SEX, DRUGS & RACING *IMSA uncovered*

Established 1924

MOTOR SPORT

THE ORIGINAL MOTOR RACING MAGAZINE

18-page F1 Season Review

DREAM TEAM

Mercedes & Hamilton make it 5

PLUS

How Ferrari blew it • Key moments • Our top 10 drivers

IT'S A WRAP

Brilliant Christmas gifts for race fans

INCREDIBLE BULK

Lamborghini's SUV goes racing

9 770027 201193 01 £5.50

JANUARY 2019 / ISSUE 1121

THE ALL-NEW PRINCESS V78

EXPERIENCE THE EXCEPTIONAL®





Global launch at boot Düsseldorf 19th – 27th January 2019

PRINCESS MOTOR YACHT SALES
+44 (0)1489 557755
sales@princess.co.uk
www.princess.co.uk

PRINCESS
CRAFTED IN PLYMOUTH, ENGLAND

FIND OUT MORE AT **PRINCESSYACHTS.COM**

FRENCH ALPS
HANDPICKED CHALETS & APARTMENTS



MÉRIBEL – THREE VALLEYS

3-5 bedroom apartments / from €2.025m

- Dominant ski-in ski-out location in Rond Point des Pistes
- Exterior space with unobstructed panoramic views
- Large properties with cellar, ski lockers & parking spaces
- All amenities within a three-minute walk



MEGÈVE – EVASION MONT-BLANC

1-5 bedroom apartments / from €394,000

- New-build apartments in a private part of Megève
- Stunning panoramic views of Megève & the surrounding mountains
- Minutes from the village centre & within easy access of the slopes & ski lifts
- Concierge service & wellness area with pool, fitness room & spa



VAL D'ISÈRE – ESPACE KILLY

3-4 bedroom apartments / from €1.93m

- Spacious & elegant new-build apartments
- Central location, 300m from the main piste
- Beautiful views of the valley & Solaise mountain
- High rental yields expected



COURCHEVEL 1650 – THREE VALLEYS

2-5 bedroom apartments / from €1.8m

- Last chance to own a property on the front de neige
- Ski-in ski-out, metres from ski lifts & breathtaking views
- Renovation of a previously popular 5* hotel
- Classic freehold properties with spa, pool & rental management

+44 (0) 20 7471 4500
info@athenaadvisers.com
athenaadvisers.com/motorsport

A CUT ABOVE THE REST



From ski-in ski-out apartments in Méribel and penthouses with panoramic views in Megève, to chalets with indoor climbing walls in Val d'Isère – we have the largest standout range of new-build and renovated properties across the French Alps' top resorts.

· Record low mortgage rates from 1.55% fixed for 20 years (70% LTV)*
· Rental management service to generate income & ensure hassle-free ownership
· Offices in London & Annecy to help with market insight & property viewings

*Subject to status through French Private Finance, depending on affordability profile.
Other rates with up to 85% LTV available. This is not an offer.

Property. Investment. Lifestyle

ATHENA ADVISERS

“ At 140mph in a 70 year old race car
you need to trust the people who prepared it”

Chris Ward – Professional Driver, Woodham | Mortimer

Professional race preparation with an obsession for detail.



woodham-mortimer.com
+44 (0) 1621 879 579



WOODHAM | MORTIMER

Restoration Race preparation Sales

INTRODUCING CLASSIC SII

THE LAND ROVER DEFENDER®, THE MOST ICONIC VEHICLE EVER TO BE CREATED. STEEPED IN HERITAGE. ROOTED IN MODERN BRITISH HISTORY. THE WORKHORSE. THE OFF-ROADER. THE UNDISPUTED BEAST OF THE GREEN LANE. WHEN THE FIRST ONE WAS BUILT IN 1948, LAND ROVER GAVE BIRTH TO AN ICON. WHEN PRODUCTION ENDED IN 2016, A LEGEND WAS BORN. NOW YOU CAN OWN A TWISTED MODERN INTERPRETATION OF THE MOST SIGNIFICANT DEFENDER® EVER MADE. TOGETHER, WE'LL REMAKE HISTORY

WWW.TWISTEDAUTOMOTIVE.COM

TWISTED®

REMAKE HISTORY

CHRONOGRAPH



High CO_2 emissions*



***Let out a huge sigh of relief.**
Only costs £395.

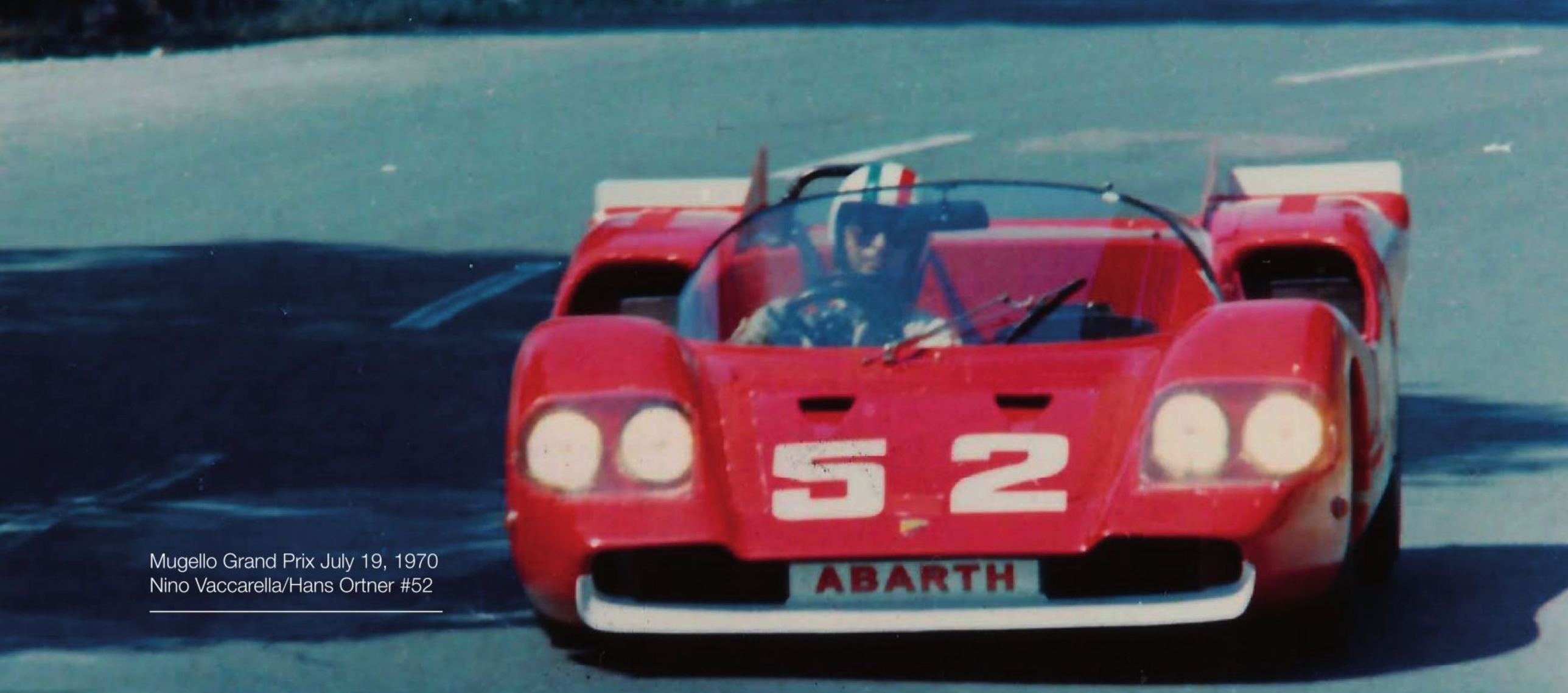
The **C3 Grand Tourer** takes our best-selling Malvern MkIII dress watch off in a distinctively retro motorsport direction, reminiscent of those classic two door coupes which effortlessly combined luxury and performance. Powered by a supremely accurate and effortless Swiss quartz movement it successfully marries the romance of yesteryear with the efficiency of modern technology.
Do your research.

