistent and I kept the small things in check. I didn't make any stupid mistakes and kept my head cool and that really paid off in the end.



"It's an unbelievable opportunity for any young driver. It just gives that bit of motivation that you need because the US is where you need to go to become a professional these days.

It's such a boost to my career."

Donegan was chosen by a judging panel that included Indycar race winner Scott Goodyear and last year's Road to Indy winner and USF2000 champion Oliver Askew.

UK drivers to make it to the Shootout included Scottish FF1600 champion Ross Martin, Northern Irish FF1600 champ Niall Murray, SuperSeries driver Jamie Thorburn, FF1600 frontrunner Oliver White and USF1600 victor Matt Cowley.

BRSCC National FF1600 champion Luke Williams missed the Arizona Shootout due to hotel and insurance costs, and felt that at 26 years old "the odds of me winning were slim". James Raven was told he would earn a place for finishing third in the Walter Hayes Trophy, but it was never confirmed by Mazda, and White was given the 'wildcard' entry from the Hayes event.

#### TCR GERMANY

# Barr steps up with TCR Germany move

MINI CHALLENGE STAR Reece Barr will graduate to the German ADAC TCR championship next season.

The 17-year-old has agreed a deal to join back-to-back TCR Germany titlewinning squad Target Competition.

Barr recently tried out the Honda Civic usually driven by TCR Germany champion Josh Files in a two-day test with the team at Adria in Italy.

He was runner-up in the Mini Challenge JCW Championship in his maiden season of car racing this year, and won the series' rookie title. He was formerly Irish karting champion.

"It feels great to get this deal done early, and of the options we had this feels like the right move for me," said Barr.

"The Civic TCR was a great car. It was quite easy to drive and more comparable to a British Touring Car than the Mini, but I adapted to it quickly. Going to race in Europe for year two is a big step, and I've got to be realistic in my expectations as it will be a lot different."



**TOYOTA RACING SERIES** 

# Pull heads down under for TRS

BRDC BRITISH FORMULA 3 CHAMPIONSHIP runner-up James Pull is heading to New Zealand in January to contest the Toyota Racing Series.

The Singapore-born Briton has joined M2 Competition, which has previously carried Nick Cassidy, Lance Stroll and Lando Norris to title success in the five-event series.

"I've heard great things about the championship from fellow drivers in Europe and so I can't wait to get out on the track," said Pull. "Now my attention is fully focused on TRS with M2 and, like all the drivers that will be there, I want the title and will be pushing hard."

Among the other drivers confirmed to date for TRS are Ferrari protege and Italian Formula 4 champion Marcus Armstrong, regular TRS leading light Brendon Leitch, GP3 racer Juan Manuel Correa, and French Formula Renault NEC pair Charles Milesi and Theo Coicaud.



**BRITISH FORMULA4** 

# F4 cars to feature halo by 2023

BRITISH FORMULA 4 IS EVALUATING when to introduce the halo cockpit-protection device after the World Motor Sport Council ruled that it will become mandatory in the series from 2023.

The WMSC last week ruled that from 2019 any new F4 category must feature the halo on its cars, but existing championships can introduce the concept at any point between '19 and the '23 deadline.

British F4 is now working to decide on

the best time to bring in the halo.

"It's too soon for any decision yet," said championship promoter Sam Roach. "It's the way it [single-seater racing] is going to go and we want to be at the forefront of any safety developments. We have to look at introducing it sooner rather than later, but we need to understand the details, like costs."

The halo will be used in Formula 1 and Formula 2 next year and will feature in the new International F3 series in 2019.

#### HISTORIC GRAND PRIX CARS ASSOCIATION

# Charade visit for HGPCA's Pre-66 cars

THE HISTORIC GRAND PRIX Cars Association has named Charade, in France's Auvergne region, as second stop on its 2018 programme of one-off events for Pre-1966 cars. Charade's spectacular Circuit Louis Rosier uses part of the Clermont-Ferrand course, which hosted the French Grand Prix four times between 1965-72.



Race Series of the Year honoree at the recent Octane Awards, the association will also take its members to the streets of Copenhagen for the first time for the annual Historic GP event founded by mid-1970s Danish F3 champion Jac Nellemann.

The HGPCA calendar for next year includes Silverstone (April 21-22), Charade (May 25-27), Brands Hatch (June 29-July 1), Silverstone (July 20-22), Copenhagen (August 3-5), Nurburgring (August 10-12), Spa-Francorchamps (September 14-16), Jarama (October 12-14) and Algarve Circuit (October 19-21).

#### **BRITISH GT**

# **Champions Morris and Parfitt split**

SEB MORRIS WILL NOT RETURN TO defend his British GT title alongside Rick Parfitt Jr after confirming that they will go their separate ways.

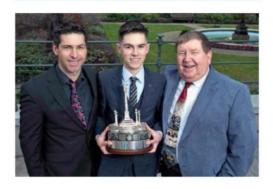
Morris and Parfitt landed this year's title sharing a Bentley Continental GT3 run by Team Parker Racing. Morris, 22, has now confirmed that a return to British GT is not his aim, and he will instead chase race opportunities in

continental Europe.

"After a lot of thought, and following two incredible seasons together in British GT, Rick and I have decided to go our separate ways for 2018," said Morris.

"Having won the British GT3 title this year there isn't much more we can achieve together in the championship, coupled with the fact that I now want to progress and challenge myself against the best in Europe."

#### **IN BRIEF**



#### **DEMPSEY WINS YOUNG DRIVER AWARD**

Jordan Dempsey has won Motorsport Ireland's Young Racing Driver of the Year award and Sexton Trophy, plus a prize of €50,000. The 17-year-old (above) beat fellow Formula Ford 1600 frontrunner James Roe Jr and 2017 Porsche Carrera Cup GB champion Charlie Eastwood. "It was one of the biggest shocks I have ever had in my life," said Dempsey. "It's a privilege − I have been a bridesmaid three years in a row so winning it made it even more special."