Christopher
Ward

christopherward.co.uk

Bonhams

AUCTIONEERS SINCE 1793



Mugello Grand Prix July 19, 1970
Nino Vaccarella/Hans Ortner #52

LES GRANDES MARQUES DU MONDE
AU
GRAND PALAIS

Important Collectors' Motor Cars and Automobilia

Paris, France | 7 February 2019

Following the spectacular auction at the Grand Palais in 2018, Bonhams is delighted to announce its return to this magical venue steeped in automotive history.

ENQUIRIES
+33 (0) 142 61 10 11
eurocars@bonhams.com
bonhams.com/motorcars

ENTRIES NOW INVITED

Ex-Casoni, Ortner, Vacarella, Pal Joe, Becchetti, 1971 1000km Monza Class Winning
1969 ABARTH SE010 2000 SPORT SPIDER
Chassis no. SE010 – 0040
€600,000 - 750,000 *

* For details of the charges payable in addition to the final hammer price, please visit bonhams.com/buyersguide

MOTOR SPORT MAGAZINE
Incorporating Speed and The Brooklands Gazette
Founder Editor Bill Boddy MBE
Proprietor Edward Atkin CBE

18-20 Rosemont Road, London NW3 6NE, UK
www.motorsportmagazine.com

EDITORIAL
020 7349 8484
editorial@motorsportmagazine.com

Editor Joe Dunn
Editor-at-Large Gordon Cruickshank
Production Editor Robert Ladbrook
Features Editor Simon Arron
Grand Prix Editor Mark Hughes
Art Editor Damon Cogman
Digital Editor Jack Phillips
Designer Andy Coates
Photographer Lyndon McNeil
Writer Samarth Kanal
Contributing Editors
Andrew Frankel, Doug Nye, Mat Oxley, Richard Meaden
Special Contributors
Gary Watkins, Paul Fearnley
Picture Library
Motorsport Images 020 3405 8100
info@motorsportimages.com

ADVERTISING
020 7349 8484
sales@motorsportmagazine.co.uk

Commercial Director Sean Costa
Commercial Manager Mike O'Hare
Advertising Manager Laura Holloway
Sales Executive William Hunt
Sales Executive Connor Garnett

PUBLISHING
Managing Director Giovanna Latimer
Publisher Steve Kendall
Financial Controller Niall Colbert
Marketing & Operations Director
Gerard O'Brien
Project Manager
Zamir Walimohamed
Brand & E-Commerce Manager
Sarah Fawcett
Digital Marketing & Analytics Executive Joel Fothergill
Senior Customer Services Executive
Denise Bernard
Circulation Marketing Executive
Oliver Ring
Event & Content Manager
Helena Barrow

SUBSCRIPTIONS
UK & Overseas subscriptions
+44 (0) 20 7349 8484
US subscriptions (Toll Free)
+1 866 808 5828

Motor Sport (ISSN No: 0027-2019, USPS No: 021-661) is published monthly by Motor Sport Magazine GBR and distributed in the USA by Asendia USA, 17B S Middlesex Ave, Monroe NJ 08831. Periodicals postage paid New Brunswick, NJ and additional mailing offices. POSTMASTER: send address changes to Motor Sport, 701C Ashland Ave, Folcroft PA 19032. UK and rest of world address changes should be sent to 18-20 Rosemont Road, London, NW3 6NE, UK, or by e-mail to subscriptions@motorsportmagazine.co.uk. Distribution: Marketforce, Blue Fin Building, 110 Southwark Street, London SE1 0SU. Colour origination: All Points Media. Printing: Precision Colour Printing, Telford, Shropshire, UK. No part of this publication may be reproduced in any form without the written permission of the Publisher. Copyright © 2018 Motor Sport Magazine Limited, all rights reserved. We take every care when compiling the contents of this magazine but can assume no responsibility for any effects arising therefrom. Manuscripts and photos submitted entirely at owners' risk. Advertisements are accepted by us in good faith as correct at the time of going to press. Motor Sport magazine is printed in England.

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

abc PPA

Contents

Volume 95 / Number 1



REGULARS

15	Matters of Moment
16	Formula 1 News
22	International News
26	Historic News
32	Club Racing & Beyond
36	Events
38	Tomorrow's World
40	Road Car News
42	Mark Hughes
44	Dickie Meaden
46	Mat Oxley
48	Doug Nye
50	Gordon Cruickshank
53	Letters
54	Precision Special
185	Books
187	Art & Memorabilia
188	Model Cars
190	Parting Shot
192	You Were There







FEATURES

58 **F1 SEASON REVIEW**
How Mercedes landed a fifth straight world championship, and how Ferrari threw its title hopes away

72 **LAND SPEED RECORDS**
As Bloodhound stalls, we recall our take on past attempts to be the fastest ever

80 **1000MPH OR BUST...**
...and bust is what's happened. Andrew Frankel considers Bloodhound's pains

86 **RACE OF REMEMBRANCE**
All quiet in Anglesey as veterans, racers and Mission Motorsport pay tribute

92 **IMSA'S BAD BOYS**
Tax evasion was the least of it; how drugs and bullets tainted Camel GT

98 **THE (UN)RACEABLES**
Three unlikely ways to have a million dollars' worth of fun - and still eat

106 **LUNCH WITH...**
The holder of four-in-a-row World Superbike titles, Jonathan Rea

116 **MASTER CRAFTSMEN**
Need a wire wheel for your Bentley? Motor Wheel Services can provide

122 **CHRISTMAS GIFT GUIDE**
It's never easy matching gift to recipient; we offer some petrol-themed treats

129 **ROAD TESTS**
Off-road extremes: Suzuki Jimny and Lamborghini Urus, plus BMW M2 Comp

137 **SPEEDSHOP**

167 **GARAGISTA**



In the spirit of Bod and Jenks

OTHER WAYS TO READ...

Our digital edition is available on any device, on desktop, tablet and smartphone



AFFORDABLE FINANCE FOR STUNNING CARS



- ✔ Our expert, friendly team will help make your dream car a reality
- ✔ Equity release can unlock the capital in your car collection
- ✔ Competitive rates and terms from 12 to 60 months
- ✔ Realistic balloon payments allow the lowest possible monthly repayments

JBR CAPITAL

Call one of our experts now for a competitive quote on
020 3603 0083 or visit**jbrcapital.com**

Finance and terms subject to status. Loans from £25k to £5m+.

TRUSTPILOT

Official Finance Partner

MATTERS OF MOMENT



Joe Dunn
Editor
@joedunn90

One of the most memorable press conferences I have attended in the past couple of years was held by a small pressure group called Article 19, and took place in a cramped lecture hall off High Holborn, London.

The organisation campaigns for press freedom in some of the world's less tolerant places and more usually focuses on government policy and the law. On the occasion I visited, they were talking about Formula 1.

The reason was the decision to award the 2017 Grand Prix of Europe title - once a glittering accolade within the world of motor racing - to Azerbaijan, a country barely on nodding terms with the concept of free expression and with a penchant for locking up those who begged to differ. The race in Baku went ahead - and has been on the calendar ever since. In fact, this year's street race was a particularly exciting one - won by Lewis Hamilton after a blown tyre resulted in an agonising retirement for leader Valtteri Bottas, and also heralded the arrival on the F1 radar of a young Monégasque called Charles Leclerc, who finished in sixth place to earn his first championship points.

But we digress.

On that afternoon in Holborn, journalists were presented with ordinary Azerbaijanis who recounted their brushes with the authorities and spoke eloquently about how holding a race in the capital would legitimise the regime and enable it to justify further repression of their citizens.

I remembered their words in the run-up to the seasonal finale held this year in Abu Dhabi. Unfortunately for the kingdom, its mask of respectability slipped just days before the race got underway, with the news that Matthew Hedges, a British academic, had been sentenced to life imprisonment for spying by an Abu Dhabi court. The day after the race he received a royal pardon. But the spectacle of British-based teams competing with nary a word of protest, in a country that had just arbitrarily imprisoned for life one their compatriots, took the gloss off the event.

The 2018 campaign also featured races in Bahrain, China and Russia, none of which are countries known for their tolerance. In fact, the latter, at the time of going to press, was further burnishing its gangster-state credentials by orchestrating a naval stand-off with Ukraine, while at the time of September's Grand Prix in Sochi, Russia was being investigated for using biological weapons on British soil.

Before you turn the page, I should say I do not intend to use this column to list the problems and abuses of the power in the world - and yes, no doubt some people will argue that Donald Trump's America has its faults too and Austin should have been cancelled. Nor do I intend to rehash the arguments about sport's place in the political sphere.

But on a purely practical level, the warning signs for the sport are clear. Bernie Ecclestone famously sidestepped the question of F1's morality or lack if it, back in 2013. "We don't go anywhere to judge how a country is run," he said. "I keep asking people, 'What human rights?' – I don't know what they are."

That line of obfuscation is surely no longer acceptable - if it ever was - with supporters of F1. In an age when fans have a voice via social media and companies - no matter how big - are only one Twitter storm away from being boycotted on a global scale, the risks of being seen to support unsavoury regimes is clear. Especially for a supposedly more enlightened (and, let's face it, NASDAC-listed) owner such as Liberty Media.

In fact, for people who love our sport and want to see it thrive among a new generation of fans, it could be argued that the old-fashioned art of cleaning up its reputation and image is equally as important as launching hi-tech initiatives such as OTT TV streaming. Perhaps the teams themselves could wield their new-found power to force organisers to think again about where it does business.

There is historical precedent for this. Between 1986-1992 F1 stayed away from apartheid South Africa, although admittedly it was a little late to the party...

To be fair, it is not just Formula 1. In mid-December the so-called future of racing - the all-electric Formula E championship - kicks off its fifth season with a curtain-raiser in Saudi Arabia. Just weeks after the state admitted to killing a journalist in its own consulate in Turkey, the FE circus rolled into Riyadh, to declare to the world that there is nothing to see here. Perhaps it's time Article 19 took another look at motor racing.

AFTER A LONG SEASON ON THE ROAD AND IN THE AIR, our Grand Prix editor Mark Hughes can look forward to spending some time at home. Unlike this season's WEC - which straddles the calendar year for its so-called super-season, and Formula E which only starts in December, Formula 1 - in common with most other forms of motor sport - takes a well-earned break over the festive season.

As well as wine, Mark will no doubt be mulling the changes that will take place in 2019, with only two teams keeping the same driver line-up and a new generation of exciting talent set to make an impact. This magazine, too, has exciting plans for 2019 and beyond. In the meantime, we'd like to wish all our readers a very happy Christmas and we look forward to seeing you back in the paddock in the new year. M

Our February issue is on sale from January 2.



Protestors welcome F1 to Bahrain in 2015

GETTY



16 January 2019



Ricciardo brought the curtain down on his Red Bull career after the Abu Dhabi Grand Prix

RED BULL

Mexican, Brazilian, Abu Dhabi Grands Prix

RICCIARDO OUT FOR 100

After hitting his century of races for Red Bull, the Aussie opens up about his reasons for jumping ship to Renault

Mark Hughes

The final races of 2019 were always going to have an end-of-term feeling. Since missing out in Austin, Lewis Hamilton wrapped up his fifth world championship in Mexico, becoming by some measure the greatest driver of his generation. It meant Brazil and Abu Dhabi had something of a dead rubber atmosphere - although there was plenty to talk about at both.

But amid the Hamilton/Mercedes celebrations it is easy to forget that these were Daniel Ricciardo's last three Grands Prix for Red Bull. If you'd asked him a year ago where he believed he'd be heading if he were to leave the team that had been behind his entire F1 career, he'd likely have said Ferrari, maybe Mercedes at a push.

Free to dictate his own destiny for the first time, that would have been the final career-defining deal, the big-money transfer to the team that was going to deliver him a world title. It hadn't worked out that way of course; he was in contact with both those teams, but in the end there wasn't room for a driver of his stature, a 29-year-old multiple GP winner who wasn't going to be anyone's understudy, who was ready for an immediate title campaign. So he was obviously going to stay at Red Bull, where a lucrative deal had been agreed with Dietrich Mateschitz - not someone who ever previously got involved in driver negotiations - at the Austrian GP. Except he wasn't. Phoning Christian Horner from LA at the beginning of the summer break, it took at least three attempts to impart the news before the team boss realised he was being serious, that he really was leaving for Renault.

When it had been mentioned as a possibility earlier in the season, Horner had commented: "It would be a brave move. We usually lap those guys." As a hard-hitting fact, it did the job. But Ricciardo had made that brave move. He gave the background to the story in a blog for *The Players' Tribune*, describing the 'crossroads with a big decision to make.'

"After the Hungarian Grand Prix at the end of July, I flew to Los Angeles. I wanted to get away. I needed space. I needed a nine-hour flight, free of WiFi and distractions. I needed to make a decision. After 10 years with Red Bull, the team had drawn up a new F1 contract offer for me. I've spent my whole professional racing career with Red Bull, but Renault had also offered me a deal. They both



wanted me to drive for them, and they both wanted an answer soon.

"Looking back now, the decision about my future in F1 had been all-consuming for some time, and it took its toll on me more than I had realised. It sounds a bit dramatic, but this was one of the biggest decisions of my life. Just as big as deciding to leave my friends and family as a teenager and go to Europe to pursue my dream of becoming an F1 driver. I know in terms of life decisions, people have to make far harder ones but, to me, this decision would be life-changing. And I have worked damn hard to get to where I am today.

"So I got on a plane. And about halfway through the flight, some 40,000 feet above the east coast of the United States, I turned off the movie I was watching, grabbed a glass of wine and had a real good think about my future.

"I needed to listen to my heart, I needed to go it alone and make my own decision. Change is scary – it's f***ing terrifying! And I know the next part of my journey won't always be easy, but I had to take this step to try to be the best version of me. That's all it was. It was the next step, the next leap, a new challenge."

Even though 2019 brings with it new aerodynamic regulations that could mix up the competitive order, realistically Renault is not going to make up a lap's deficit on the basis of a good off-season. So these races would be Ricciardo's last for some time in a top-line car.

MEXICO

Mexico was always on Red Bull's list of races where it felt it could take the fight to Mercedes and Ferrari: Monaco, Hungary, Singapore and Mexico. The exceptionally high altitude of the Mexico City track (a quarter of the elevation of the top of Everest) equalises the Renault engine in the back of the RB14, for one thing. Its smaller turbo can be more easily spun faster in compensating for the lower oxygen content than the bigger turbos of Merc and Ferrari. Couple that to the fact that an air density 25 per cent lower than at sea level means a corresponding reduction in downforce and drag, so every scrap of the Red



Bull's extra downforce is more valuable than ever and the usual corresponding penalty of extra drag is reduced. So, with a competitive engine and the best aero for the track, the Red Bulls were fighting for pole - with each other, leaving the Ferraris and Mercs more than a tenth behind.

Max Verstappen appeared through practice to have the edge in this in-team contest, much as he has had throughout the latter half of the season. Ricciardo came close to admitting a



Pole in Mexico was followed by yet another retirement for Ricciardo, as Verstappen won

RED BULL

few races earlier that Verstappen's speed and how difficult he was going to be to beat over the coming years had been a factor in the thought process high above the American coastline. But Daniel's a wily old fox behind the grins and jokes. When it came to it, on the final Q3 runs, Ricciardo aced the second and third sectors of the lap. "I've no idea where that came from!" said Horner in admiration afterwards. "He was suddenly way faster through there than he'd been all weekend." It was enough to deny (by 0.026sec) Verstappen the chance of becoming the youngest-ever pole sitter. A furious Verstappen ran over the P2 bollard in parc fermé. How had qualifying been, he was asked. "Crap! The same problems as FP2 [in which he'd been fastest by 0.15sec)."

Ricciardo, by contrast, was milking it in his unique showman way, getting the crowd going as he stood on the track being interviewed. It looked like he may have been trying to rub it in. Certainly, that's what Max's father Jos - who was watching from back home - believed. "I spoke to [Max] before going to sleep," he said. "I tried to calm him down a bit. He was upset because the car wasn't right. He was irritated because he missed out on pole and because of the car, but also because of Ricciardo's exuberance."