#### **DOUBLE R GETS GORE FOR BRITISH F3**

American Dev Gore will race with Double R Racing next season in the BRDC British F3 Championship. The 20-year-old competed in the USF2000 Championship this year, finishing 13th in the standings. "I really am so happy to have joined Double R for my first season of racing outside the US," he said. "Racing in Europe next year will really help me get a lot of seat time, testing and opportunities for development and that's the reason we've decided to race in British F3."

#### **GINETTA OFFERS NEW GRDC PACKAGE**

Ginetta has unveiled a new arrive-and-drive package for racers wanting to take part in its Ginetta Racing Drivers' Club (GRDC) series next year. The scheme allows drivers to race without having to buy a Ginetta G40 outright and means they can compete for a fixed cost.

#### **CASTLE COMBE CLASSIC DATE REVEALED**

The date for the seventh Autumn Classic meeting at Castle Combe has been announced as Saturday October 6. The one-day event celebrates the history of the Wiltshire track, which first hosted racing in July 1950.

#### **RESTORED NOMAD-BRM MK3 TO RETURN**

The unique Nomad-BRM Mk3 sports-racer from 1970 has been totally restored and is due to make its racing return at the Le Mans Classic next July. First designed by Bob Curl, the third and final Nomad (below) ran with a two-litre BRM engine and was raced by husband and wife Mark and Gabriel Konig, who funded the project, and experienced all-rounder Tony Lanfranchi.





# **Memories of 2017**

He's made pilgrimages to Taupo and (almost as far) Croft, got a special tankard at Castle Combe... and even took on the role of team patron

#### By Marcus Pye

**y** @AS National

#### VARIETY COLOURED MY 40TH ANNIVERSARY SEASON

of writing for Autosport, as you will discover. Other than time and wherewithal to attend special events I've not yet managed to squeeze into my calendar — and the opportunity to race again after seven years out — I wouldn't have it any other way. As ever, during a 30-meeting season, there were highs and lows. The joy of reporting and commentating at every round of a sensational Historic Formula Ford championship, which immortalised the class's golden jubilee year, was tempered by the ghastly accident at Zandvoort that ultimately claimed French Historic F1 racer David Ferrer's life.

#### **Taupo Historic GP**

Being in at the start of something new and exciting was very special. The inaugural Taupo Historic Grand Prix at the Bruce McLaren Motorsport Park in my beloved New Zealand — to which I was first lured for a racing expedition in 1990 — was built on passion and tradition, which is why I readily accepted circuit boss Chris Abbott's invitation to commentate. What started as a little club track has evolved into a superb facility in a splendid lakeside town on the North Island, and sharing the box

with my old friend Howden Ganley as Formula 5000 and F1 cars of his era provided the headline races was a wonderful privilege. Period F5000 ace Kenny Smith, now in his mid-seventies, is still the Kiwi king in the thunderous machines, but Briton Michael Lyons beat him in the Race of Champions finale, driving father Frank's F1 McLaren M26, the event's poster car.

#### **Extreme speed at Shelsley Walsh**

It had been far too long since I'd visited a top-class speed hillclimb, but — hotfoot from watching the Vintage Sports-Car Club's extraordinary annual race for Edwardian cars at Mallory Park — I couldn't miss the 'RAC' British Championship's 70th-anniversary celebration at Shelsley Walsh, that hallowed 1000 yards over which the Midland Automobile Club has run events since 1905. Today's bespoke 'climbers from Gould, OMS, Force, DJ and others — designed for explosive acceleration and ultra-high downforce to carry speed — have long consigned the converted circuit-racing chassis of my youth to historic classes. Such is progress that even the smallest-engined single-seaters' ascents are now breathtaking to behold. The quickest numb the senses. I made a point of standing





adjacent to the steep wooded course's summit as Wallace Menzies rocketed his 3.3-litre Gould-Cosworth GR59M through the finish at more than 150mph. Staggering anywhere, but at the end of a country lane...

#### **CSCC Thruxton and Croft**

Focusing on fulfilling customer demand for drivers of cars built either side of the millennium, the Classic Sports Car Club has deservedly become a major player with circuit owners over the past decade. That it constantly reviews its offering, adding series (not championships) where justifiable, is a key to its continued rise. Turbo Tin Tops join the fray for 2018. This season I witnessed a brilliant CSCC meeting at Thruxton from the complex and another cracker at Croft — the first of two 700-mile pilgrimages to the super Darlington venue in three weekends, both well worth the effort — where its Special Saloons and Modsports brigade took centre stage. Andy Southcott's victory from the pitlane there, in a brand new Vauxhall-powered MG Midget silhouette from Mike Johnston's Northern Ireland workshop, has to be one of the drives of the season!

#### **Goodwood's 75th Members' Meeting**

The top floor of the white tower above the pits at Goodwood Motor Circuit, looking down on a full grid of diverse and colourful cars, is the greatest place in the world. The atmosphere as engine revs rise in anticipation of the Union flag's fall to start a race in time-honoured style is utterly magical. The subsequent stampede towards Madgwick corner, competitors jostling for position on one of the planet's fastest, most demanding and unspoiled tracks is incredible. Calling the action to sell-out audiences — and countless fans globally via live screening — at the Members' Meeting each spring and autumn's Revival Meeting, with former Autosport editor Bruce Jones in the St Mary's vantage point, is the highlight of my year. A brilliant Jayson Fong image of the tyre-frying start to the Graham Hill Trophy GT race at March's 75th MM reminds me of it every day as my laptop's screensaver.