Verstappen came to the track on Sunday morning after just three hours of tormented sleep. "I knew from the look on his face that there was only one person coming out of Turn One in the lead," said Horner later. That's how it played. In fact, the way it worked, with Lewis Hamilton getting a tow from Ricciardo, it was better to have started second and to be on the inside. Besides, Ricciardo had been just a little too sudden with his clutch release, triggering slightly too much wheelspin.

So Verstappen waltzed to a dominant victory, Hamilton sealed his fifth world title with fourth place. Ricciardo? He was running third when the engine lost all power. He pulled off and a small fire started around the exhausts. A marshal trained his extinguisher upon it. The extinguishant found its way into the turbo's internals. Which meant it had to be changed for Brazil - incurring a five-place grid penalty. If there was any worse news than that from Mexico for Ricciardo, it was that Nico Hülkenberg's 'Class B'-winning Renault had finished two laps behind Verstappen...

"If there was any worse news than retirement for Ricciardo, it was that Hülkenberg's Renault finished two laps behind Verstappen"

BRAZIL

Although Interlagos is the second-most vertiginous track on the calendar, at a mere 800 metres (compared to Mexico's 2300), it's not enough to give the Renault engine parity - and it was back to row three for Red Bull - with Ricciardo additionally penalised down to row five. But on race day the RB14's

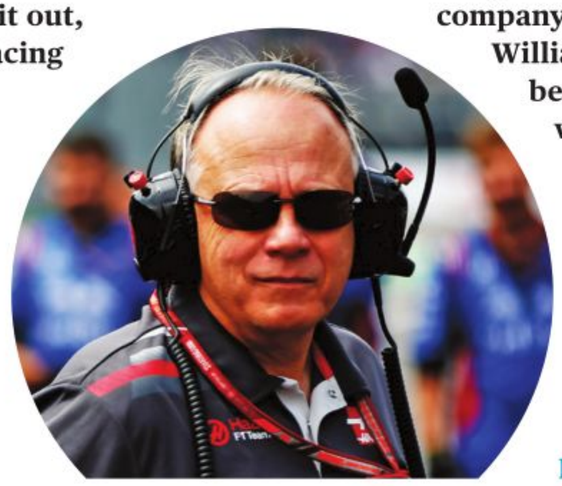
WORD ON THE BEAT

Rumour and gossip from the F1 paddock

As from next year the FIA will not conduct pre-race scrutineering. The measuring equipment and set-up patch will be available for teams to check dimensions.

Existing supplier PIRELLI has been confirmed as the winner of the tender to supply F1 until 2023. New 18-inch wheels will be introduced from 2021. HANKOOK had also bid for the tender. In the meantime, drivers are once more asking for tyres on which they can push hard for longer.

In the final round at Abu Dhabi, the HAAS team launched a protest against FORCE INDIA, claiming the new Racing Point Force India (established post-Hungary) was not a constructor on the grounds that it was not using its own car, but that created by a previous team (ie Force India). The FIA heard the protest but threw it out, but agreed that Racing Point Force India was a new team. This has implications upon when it will be eligible for prize money payments. Which was almost certainly the intention of the Haas protest, given that the team owned by Gene Haas (*below*) has endured the regular stipulation that a new team must score points in two of its first three seasons before being eligible for full payments. The ruling could cost Force India $30 million.



RICH ENERGY was announced at short notice in Mexico to be a HAAS title sponsor for 2019. The company's chief executive William Storey had been in discussion with Williams about such a role just seven days earlier, in Austin. The WILLIAMS team - which loses title sponsor MARTINI next year - was therefore surprised to discover the Haas tie-up only when it was announced in the media.

F1's COST CAP has been postponed from the originally-planned 2021 season and is now set for 2023. There is a hope that there can be a team agreement in the interim.

TORO ROSSO and McLAREN have agreed the terms of technical director JAMES KEY'S transfer from the former to the latter. He will begin work at Woking next summer. Design of the new car will be led by Pat Fry and performance director Andrea Stella.

On the day after the F1 season concluded in Abu Dhabi, Toro Rosso confirmed that Anglo-Thai F2 graduate ALEXANDER ALBON would partner returnee Daniil Kyvat in its 2019 line-up.

ability to treat its tyres nicely turned out to be a more powerful asset than any engine advantage. Verstappen overtook the entire Ferrari and Mercedes teams on track to be leading until tripping over the Force India of old karting nemesis Esteban Ocon, who was trying to unlap himself. This gifted a struggling Lewis Hamilton the win. Ricciardo came through the midfield easily enough but spent a long time dicing with Sebastian Vettel's fifth-placed Ferrari. He eventually got by with one of his patented late-braking moves, something he then repeated on Valtteri Bottas's Mercedes. So fourth place at the flag, but without the penalty he'd arguably have been around to profit as the winning beneficiary of Verstappen's incident.

ABU DHABI

The emotions were running high in Abu Dhabi, every part of a Grand Prix weekend routine carrying with it an unsaid weight, of it being the last time. Red Bull's car was again great on its tyres and easily fastest in the twisty last sector of the desert track, where the rubber tends to run too hot. But that wasn't buying it as much time as it was losing to Mercedes and Ferrari in the power-demanding first and second sectors. So they were back to being on the third row, but Ricciardo this time was able not only to outqualify Verstappen but get through Q2 on the harder ultra tyre, unlike Verstappen who needed a hypersoft to make it. The implied strategy advantage for Ricciardo didn't really play out, though.

Ricciardo ran the initial stages of the race in fifth place, but dropped behind Verstappen at the pit stops but both were then able to ambush Valtteri Bottas's Mercedes. But that took them only as far as third and fourth. After the disappointment had faded, there was one last love-in.

"Everything I have done in F1 is down to them and I'm incredibly grateful for that," said the 'Honey Badger'. "The moment before the race with everyone in the garage showing their love and appreciation was really cool and that's certainly something I will never forget. I thank the team for the last five years and Red Bull for the last 10. I would have loved to drink out of my shoe and celebrate with the team one last time, but now I close this chapter with thanks and love for everyone in the Red Bull family."



Red Bull's inherent aero advantage made it the car to beat in Mexico

LAT

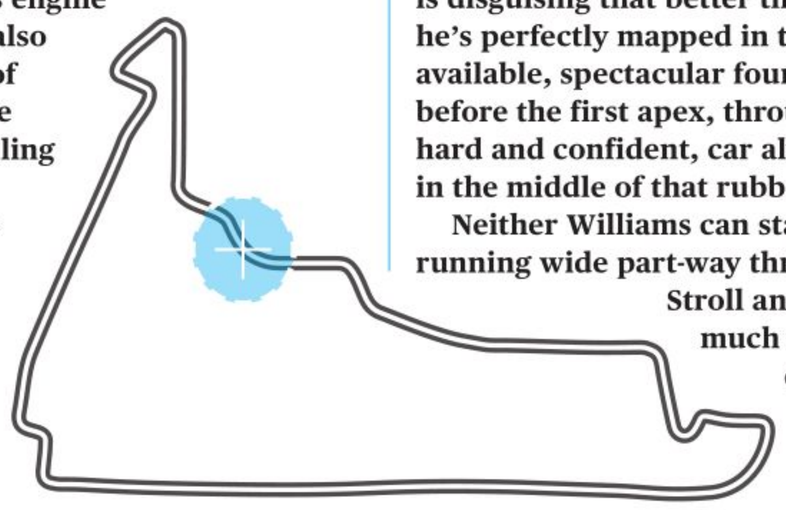
TURN 8-9, AUTÓDROMO HERMANOS RODRÍGUEZ

TRACKSIDE VIEW

In the thick of it, with thin air and big commitment

The late morning Mexican sun is back-lighting the track and picking out the rubber groove through the fast ess of Turns 8-9.

As you breathe you can feel the thin air with which the car's engine and downforce are also struggling. Intakes of breath don't feel like they are properly filling your lungs – and although the engine has the benefit of a turbocharger to compensate for that by way of greater boost, there is a limit to turbo speeds, with the net result being a roughly proportional decrease for everyone. Which means the actual bhp shortfall for Renault is smaller than usual.



The thinner air also means 25 per cent less downforce and Monaco wing levels gives roughly Monza levels of downforce. So with the engine penalty minimised and each scrap of extra downforce like gold dust, the Red Bull is looking great here – particularly so in Max Verstappen's hands.