#### **25th Spa Six Hours**

Alain Defalle and Vincent Collard's Spa Six Hours race, for FIA-homologated GTP, GT and touring cars of a type that raced prior to 1966, is the world's favourite historic enduro.



Competitors have travelled from around the globe to experience Belgium's Grand Prix circuit. Once hooked, they tend to return year after year, for the extraordinary atmosphere as much as anything. For many, myself included, it's addictive, utterly unmissable. The first one I saw was the fifth in 1997 — a week after Princess Diana's death — and I competed in it, in a Lotus 23B with Bob Tabor and Simon Hadfield and a 26R-spec Elan with Gerard Macquillan and Gerry Wainwright. Both cars finished. While I have not taken part again I've not missed the subsequent 20 editions. Providing the English commentary is the next best thing. Now the 25th landmark has been reached, I'm keen to chronicle the great race's history in a book.

#### 50 years of attending Castle Combe

Most nine-year-olds getting drenched at a race track would be nagging to go home. Not me. My first visit to Castle Combe, on July 29 1967, was to watch my godfather's pal Ken Storey race his Sprite at a very wet Austin-Healey Club gathering. Lunch at Chippenham's Chinese restaurant en route was a treat, but I loved the racing. John Chatham's and Stuart Hands's Healey 3000 battle, Brian Tarrant's hulking Austin A40-Chevrolet and Australian Bryan Thomson's Ford Mustang made my day. I have returned often, as spectator, marshal, journalist, competitor and commentator, and experienced mixed emotions — wrecking my Classic F3 Argo JM6 in July '87 the nadir, finishing second in a Special GT race in a Jade-Chrysler Trackstar in April 2007 the high — but treasure the memories. To receive a tankard commemorating my 50 years at the venue from Queen of Combe Pat Strawford at the Autumn Classic was a wonderful surprise.

#### **Promising drivers breaking through**

Watching drivers progress has always been exciting. Club and national motorsport's landscape has changed beyond recognition over the 40 years I've been covering it, as it did between the 1950s and '70s when patrons such as Ken Tyrrell mentored outstanding youngsters. These days the cost of graduating to the next strata in single-seaters is as prohibitive as getting a foot on the ladder for most, although as a BRDC member I'm encouraged to note a rich vein of British talent bubbling under F1. There's no shortage of ability in historic racing, where installing a young-hotshoe team-mate often brings results. David Pittard — previously outstanding in a Toyota MR2 and Sports 2000 — has really made a name for himself in Lotus Elan, Chevron B8 and AC Cobra this term.



Also from the 750 Motor Club school, ambitious Stefano Leaney's Bikesports title in his first year of car racing, driving a Radical PR6, really impressed.

#### **Historic FF1600 from all angles**

Having lent my F3 Argos and GRD to friends (including Thruxton boss Bill Coombs) when I was elsewhere in the late 1980s, watching a car of mine race was a new experience. I'd acquired a long-dormant Merlyn Mk20 last October, fully intending to have another go, but was committed to working at every Historic Formula Ford event by the time it was ready resplendent in championship supporter Jimmy's Iced Coffee's colours – for the class's 50th-birthday rounds at Brands Hatch in July. I thus offered it to talented mate Ben Mitchell, a proven winner. Commentating as my pride and joy led on its 'debut' was surreal, but third was a promising start. Flagging oil pressure in the sequel necessitated an engine rebuild that kept us out until November's Walter Hayes Trophy, where Ben terrorised new cars in the main event, then led from pole and placed third in a frenetic 'Historic/Classic' race. Hopefully he can chase the title in 2018!



# Autosport's memories

The staff responsible for putting Autosport's National pages together recount their fondest memories from an epic 2017 season



#### Jack Benyon Group National Editor

@jackbenyon

My memory of the year comes from my office desk, an unusual place given the fact that the UK and Ireland have the best selection of racing circuits on the globe; Richmond High Street doesn't really factor in. But it was from here that I revelled in the stories of Jimmy Hill, Warren McKinlay, Andy Searle and Tony Williams – all four injured while serving in the armed forces abroad; all four using motorsport as a rehabilitation tool with Team BRIT in the Fun Cup. All of the drivers suffer with mental, psychological or physical injuries, and are testament to what motorsport can do: offer a new lease of life for servicemen given the chance to experience the adrenalin thrill they once had in the forces. I look forward to watching the drivers in action next year they're planning an entry into the GT4 class of British GT, with the ultimate aim of competing at Le Mans.





#### Stephen Lickorish Special Contributor

@sdlickorish

You always know the final day of the TOCA-supports season is going to provide excitement. But no-one could have predicted quite how dramatic the Porsche Carrera Cup GB finale would prove to be. The championship fight between Charlie Eastwood and Dino Zamparelli was finely poised anyway, but adding some treacherous track conditions and a lack of team orders made for a thriller. The destination of the title swung several ways during the 17-lap contest, but in the end Eastwood was able to seal it by topping a crucial fifth-place battle with Redline team-mate Tom Oliphant to tie on points with Zamparelli and claim the crown on countback. It was a memorable end to a hard-fought year.





#### Stefan Mackley Special Contributor

@Smackley27

My memory of the year comes from the Paddock Hill Bend grandstand at Brands Hatch during the Formula Ford Festival. It was my first time at the much-loved event and the racing up until the final had been action-packed and thrilling. The best was saved until last though as Joey Foster's overtake for the lead — and eventual victory — was one of the best I've seen. Leaving his braking to the absolute last, he swept around the outside of Neil Maclennan down the hill, his left-side wheels brushing the gravel in a pass that left me and the others watching applauding. It was an overtake that will live long in the memory.