The track is dusty and gripless but his car is disguising that better than any other and he's perfectly mapped in to what is available, spectacular four-wheel drift well before the first apex, throttle application hard and confident, car always smack bang in the middle of that rubber groove.

Neither Williams can stay in it, the front running wide part-way through the corner, Stroll and Sirotkin using as much throttle as they dare, trying to co-ordinate that with not running out of track on the exit.

Sainz's Renault is hanging it out here, rally-style, but at visibly lower speeds than the more neutral Red Bull.

Sebastian Vettel is attacking the sequence too and the Ferrari is, as ever, pliable, compliant, driveable. But it surrenders earlier than the Red Bull.

RM | Sotheby's

NEW AUCTION



11 APRIL 2019

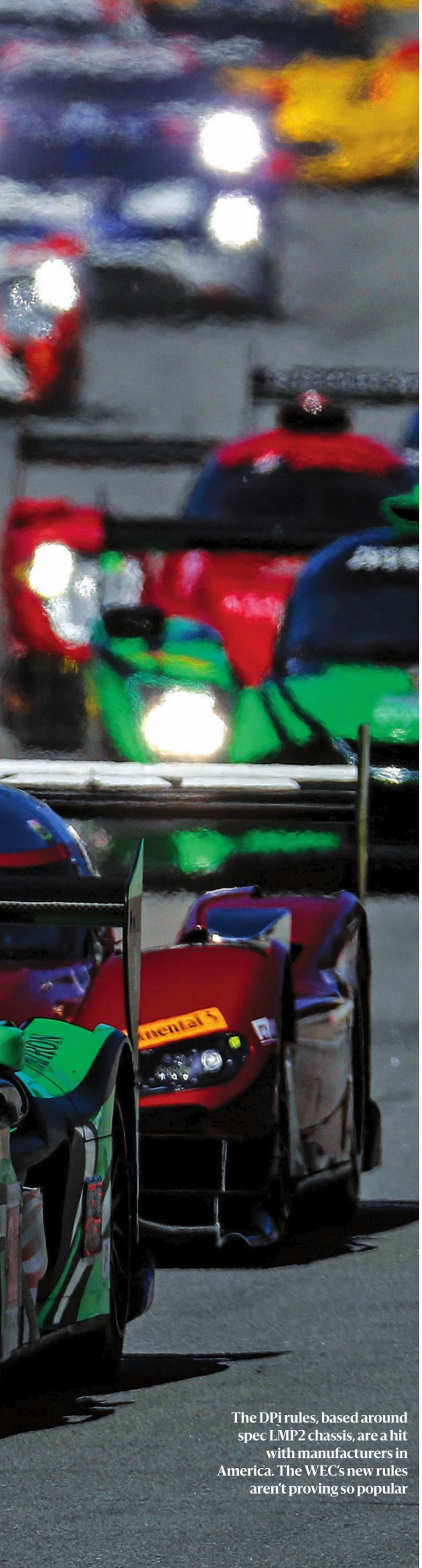
ESSEN 2019

CONSIGNMENTS INVITED THROUGH 20 FEBRUARY

HEADQUARTERS +1 519 352 4575
GERMANY +49 172 7151 251
FRANCE +1 33 (0) 1 76 75 32 93
ITALY +39 02 9475 3812

rmsothebys.com
Collectors gather here.


CADILLAC
ACURA
mazda
ModSpace
mazda
NISSAN
NISMO
POWERED BY
NISSAN
NISMO
IMSA



The DPi rules, based around spec LMP2 chassis, are a hit with manufacturers in America. The WEC's new rules aren't proving so popular

LAT

GLOBAL DISHARMONY

American brands resist the WEC's overtures as budgets threaten rules alignment

Gary Watkins

The hopes of having the same machinery competing for outright victory in the 24-hour classics at Le Mans and Daytona have faded after American brands hit out at the proposed budgets for the FIA World Endurance Championship's new 2020/21 hypercar regulations, calling them too expensive.

The Automobile Club de l'Ouest, the organiser of Le Mans and the promoter of the World Endurance Championship, wanted the new hypercar concept class due to come into force for the 2020/21 season to be adopted by the IMSA SportsCar Championship in North America as a replacement for its Daytona Prototype international (DPi) class. However, plans have hit the skids over cost forecasts.

The plan appeared to be attainable given the WEC's accord with IMSA, which has more or less survived the 2014 US sports car merger – when the American Le Mans Series and Rolex Sports Car Series combined into the current IMSA SportsCar Championship.

The shared regulations would likely have resulted in the twice-around-the-clock fixture at the self-styled 'World Center of Racing' becoming a world championship round once again. The last time that happened was when Daytona opened the 1981 World Sports Car Championship. But it could have created a significant pool of manufacturers ready to cross codes and compete in the major enduros of the two series. A common set of rules would have allowed WEC competitor Toyota to return to a race it won in 1993, while IMSA DPi participants Cadillac, Acura and Mazda would have had the chance to compete at Le Mans.

WHAT WENT WRONG?

IMSA always insisted that it was in favour of a common set of regulations for the top class of the two series, but it raised doubts that the hypercar concept rules could replace its DPi category on its announcement at Le Mans back in June. It suggested that there was still some way to go in terms of cost reduction to make the category attractive to its manufacturers. A further downscaling of the budgets involved announced by the ACO and the WEC in October appears not to have gone far enough.

The initial budget target for a two-car WEC assault when the new rules come into force for the second season running to the new winter series format in 2020/21 was €25-30 million. IMSA suggested that such a figure was significantly north of what Cadillac *et al* are spending on their IMSA DPi programmes, which are based around off-the-shelf LMP2 machinery. That was a major reason why the group working on the new hypercar rules strove to reduce the figure further to €20m.

IMSA boss Scott Atherton has had to concede that his manufacturers still don't have an appetite for the new category, or rather the costs it will entail.

"If they were saying, 'yeah, we're all in with the WEC commitment and we're ready to commit to IMSA for our championship – same car, same technology' – we'd sign up for it, but right now that's not the case," he says. "Unfortunately, as we speak today, we're not getting positive feedback from our existing manufacturers and those that have expressed an interest for the future."



Honda Performance Development (HPD), which runs Acura's race team, is a critic of new hypercar rules

Honda Performance Development, which drives the Acura programme with Penske Racing in North America, is certainly not offering positive feedback. Vice-president Steve Eriksen believes that the budgets for the hypercar rules remain too high for the manufacturers racing in the DPi category in North America.

"There has to be a doubt about the scope of the cost reduction and that the figures quoted will match up," he says. "Even at the lower figure, the number is too high for the economic times we find ourselves in.

"It is not feasible for us to develop our own car. We've done that in the past [with a series of LMP2 and LMP1 cars] and we know what it costs. The DPi concept is entirely different. You are taking a chassis that has already been developed and doing a bit of aero work. Then you have to come up with an engine, which in our case has already been developed out of a production engine. So you are cutting costs left, right and centre."

Eriksen believes that starting out with a common monocoque and crash structure would have been a more workable way forward. He also suggests that the front-axle hybrid system that will be mandatory on the new breed of hypercar prototypes is also unnecessarily expensive.

"Our halo cars are all hybrids – it fits with our brand technology," he says. "But it would need to be something more modest."

THE IMPLICATIONS

The failure to create a common platform can only make the hypercar rules less attractive to manufacturers looking to amortise costs.

Ford, one of the six OEMs around the table thrashing out details of the rules, has always made it clear that it is only interested in a global category. It stressed that it would develop a new car only if it had multiple applications, in the same way as the Ford GT that's racing in both the WEC and IMSA.

Porsche, an observer rather than a full participant in the early rules discussions, has expressed a similar sentiment. The German manufacturer, it should be stressed, was never a candidate to be an early adopter and make a swift return to the prototype ranks so soon after drawing a line under its successful 919 programme at the end of 2017.

How many manufacturers can be ready for the September 2020 start of the hypercar category isn't clear. The regulations are due to be published this month, which means time is short for any prospective entrants. McLaren, which is one of the half dozen involved in writing the rules, has already stated that it is unlikely to be ready for season one.

The failure to create a global platform isn't a nail in the coffin of the hypercar concept, but it could ensure that a relaunch category conceived in a hurry will endure significant growing pains.