# Top 10 club drivers of the year

There were many champions in 2017, but some stood out more than others. Our contributors pick out their most impressive club racing drivers of the year

#### **Compiled by Jack Benyon**

Entries by Jack Benyon, Rob Ladbrook, Stefan Mackley, Mark Paulson, Ian Sowman and Dom D'Angelillo

10

### **Jon Harmer**

BARC CATERHAM GRADUATES SIGMA CHAMPIONSHIP TIME AWAY FROM RACING WASN'T OBVIOUS

A quarter of a century. For Caterham Sigma driver Jon Harmer it had been *that* long since he had last raced competitively. With a two-man team of his best friend and son, he became the Sigma 2017 champion, taking 11 victories, beating Caterham stalwarts Ben Winrow and Rui Ferreira. Whether speaking after race one or race 15, Harmer's attitude was always the same, grinning from ear to ear. "I'd always wanted to get back into it but it was a case of time, money, family, my business and shift work all taking priority. It's not a question of why now, but why not before?" **DD** 





HSCC HISTORIC TOURING CAR CHAMPIONSHIP RESULTS BELIE DRURY'S IMPRESSIVE YEAR

A quick glance at the Historic Sports Car Club's Historic Touring Car Championship points table will sight Jack Drury in sixth. Why does that entitle him to feature in the top 10, you ask?It's Drury's first full season in car racing and he took four wins against very strong competition, despite a mid-season 120mph roll in which he was lucky to escape his Ford Falcon without injury. Drury is the next installation in the Drury dynasty after his father Terry passed away last month. The Ford GT40 builder and tin-top production ace was proud of Jack's first-year achievements. **JB** 





### **Adam Shepherd**

**750MC M3 CUP** 

**DOMINANT START TO THE YEAR SECURED TITLE** 

Six wins on the spin at the start of the year set the tone for Adam Shepherd's M3 Cup campaign and, notwithstanding a weekend hampered by set-up issues at Cadwell Park, it might have been a near-perfect season. As it was he took eight victories. In addition to winning the inaugural M3 Cup championship – a one-make formula for the E46 M3 – he was also the leading driver in the non-points series award from 2016, and 2015's Civic Cup title winner, and is now TOCA-bound for a crack at the Ginetta Supercup, where he will likely turn heads. **IS** 



7

### **Luke Williams**

BRSCC NATIONAL FF1600 CHAMPIONSHIP
THE PICK OF A STRONG NATIONWIDE FORMULA FORD SERIES

Luke Williams was the man to beat from the outset in the British Racing and Sports Car Club's National Formula Ford Championship. After overcoming the mechanical woes suffered by his Firman RFR16 last year, Williams recorded seven wins during the course of 2017 – eventually finishing 69 points clear of his nearest challenger, Neil Maclennan, winning the title at the final round at Anglesey. Car problems at the Brands Hatch Festival and Walter Hayes Trophy meant his impressive season ended in disappointment but there's no doubt he was the class of this championship in 2017. **SM** 



# 6

### **James Gornall**

BRSCC BMW COMPACT CUP
BRITISH GT CHAMP CONTINUES TO IMPRESS

You may expect a British GT champion to show well in a club-level championship, but James Gornall continues to impress in the Compact Cup. After taking the 2016 title, he was pushed hard this year by rival Steven Dailly, who won every race of the Scottish Compact Cup in 2015. Gornall took seven wins out of 14 races on his way to the title in which the pair were a class apart, and not afraid to rub, bump and do a bit more than lean on each other when necessary. Myriad poles and fastest laps showed Gornall's all-round consistency in a championship where the racing is close. **JB** 



4

### **Billy Albone**

750MC RGB

TITLE CAMPAIGN PROVED ALBONE'S MATURITY

Billy Albone has grown up since his 2014 750 Formula title, and this year's RGB series win was a coming-of-age moment. This had been hyped up as one of the best club racing battles of the season, with Scott Mittell, multiple Formula Vee champion Paul Smith, four-time RGB title winner Matt Higginson and 2015 Locost champion Danny Andrew among the expected frontrunners, along with quick Spire team-mate John Cutmore. But with his new-found maturity, and realistic approach to his racing, Albone saw them all off comfortably. His title win was secured by 15 points over Mittel. **IS** 



2

### **Stefano Leaney**

750MC BIKESPORTS AND BRITCAR
FIRST YEAR IN CARS PROVED HEAD-TURNING

The points table will tell you that Welsh-Italian Stefano Leaney dominated the Bikesports championship, but it was consistent results at the beginning of the season – his first ever car races – that laid the foundations for success as he made the switch from motorbike competition. By the end of the year, he was sampling Britcar machinery – and proving rapid in the Radical RXC – and it wouldn't be a surprise to see him step up to a more high-profile sportscar category. A trip to Sebring to drive a Lola B2K/40 in the Classic 12 Hours at the venue proved a perfect end to the year. **IS** 



# $\int_{B}^{I}$

#### **Luke Herbert**

second as an earlier clash left Roche in fifth. MP & IS

BRSCC MAZDA MX-5 SUPERCUP
MR CONSISTENT SHOWED RIVALS THE WAY

In a very competitive championship with large grids often upwards of 40, Luke Herbert went on a run of 14 consecutive first or second place finishes on his way to the title in a brilliantly consistent campaign. It wasn't all plain sailing, though. The rekindled rivalry between Herbert and perennial foe Tom Roche, who is ever-present in an MX-5, rapid and capable of racing in higher categories, featured some epic battles. The Anglesey

weekend proved critical, where Herbert pulled off a supreme comeback drive to

WWW.Arcsalizer.57 tak

3

#### **Brett Smith**

MSVR MINI CHALLENGE JCW

A REFRESHED APPROACH PAID DIVIDENDS FOR SMITH

If you'd been asked to pick a Mini Challenge champion ahead of the start of the year, you probably wouldn't have punted for Brett Smith. Don't get us wrong, Smith had shown flashes of talent during his first Mini Challenge season last year, but he had yet to show any signs of true consistency. This year he came back a different driver. His team went back to basics with his JCW and Smith blew everyone away in 2017. Six race wins meant he had the title wrapped up with a weekend to spare and could instead focus on deputising for his injured father in the Eurotech BTCC Honda Civic. **RL** 



## **Richard Tarling**

HSCC HISTORIC FORMULA FORD 1600
AFTER 18 YEARS, TARLING IS STILL WINNING TITLES

Is it 1999? No, there's no Geri Halliwell on top of the charts. But there is someone else still atop a list. It's Richard Tarling and he's Autosport's club driver of the year. Tarling's stock rose when he beat some impressive drivers to the 1999 Formula Palmer Audi title, and he's done the same here. McLaren GT-bound Michael O'Brien and 2016 benchmark Callum Grant were narrowly defeated after some incredible racing as Tarling's first full season in the championship yielded glory. Far from being upset on missing out, his opponents were just grateful to learn from him. That's a sign of true class. **JB** 



# Top 10 club rivalries of the year

From title battles that were decided by the National Court to series where two or more drivers have tied on points, and from drivers raging about controversial rules to staging a pre-race protest, there's been no shortage of contention this year

#### **Compiled by Stephen Lickorish**

Entries by Jack Benyon, Ian Sowman, Stefan Mackley, Dan Mason, Marcus Pye and Dom D'Angelillo

10

#### **Mickel v Power**

BARC LEGENDS

**SERIES SPECIALIST UP AGAINST A YOUNG CHARGER** 

It looked at times as though the wily John Mickel could be defeated in the Legends Championship – there was a roll at Donington Park and three engine changes at Anglesey. That gave Ben Power (chasing Mickel, below) his opportunity, Mickel saying he was "always keeping an eye" on the Welshman. A crushing blow was dealt by Mickel's late run of form as he snuck ahead to claim his third consecutive crown, and Power was left second best after a rough Rockingham put him on the back foot in October. Power did at least pick up a prize test in Rob Austin's BTCC car as some consolation. **DM** 





TRACK-LIMITS DISPUTE TURNS INTO PROTEST AT OFFICIALS

Mention driver strikes and thoughts of 1980s Formula 1 and safety fears come to mind. So it was a surprise to see Formula Ford drivers stepping out of their machines on the dummy grid for Castle Combe's Carnival race to stage a mini-protest. Their bone of contention centred on track-limit penalties in the day's earlier race – the top four drivers were penalised – but other issues from the season meant that boiling point was reached at the final meeting. The drivers eventually got back in their cars and the race was run, but not before sending a stark message to the track's officials. **SM** 





# **Plant v Coffey v Shaw**

**HSCC HISTORIC ROAD SPORTS** 

THREE DRIVERS, THREE CLASSES, SAME NUMBER OF POINTS

A three-way tie atop a club championship after dropped scores is rare, but it happened in the HSCC's Historic Road Sports. Peter Shaw (Lotus Elan) needed another class win at Silverstone's finale for an unassailable total, but was beaten into second place. With the same number of wins and fastest laps on countback, former GT Cup racer Will Plant (Morgan +8, below) and Dick Coffey (Turner Mk1) shared the crown with Shaw. Coffey also split top honours in 2005, with Colin Sharp (Triumph TR5), and was champion in '03 and '16 in the Alexander team car in which Chris Horner won the 1996 title. **MP** 



# **7** Gamble v Priaulx v Harper

**GINETTA JUNIORS** 

THREE EVENLY MATCHED STARS AND AN ENTHRALLING SEASON

This was a Ginetta Junior season that had it all: bucketloads of controversy, some brilliant racing and three incredibly talented drivers fighting for the championship. JHR Developments' suspension mid-season while its conduct was investigated – following alleged engine irregularities earlier in the year – did not derail Tom Gamble's bid as he beat former team-mate Seb Priaulx and reigning rookie champion Dan Harper (below, behind Gamble). Three wins at Silverstone for Gamble meant he won surprisingly easily in the end and denied us the chance for an even closer finish. **SL** 



# 6

### Eastwood v Zamparelli v Cammish

**PORSCHE CARRERA CUP GB** 

TWO DRIVERS WHO TIED AND ONE WHO PUSHED THEM ALL THE WAY

You can't have a much closer rivalry than one that ends with two drivers tying on points. In the end Charlie Eastwood (third in pic) just got the edge over Dino Zamparelli (second) in a thrilling Carrera Cup season because he won more races, after a finale during which the destination of the title changed repeatedly. Following two seasons of Dan Cammish (leading) domination, it was a refreshing change. Cammish was well in the mix and could have won a record third crown, until Eastwood forced him off at Knockhill and he suffered a fire at Silverstone. **SL** 



# **Club motorsport v Code 60**

BRSCC AND, IN PARTICULAR, CATERHAM ROADSPORT
A BATTLE AGAINST A HATED RULE THAT WAS QUICKLY AXED

Winners stripped of celebrations, mass driver protests, confused restarts and one purple flag to blame. It's fair to say the British Racing and Sports Car Club's introduction of Code 60 to deal with certain incidents instead of a safety car was somewhat divisive, and no drivers were more outspoken than a selection from Caterham Roadsport. The top six were all penalised in the Caterham 60th Anniversary celebration race, forcing an emergency anti-Code 60 meeting where some even refused to race if the rule remained in place. Their words were heard, and the club stopped using Code 60 soon after. **DD** 