HOT TOPIC

ALONSO'S LIST OF TARGETS

Spanish ace promises more "iconic" outings for 2019

Fernando Alonso hasn't shocked anyone with news of his return to the Indy 500 in 2019. But he is promising to spring a surprise over the winter by adding what he is describing as "a couple more challenges" to his new schedule.

"There are a couple of iconic places, iconic races that probably I will add to my calendar," says the Spaniard, who may or may not have bowed out of F1 for good after Abu Dhabi in November. Don't forget that he's only announced that he's not racing in F1 in 2019, not that he has retired from the pinnacle of the sport.

Alonso has got the three remaining rounds of the 2018/19 World Endurance Championship superseason, culminating in the defence of his Le Mans 24 Hours crown in June with Toyota, and the Indy 500 the preceding month in McLaren Racing colours. "It will be a little bit more than that," he says of his planned 2019 programme.

What he has in mind isn't entirely clear, and he wasn't making any connection between the new challenges and the 'ride-swap' PR gig in which he was scheduled to drive Jimmie Johnson's NASCAR Cup Chevrolet in Bahrain the week after Abu Dhabi. Some news is being promised by Alonso soon as a "Christmas gift".

What is clear, however, is that Alonso is a man enjoying himself away from the F1 pressure cooker, enjoying racing for racing's sake.



Barrett-Jackson®

THE WORLD'S GREATEST COLLECTOR CAR AUCTIONS®

CONSIGN NOW | JAN. 12-20 | SCOTTSDALE

CONSIGNMENTS@BARRETT-JACKSON.COM | CONTACT 480.663.6226

1957 A.J. WATSON INDY ROADSTER RE-CREATION
Indy roadster purpose-built to race at Bonneville. August 2018 world-record holder. A.J. Watson onsite and track consultant. Built with his chassis plans and body molds. Powered by a 270ci Offenhauser engine and a Winters Performance Phoenix transmission. ***No Reserve***

1967 SHELBY GROUP II RACE CAR
The first of the 26 total Shelby Racing Co. Mustang Group II FIA-GT SCCA Trans Am race cars. Shelby American Automotive Club Division 1 Concours Gold Award, Marti Report. Powered by a 305ci 8-cylinder engine mated to a 4-speed manual transmission. ***No Reserve***

1966 FORD SHELBY GT350 RACE CAR
Fully restored GT350 SCCA "B" production engine and documented in the Shelby American Registry. It's powered by a 289ci V8 engine, single 4-barrel with a 4-speed manual transmission. Includes a copy of the original order form dated January 26, 1966. ***No Reserve***

FOR THE COMPLETE DOCKET, CONSIGNMENT AND BIDDER REGISTRATION, VISIT BARRETT-JACKSON.COM

Experience the Barrett-Jackson Auctions live exclusively on Discovery Channel, MotorTrend and around the world on Discovery Networks International.

Discovery MOTORTREND

ALL THE CARS, ALL THE TIME.
Streamed live on Barrett-Jackson.com



Matt Neal's Studebaker heads a BTCC-studded St Mary's Trophy field at the 2018 Goodwood Revival

GOODWOOD MIGHT RUE BTCC CLASH

Calendar congestion prevents tin-top stars taking part in 2019

Samarth Kanal

Events at Goodwood in 2019 are likely to suffer a dip in star names because dates for both the Members' Meeting and the Revival conflict with British Touring Car Championship rounds, effectively ruling out many tin-top racers who usually enliven events at the Sussex circuit.

Goodwood's 77th Members' Meeting will clash with the opening BTCC weekend at Brands Hatch on April 6/7, while the Revival clashes with Knockhill on September 14/15.

BTCC regulars have been a large draw for Goodwood in recent seasons, with seven current or past stars competing in the 2018 St Mary's Trophy - an event that coincided with the BTCC's 60th anniversary season.

Triple BTCC champion Matt Neal has been a Goodwood regular in recent seasons. He said the clashes were disappointing and would affect deals he already had in place for 2019.

"It's such a shame," he said. "I've competed in the St Mary's and Gerry Marshall trophies for the last couple of years and teams have already asked me to compete in both again in 2019."

Goodwood's dates don't clash with the F1 schedule. However, Neal believes that the BTCC should take precedence over F1 when it comes to arranging Goodwood's calendar. The BTCC announced next year's dates last June.

"Everyone said to me, 'How many current Formula 1 drivers compete at the Revival?' I don't think I've ever seen one, so I don't know why that's been done," added Neal. "But it's Charles's [The Duke of Richmond's] football pitch and he can play the ball whenever he wants."

Ash Sutton, the 2017 BTCC champion, was another star driver to race at Goodwood in 2018, sharing a Ford Lotus Cortina with Peter Chambers. Sutton's father Warren told *Motor Sport*: "It's silly, really. They've lost the chance to have touring car drivers on the grid and they've taken out the best racers who have been here over the past few years.

"It's quite a massive thing to lose off the yearly calendar and they're two fantastic weekends. The historic races involve a lot of touring car drivers..."

A statement from Goodwood read: "Deciding on the dates for our motor sport events is always a challenge.

"As well as inviting the very best drivers and riders, we want to make sure as many fans as possible can come and enjoy the action. Inevitably there will sometimes be clashes and next September is particularly tricky with F1 fixtures and BTCC rounds.

"So we're sad to say for 2019 the Revival will fall on the same weekend as Knockhill. We'll



"How many current Formula 1 drivers compete at the Revival? I don't think I've ever seen one"

miss our BTCC friends very much but look forward to welcoming them back to Goodwood very soon."

Neal also warned that attendance figures may take a hit as a result of the move, as BTCC fans may skip both Goodwood dates.

"Whenever I go [to Goodwood], I see a lot of faces in the crowd that I see at BTCC meetings," he said. "It's going to cost both events attendance and everyone will be disappointed. It is what it is, and it's a shame because the Goodwood events are special events - especially the Revival - and I've always said that they are the blue riband events for historic racing all over the world.

"I did get asked to do the Silverstone Classic, which doesn't conflict this year, so maybe I'll do that," he added.

In addition to the calendar announcement, it has been revealed that the SF Edge Trophy for Edwardian machinery will return to the Members' Meeting after a year off in 2018.

Furthermore, the John Duff Trophy for pre-1930 vintage sports racing cars - named in honour of the first Canadian to contest the Le Mans 24 Hours, a winner for Bentley in 1924 - will be added to the Members' Meeting mix.

PETER AUTO F2 CANNED

Peter Auto's Historic F2 series - the Formula 2 Challenge - is no more. The organiser unveiled its 2019 calendar in November, including the Spa Classic in May and the Grand Prix de l'Age d'Or at Dijon in June.

The F2 series, which began in 2017, attracted only seven cars for its opening meeting in Barcelona.

"We don't have enough cars on the grid, that's the reason [for the series' cancellation]," said a spokesperson for Peter Auto.

"Peter Auto's regular drivers requested that we run the series [in 2017] but, finally, they didn't come."

The organiser is exploring other options, but it is not considering a new F2 series. Rather, it is looking at a new one-make historic series for 2019. The Historic Sports Car Club runs a more successful F2 series, also incorporating Formula B and Formula Atlantic cars built between 1967 and '78.

Peter Auto will expand into the Middle East for 2019, however, as its Sixties' Endurance for pre-63 Sports and pre-66 GTs will support the Bahrain GT Festival that begins on November 30, 2019, at Formula 1 venue Sakhir.

PETER AUTO 2019 CALENDAR

April 5	**Espritu de Montjuïc**
April 29	**Tour Auto Optic 2000**
May 17	**Spa Classic**
June 7	**Grand Prix de l'Age d'Or**
July 12	**Hungaroring Classic**
September 20	**Monza Historic**
October 18	**Dix Mille Tours, Paul Ricard**

AROUND THE WORLD

Former World Rally Championship co-driver Fred Gallagher has founded Rally the Globe, aiming to provide rallying adventures all around the world.

Gallagher, who has won WRC rallies with the likes of Juha Kankkunen and Björn Waldegård, said: "We pride ourselves not only in finding some of the greatest driving roads on earth but also in seeking out both quirky and astonishing places along the route for our crews to relish in between their competitive tests."