# Tarling v O'Brien v Grant

**HSCC HISTORIC FORMULA FORD 1600** 

AN INSEPARABLE TRIO OF CONTENDERS IN A CLASS FIELD

It's almost becoming the cliche of club motorsport but, in case you didn't know, the Historic Formula Ford 1600 Championship is one of the most hotly contested and exciting series to watch in the UK. This year, a horde of young pretenders took on 1999 Formula Palmer Audi champion Richard Tarling (below, leading) and three-time champion Callum Grant (orange car). Michael O'Brien was impressive, and has since been signed to a McLaren factory GT deal, but a puncture in the final round ruled him out. Grant suffered a nightmare at Croft, leaving Tarling to seal the win in the finale. **JB** 



# Cowley v Gearing

**750 FORMULA** 

A RIVALRY THAT CRASHED OUT OF CONTROL

Robin Gearing was defending his title while Bill Cowley (leading Gearing, below) was aiming for his first crown, having been there or thereabouts for years, and stymied in his 2016 challenge by a big accident at Mallory Park. The antagonistic relationship developed at Anglesey in July, with incidents on the last lap of both races. Three weeks later, at Cadwell, there was another clash between them at the hairpin, in a race that went in Cowley's favour. The post-race interviews were less than edifying, and Gearing sat out the rest of the campaign, leaving Cowley to claim his maiden title. **IS** 



# Ward v Traynor

**750MC MR2** 

A TITLE FIGHT THAT TURNED NASTY AND WAS SETTLED IN COURT

Former champion Shaun Traynor was six wins to four up over the less experienced Lewis Ward (leading Traynor, below) going into the final round, but Ward enjoyed a more consistent season. Traynor seemingly did enough to wrap up the title with victory in the final round at Snetterton, but Ward elected to protest the victorious car's legality. With the camber angle on one of Traynor's wheels found to be marginally greater than that specified in the regulations, Ward was provisionally declared champion but, after a protest, the National Court ruled in favour of Traynor. It all left a rather nasty taste. **IS** 



### Fisher v Moyers

**CASTLE COMBE FORMULA FORD 1600** 

TWO DRIVERS WHO JUST COULDN'T SEE EYE TO EYE

Former British Formula 3 racer Josh Fisher had won the Combe title before, but for Michael Moyers the aim was sealing a first FF1600 crown. The pair were equally matched, but twice in eight rounds they clashed. On the first occasion, Moyers (below, left) was ruled out but Fisher (right) – decisively for the championship – won the restart. Each driver protested the other during the season, but Moyers had the last laugh, winning arguably the bigger prize in the form of the Walter Hayes Trophy, although even then Fisher pointed to the winning pass allegedly happening under yellows. **IS** 





The national racing scene in the UK is unrivalled — there are fantastic cars, teams, drivers and stories, and also some great photographers. Here are some of Autosport's best from the past season

**Compiled by Stefan Mackley** 















## CLUB AUTOSPORT/PICTURES OF THE YEAR













# WHAT'S ON



WHEN RAINER SCHLEGELMILCH went against the wishes of his father to become a photographer rather than pursuing a career as a lawyer, the motorsport world became all the richer.

During his 55-year career, the German produced a remarkable body of work and set new standards for the artistry of Formula 1 photography, with his archive now curated by the Motorsport Network. *Rainer W Schlegelmilch: Freezing Speed*, which premieres on Motorsport.tv on Saturday, tells his story.

The documentary, narrated by James Allen, features two very familiar faces — Bernie Ecclestone and Sir Jackie Stewart — who explain just how significant Schlegelmilch became in the world of grand prix racing.

"Rainer was more than just a photographer, he was more than an artist," says Stewart. "He was a psychologist almost, looking at motorsport, because he's got as many photographs of the people as he has of the cars."

And Stewart is right, with part of the documentary focused on Schlegelmilch's remarkable portraits from the 1960s and '70s. In fact, in keeping with a man whose career has

Schlegelmilch (below) has described his shot of Johansson's Ferrari at Monaco in 1985 (above) as his "greatest picture ever"



been dedicated to capturing moments, parts of this documentary are more about encapsulating F1 in that era than the artist doing the photographing. We actually see little of the excellent work from the later years of his career, which ended with his retirement this year, for this is the story of an earlier time.

Schlegelmilch himself considers the late 1960s and early '70s to be the golden age of motor racing, and it's fascinating to see how Stewart and Ecclestone respond to his photographs. The film also covers tragedy, and the photograph Schlegelmilch took of Nina Rindt in the Monza pits in '70, which Stewart suspects was taken shortly after Jochen's crash but before the consequences were known, is moving. Those used to characterising Ecclestone as a hard-nosed businessman only interested in money will be surprised to see the genuine

## READ AUTOSPORT ON THE MOVE

**DOWNLOAD IT NOW FROM** 







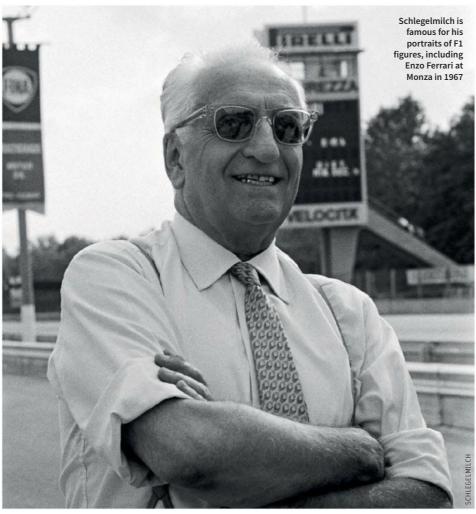
## HOT ON THE WEB THIS WEEK



## F1'S BEST OVERTAKES OF THE YEAR

#### Search for F1: top 10 overtakes of 2017

The top overtaking manoeuvres from the 2017 Formula  $1\,$ season, as voted for by F1 fans, are presented here. From the Force India civil war at Spa, to Hungaroring duels and brazen moves in Baku, it's a fast-paced recap of the best wheel-to-wheel action from grand prix racing this season.



emotion when recalling the death of a driver he was so close to - and his quiet reflection on why it's important that safety standards have improved.

Schlegelmilch's move into colour photography brings us to the titular technique freezing of speed, which became his trademark.

"Freezing speed is a kind of photography I started very late," he says. "The first 10 years, I did black and white without freezing speed because you can only do that with colour photography. I started with the zoom, when that was invented, to do freezing speed with a long exposure time -Ipaint with the colours of a racing car when it's moving in front of me."

The remarkable results of this experimental technique are showcased with some iconic images, including probably Schlegelmilch's most famous photograph – of Stefan Johansson's

Ferrari at Monaco in 1985. And it's not just this photo, with fine examples of the technique including beautiful shots of Stewart and Emerson Fittipaldi.

It's impossible to differentiate between the parts of this documentary that showcase the era, and those that showcase Schlegelmilch. And that is perhaps the greatest testament to his work and career.

This is a documentary that offers different things to different viewers. It's well worth watching whether you are a student of motorsport photography, or just want to revel in the colours, texture and character of a lost age of motor racing.

**FDD STDAW** 

Rainer W Schlegelmilch: Freezing Speed premieres on Motorsport.tv at 2000 Saturday, and is also available on the Motorsport.tv website.



## **O** ROEBUCK'S GREATEST RACES

Renowned F1 writer picks his standout GPs

## INTERNATIONAL **MOTORSPORT**

## **GULF 12 HOURS**

Yas Marina, **United Arab Emirates** December 16

## **MRF CHALLENGE**

Rd 3/4 Yas Marina. United Arab Emirates December 14-15

## **SUPER TC2000**

Rd 12/12 Cordoba, Argentina December 17

#### **ANDROS TROPHY**

Rd 3/7 Circuit of Andorra, Andorra December 15-16

## **MOTORSPORT**

#### **MALLORY PARK BRSCC**

December 26 Sports Cars, Open Saloons, motorbikes



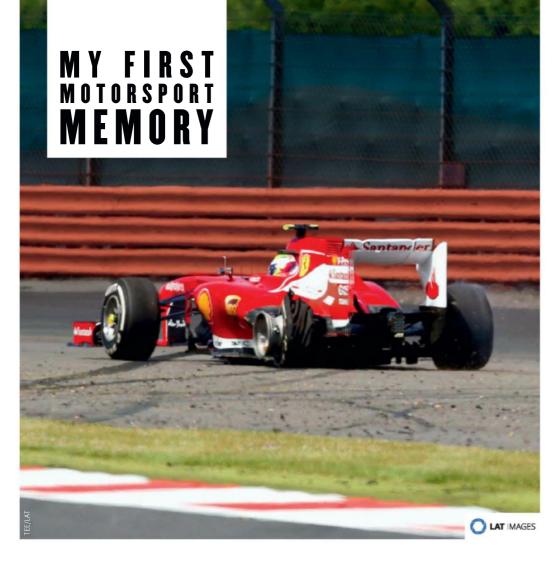


# FROM THE ARCHIVE

The eyes have it: Graham Hill's intense focus is captured in the 1966 German Grand Prix at the Nurburgring. Hill qualified his two-litre BRM P261 in 10th place, and finished fourth behind a three-litre trio led by Jack Brabham (Brabham-Repco BT19), then John Surtees and Jochen Rindt (both Cooper-Maserati T81).

latimages.com **y**@latimages







## **ALEX KALINAUCKAS**

## THE RAIN. WIND AND SUNBURN OF SILVERSTONE

irst off, a confession: the 2013 British Grand Prix was my first experience of live motorsport. I can feel my editor's inevitable crushing disappointment as I write this (I think I can cope! – ed), but a lack of interest from my friends and family, cash and wheels meant there wasn't a lot I could do about it until getting my first proper job after leaving university (and I still had to get there by public transport).

So, after saving up for a seat in the Becketts grandstand, making it through a journey comprising two tubes, a train and an eye-wateringly-expensive bus, I arrived at Silverstone. In a way, the journey is continuing – since that joyful weekend I have been lucky enough to cover many excellent events around the UK and the world.

But back on that first weekend at Silverstone (a track I don't think I'll ever truly love, having seen its flatness and lack of geographic atmosphere), it was all new.

I spent Friday making my way around the track during the two Formula 1 free practice sessions and the warm-up acts of the support series. I tried to sit in as many different grandstands as possible (an excellent addition to a weekend ticket) and see the cars in action on a wet-to-dry day.

Saturday was a scorcher. Having decided during FP3 that the grandstand overlooking Village would be the best place to see the cars attacking during qualifying, I settled down to burn (unknowingly in the breeze) and witness Lewis Hamilton take his second pole in front of his home crowd. The spot was excellent, with the difference in the drivers attacking and backing off on approach to the right-hander accentuated by explosive gearshifts and that V8 howl.

Sunday brought a third different element into play - wind, which the Becketts grandstand was perfectly placed to catch. On one of the hottest days of the year, I shivered in a jacket while Felipe Massa, Hamilton and others had tyres suddenly let go from under them. To make matters worse, a suncream-in-eye situation caused a repeat of my figurative problems from two days earlier.

And so it must have looked like I took Sebastian Vettel's gearbox-induced retirement well and truly to heart (the glee of many fans at this development stood out above the noise), was deeply upset by the tyre failures and moved beyond belief by Nico Rosberg's victory.