Rally the Globe's first event takes place in Spain and Portugal with the Carrera Iberia in October 2019. Other events include Seoul to Sapporo in 2023 and the 2020 Celtic Challenge. Its flagship rally covers the whole world and runs in three parts: London to Casablanca, New York City to Anchorage, and Vladivostok to London over 70 days from 2020-21.

Gallagher's fellow founders include former Subaru WRC team manager John Spiller, while Graham Goodwin serves as chairman. He said: "We are setting this up as a not-for-profit club for invited members who share a similar passion for automotive adventures.

"We all desire events that will serve up a magical cocktail of great classic cars, the thrill of competition and some unforgettable shared experiences in far-off places."

RtG's main competitor is HERO events, which took over the Endurance Rally Association's 25 events earlier in 2018. Gallagher and a number of his colleagues formerly worked for ERA/HERO.



Formula 2 cars have been dropped from Peter Auto's schedule due to a lack of support







NEC highlights included bagpipes, Ford Capris and Porsches

CLASSIC ATTRACTS 71,000

The National Exhibition Centre played host to more than 71,000 visitors over Remembrance weekend, as the 2018 Classic Motor Show opened its doors in Birmingham. The theme of the event was 'built to last' and more than 300 car clubs interpreted that brief in their own unique ways. In particular, the Veteran Car Club themed its display on World War I with a 'Coming Home' tribute.

Silverstone Auctions' sale took £4 million, with Frank Sinatra's 1984 Rolls-Royce Corniche Convertible selling for £140,625 and Steve McQueen's 1945 Willys Jeep fetching £84,375. Armistice Day was marked with a moving two-minute silence on Sunday, broken by a Highland bagpiper playing the silence away on the Live Stage.

JIM CLARK ROAD RUN

A new classic car event in memory of Jim Clark will take place on August 25, 2019. The Jim Clark Road Run, which ties in with the Linlithgow Classic Car Day in Central Scotland, is a two-hour drive that starts outside Linlithgow and ends in the town centre.

Special plaques will be handed out to the first 100 entrants, with Doug Niven - Clark's cousin - attending along with the famous yellow Lotus Elan once owned by the Formula 1 legend.

"It's something we've decided to do in Jim's memory as he died 50 year ago last April and we'd like to get it running next year," said Dave Miles, the promotions manager for the Linlithgow Car Club.

"I've been in touch win Doug Niven and he and his family are over the moon about it, and very supportive. Doug is coming along with Jim's Lotus Elan and the Jim Clark Trust will be there, too. We have special plaques for the cars, provided by Dragonfly, and they'll be highly coveted."

THRUXTON'S FESTIVAL

A new summer event has been announced for June 1-2, 2019, with the Thruxton Motorsport Celebration. Historic Promotions, which manages events such as the Sunday Scrambles, Flywheel Festival and Donington Historic Festival, will be taking the reins. Car club displays, historic racing and more will all feature during the weekend.

"We're certain the Thruxton Motorsport Celebration will become a huge regional summer highlight for years to come," said circuit managing director Bill Coombs.

The first major Thruxton meeting in 2019 is the BTCC round on May 18, with another round on August 17 and a Classic Sports Car Club meeting on September 21.

Elsewhere, Masters Historic Racing will return to Donington Park on June 8-9 for the Masters Historic Festival. The headline event will be the FIA Masters Historic Sports Car race, as well as a three-hour race for cars eligible to enter the Spa Six Hours. Pre-66 Touring Cars and a race for GT cars built between 1966 and 1981 feature among the supports.



HOT TOPIC

CAPITAL GAINS

Cities could be pivotal to a historic racing renaissance

By displaying its competitors' cars on a pedestrianised Regent Street at the free-to-enter Regent Street Motor Show in early November, the London to Brighton Run might have taught historic and vintage race organisers a valuable lesson.

More than 500,000 tourists from all over the world were eager to get up close and personal with the vintage machinery in the centre of London, with people of all ages and backgrounds taking an interest in pre-war cars.

And it showed that historic cars don't have to be confined to circuits - there's invaluable exposure to be gained by displaying or even demonstrating cars in inner-city areas.

The Silverstone Classic, which regularly attracts 100,000 people every July, had a major presence on Regent Street. And Formula 1's new owner - Liberty - is already reaping the rewards from inner-city demonstrations, with its October F1 Live event in Miami attracting a reported 80,000 people.

So if there is an "age problem" in historic racing, which outgoing HSCC CEO Grahame White said was a creeping issue in the December issue of *Motor Sport*, then utilising the tremendous footfall of cities and their young populations across the UK could well be the antidote.

Maybe a Central London demonstration is too much to ask for, being a financial and logistical burden but London isn't the centre of the UK.

An inspiring demonstration of historic racing cars could have another positive effect as new generations pick up an interest in engineering and racing; historic racing might become a stepping stone for people to pursue STEM careers if the right demographic is targeted.

And it could help fill up dwindling grids and empty grandstands.

SILVERSTONE
AUCTIONS



12th January 2019

Autosport International 2019

120 lots
Classic cars
Competition cars
Motorcycles
Automobilia and watches

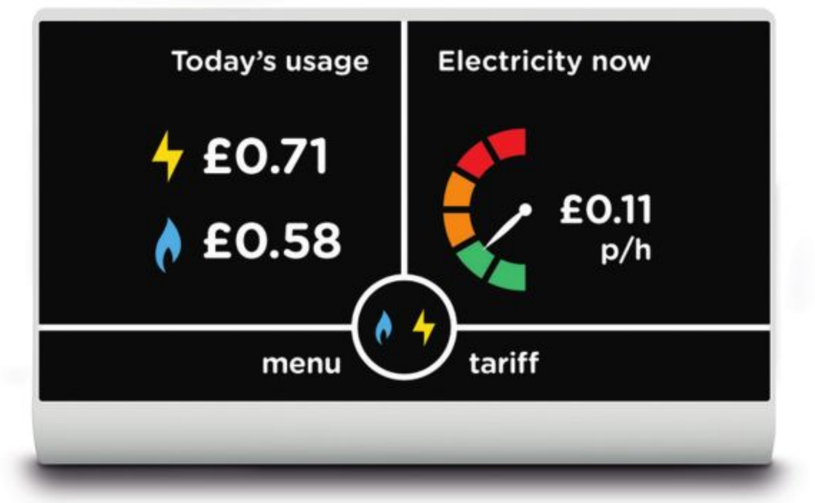
The NEC, Birmingham B40 1NT

A NEW APPROACH IN AN AGE OLD BUSINESS

+44 (0)1926 801 083 | silverstoneauctions.com

AUTOSPORT INTERNATIONAL


MODEL HD 6701
DO NOT TAKE INTO BATHROOM
£0.71
£0.58



Get a smart meter and you could save enough energy to power this many blow-dries



Save your energy for proper pampering.

Contact your energy supplier about getting your smart meter at no extra cost.

THE CAMPAIGN FOR A SMARTER BRITAIN

smartenergyGB.org

Representative of a typical in-home display. Based on UK Gov's projected annual savings of 2% and a Blow Dryer using 2.47kWh. Savings possible by customers measuring energy use and cutting waste. Eligibility may vary. Available in England, Scotland and Wales by 2020.





TITLE DEEDS & THE SOUND OF MUSIC

Two of the UK's foremost championships enter hibernation – and tunes ring

Simon Arron



Turkington celebrates. Above, 31 cars will almost fit into one corner. Above left, Team Dynamics' 150mph lawnmower

Regular readers might suspect a hint of bias, or else plain idleness, as Brands Hatch tends to feature frequently on these pages at this time of the year and lies but 25 minutes from my front door, but a) I still consider Oulton Park to be my home track, even though it is 200 miles distant and b) Brands is quite simply a magnet for wonderful stuff as the racing season draws towards its conclusion. And that's without mentioning the Formula Ford Festival...

BRANDS HATCH

Autumn, officially the season of mists and mellow fruitfulness. Had Keats lived another 197 years he might have added 'sportsmanship' to that catalogue of charms, but sadly he perished while internal combustion was but a nascent technology.