But it was undoubtedly a magnificent weekend, made all the better knowing I was surrounded by fellow fans, full of passion for motorsport. \*\*

## **MAUTOSPORT**

Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1AG Tel +44 (0) 20 3405 8100 Email autosport@autosport.com Individual email firstname.surname@motorsport.com Website www.autosport.com Twitter @autosport

#### Editorial

Editor Kevin Turner Deputy Editor Marcus Simmons Grand Prix Editor Ben Anderson F1 Correspondent Lawrence Barretto Assistant Editor Alex Kalinauckas Chief Sub-Editor Peter Hodges **Executive Editor Stuart Codling** Group National Editor Jack Benyon Rallies Editor David Evans BTCC Correspondent Matt James Art Editor Lynsey Elliott Senior Designer Michael Cavalli Office Manager Joanne Grove

#### Autosport.com

Editor Glenn Freeman Deputy Editor Matt Beer Autosport Plus Editor Scott Mitchell International Editor Jack Cozens Social Media Editor Fatema Chowdh Technical Team Leader Geoff Creighton Head of UX and Digital Design Amar Vijay

## **LAT** IMAGES

## Photography

Glenn Dunbar Sam Bloxham Zack Mauger

#### Special Contributors

Gary Andersor Alan Eldridge Tom Errington Rob Ladbrook Stephen Lickorish Stefan Mackley David Malsher Marcus Pve Dieter Rencker Nigel Roebuck Caroline Stammers Jim Utter Gary Watkins

Argentina Tony Watson Australia Phil Branagan Austria Gerhard Kuntschik Belgium Gordon McKay Brazil Lito Cavalcanti Finland Esa Illoinen Germany Rene de Boer Greece Dimitris Papadopoulos Italy Roberto Chinchero Japan Jiro Takahashi New Zealand Bernard Carpinter Russia Gregory Golyshev Spain Raimon Duran Sweden Tege Tornvall **USA** Bruce Martin, Jeremy Shaw **UK & Ireland** Pete Allen, Lee Bonham, Stephen Brunsdon, Jonathan Crawford, Dom D'Angelillo, Kerry Dunlop, Charlie Eustice, Joe Hudson, Jake Jones, Samarth Kanal, Matt Kew, Mark Libbeter, Stefan Mackley, Dan Mason Damian Meaden, Lucy Morson, Will Moulton, James Newbold, Jason Noble, Mark Paulson, Brian Phillips, Graham Read, Hal Ridge, Peter Scherer Jan Sowman, Chris Stevens, Oliver Timson, Jan Titchmarsh, Eddie Walder, Rob Watts, Richard Young

#### Advertising

Tel +44 (0) 20 3405 8106 Email autosport.ads@motorsport.com Sales Manager James Robinson Display Advertising Don Rupal, Karen Reilly, Jamie Brooker Classified Advertising Fran Hall, Ben Kavanagh Autosport.com Sales Manager Fiona Bain Online Advertising Chris Hermitage Sales Director Matthew Witham

## **Advertising Production**

nior Production Controller Abbey Gunner Tel +44 (0) 20 3405 8131 Email abbey.gunner@motorsport.com

#### Subscriptions

UK +44 (0) 344 848 8817 Overseas +44 (0) 1604 251451 Email help@asm.secureorder.co.uk Back issues 0344 8488817 Laura Paterson +44 (0) 20 3405 8129

weekly by Autosport Media UK Ltd, 1 Eton Street Richmond, TW9 1AG, United Kingdom. Airfreight and mailing in the USA by agent named Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, L46th Avenue, 2nd Floor, Jamaica, NY 11434, US/ Subscription records are maintained at Autospor Media UK Ltd, 1 Eton Street, Richmond, TW9 1AG Air Business Ltd is acting as our mailing agent

## **Licensing and Syndication**

Stuart Williams

#### Management

Publishing Director Stuart Williams Editor-in-Chief, Autosport Media UK Andrew van de Burgt

Creative Content Director, Autosport Media UK **Anthony Rowlinson** Group Publishing Manager Sunita Davies Special Events Manager Laura Coppin Digital Product Manager Simon Grayson Digital Content Manager Edd Straw

We abide by the Editors' Code of Practice an we abloe by the Editors Code of Practice and are committed to upholding the highest standards of journalism. If you think we haven't met those standards and want to make a complaint, contact 0203 405 8100.





#### CIRCULATIONTRADE ENOUIRIES

our Distribution Ltd Printed by William Gibbons & Sons Ltd, 28 Planetary Wolverhampton WV13 3XT ISSN 0269-946X. Auto Autosport Media UK Ltd, 1 Eton Street, Richmond

© 2017, AUTOSPORT MEDIA UK LTD Trading as Autosport Media UK. Publishing, trade and further subscription details on www.autosport.com. While due care is taken to for publication in Autosport only upon Autosport Media UK's Standard Terms of



"AlcoSense are a clear step ahead of the rivals"



If you drank 4 pints or 4 glasses of wine between 9pm and midnight you could still have alcohol in your system at 11am the next day. That's why one in five drink drive accidents happen the morning after<sup>A</sup>.

AlcoSense quickly and accurately shows your blood alcohol level, so you don't become one of them.











# **Exterior Car Care**



Dragon's Breath is a specialist pH neutral wheel cleaner that reacts with the iron contamination within brake dust to produce a brilliant red bleed from an otherwise colourless gel.

Advanced Poseidon Car Wash uses a special blend of anionic surfactants and polymers to remove dirt with ease whilst leaving a protective gloss enhancing film behind when rinsed off.

Glass Cleaner is a spectacularly simple but effective product designed to clean everything from bird muck to cigarette smoke stains and bug splats.

Bug Remover is a simple and effect bug splat remover. From windscreens to bumpers, simply spray on and jet wash off. If you don't have a jet wash Bug Remover can be used to pre spray bug splats prior to shampooing.

Mad Wax is a Montan based paste wax. Montan Wax is an alternative wax to Carnauba as it has many of the properties Carnauba wax does. It gives a good gloss and is a very durable wax.

for more information, visit: **www.valetpro.eu**