By reputation the British Touring Car Championship is a slightly posher form of banger racing, but that myth ought by now have been laid to rest. Some contact is inevitable when you have 30-odd cars separated by a singular inhalation of breath around the UK's relatively short circuits, but proximity is also a catalyst when it comes to showcasing the bygone custom of hard, fair racing.

The campaign's closing 15 laps, featuring a wonderful battle between Josh Cook and Ash Sutton, underlined the point. The pair were never more than a fraction apart, frequently side by side and avoided any kind of deliberate contact before crossing the line just 0.032sec apart in Sutton's favour.

The two of them might be mates, and thus less prone to acts of serial antagonism, but that doesn't alter the facts.

With the title all but settled in Colin Turkington's favour – a 22nd place finish in race two was enough to nudge the matter beyond Tom Ingram's mathematical grasp – there was always the option of idling on a sofa with glass of Sauvignon close at hand and watching events unfold from a distance, but TV is ever a poor substitute for the real thing.

And there is no evidence that the BTCC's accessibility on free-to-air telly serves as any kind of deterrent. Even arriving circa 8am, it was necessary to park slightly closer to Orpington than Druids due to the incoming wave of humanity.

The anticipation was absolute, the mood infectious – and the whole embellished by the ancient ritual of mechanical origami, folding deckchairs being slotted at the front of the spectator banks before sunrise to reserve a prime position for the day's balance. The title fight might have looked lopsided, but that prosaic detail didn't dilute the sense of occasion.

While there is nothing amiss with the headline act (during the weekend's course, Dan Cammish became the season's 17th different BTCC winner), the supporting cast could do with a refresh. Porsche Carrera Cup cars doubtless feel wonderful from behind the wheel, but their inherent efficiency seems rarely to generate compelling racing. Likewise FIA F4, wherein the cars are possessed of too much grip and lack the engaging body language of, say, a Hawke DL15 or Van Diemen RF79.

A demonstration of the Team Dynamics-developed Mean Mower V2 – a 190bhp, 150mph lawn trimmer – provided light relief and there was a great show of brotherly spirit among the customarily rough-and-tumble denizens of the Renault Clio Cup, championship rivals James Dorlin, Paul Rivett and Max Coates slowing to complete their cooling-off lap side by side, with thumbs aloft. And then there was the setting, all of this taking place adjacent to a sprawling, leafy canopy in which buzzard, nuthatch, wren, jay, ring-necked parakeet and greater-spotted woodpecker could be heard whenever cars peeled off.

The only thing lacking was a little imagination, the presence of a guest race or

two to fracture the BTCC's homogeneity, but there are worse places to have been.

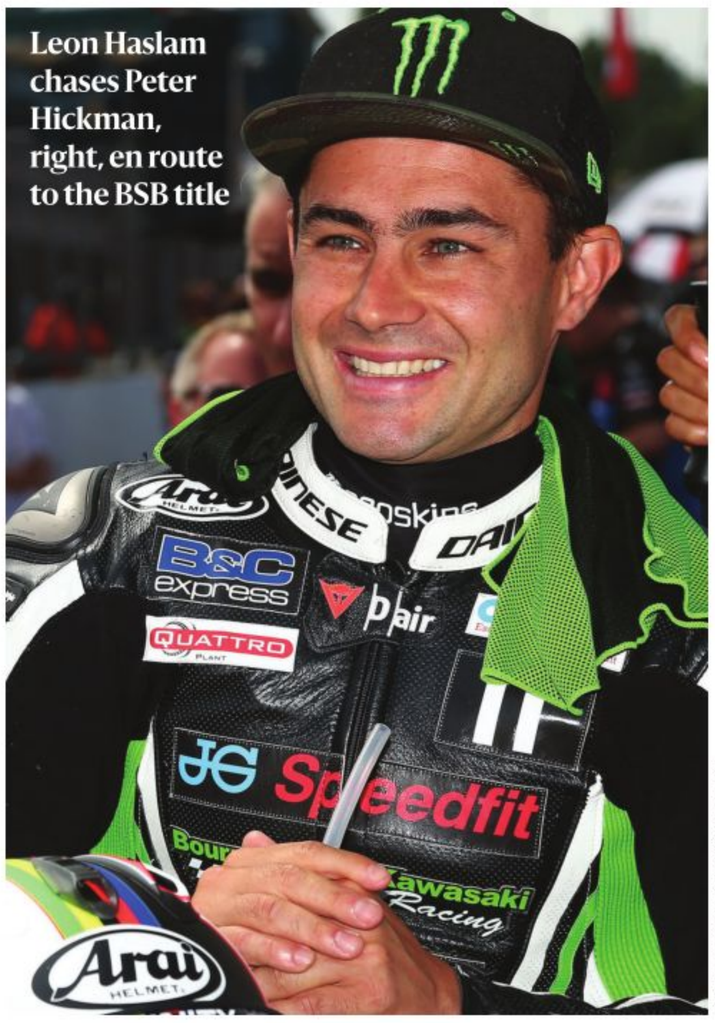
THERE WAS PERHAPS THUS A SCINTILLA OF inevitability about my return a fortnight later for the British Superbike Championship finale.

While Storm Callum ripped apples from trees and blew them into the River Wye, and caused roads to collapse in Wales, it subjected north-west Kent to no more than a stiff breeze, a pleasant complement to unseasonal warmth.

There's a popular myth that concepts such as opposite lock exist only at meetings prefixed by the word 'historic', but nobody mentioned that to BSB riders. Seldom have the laws of physics been so elegantly defied.

The first of the weekend's BSB races - the only one run in properly dry conditions - proved to be as pivotal as it was engaging to watch. While Glenn Irwin (Ducati) edged to his first win of the campaign, narrowly clear of a brawling mob, Leon Haslam (Kawasaki) was an unusually low-key sixth. The following afternoon would produce his 15th victory of the

"Even arriving circa 8am, it was necessary to park slightly closer to Orpington than Druids due to the incoming humanity"



Leon Haslam chases Peter Hickman, right, en route to the BSB title

JAKOB EBREY & SIMON ARRON



campaign, but this relatively subdued opening salvo secured him the title for the first time.

One year earlier he had refused immediate medical care in order to hobble to the grid - with broken wrist, thumb and ankle after a 170-odd mph tumble - and compliment victorious rival Shane Byrne.

Small wonder that his success 12 months

on was so graciously acknowledged by peers.

This is a world in which complete strangers wander up and say "hello" first thing in the morning, because - correctly - there is an assumption that all present are unified by a common passion. And this is also where sidecar crews exchange pumped fists at their race's conclusion, not just from driver to passenger but also from chair to chair.

It's camaraderie as an art form.

PRESCOTT

There comes a point when traversing the front door is all that's required for a bracing reminder that summer has officially expired - and this was perhaps it. The London landscape wasn't quite dappled with frost, but sections of the A40 certainly were - and the road also featured a new chicane just before Cheltenham, in the form of an errant family of pheasants. There was just sufficient time and space to swerve around them and preserve Cotswold wildlife stocks at their existing level.

Prescott's seasonal finale is known as The Autumn Classic, a name it shared with the concurrent race meeting only 50 miles away at Castle Combe - yet more evidence of UK motor sport calendar madness, though the hillclimb was a two-day affair so it was at least possible to attend bits of both events.

The first part of the meeting was a washout, but Sunday dawned beneath crisp seasonal sunshine - and Prescott rarely looks finer than it does at this time of the year.

In addition to the customary ranks of Ford Escorts and Minis (and Andrew Bower's Bruichladdich Capri, a new one on me in its distinctive shade of British Racing Turquoise), the paddock was graced with much Americana - including flat-head coupés that didn't so much tackle the course as lurch to the summit in a blaze of understeer.

A healthy entry of 500cc F3 cars crackled away, with their distinctive perfume of distilled Castrol R, and passers-by paused in the paddock to jive to songs belted out by the marvellously monikered Betsy Harmony. If there is a better stage name anywhere on the planet, I'd like to hear it.

Such are the occasions that give British motor sport its unique flavour. M







Nick Allen's Austin 7 Shelsley Special. Above left, John Dent's 500cc Cooper. Above, one of the world's finest paddocks



CLUB RACING SPOTLIGHT

Dave Lowe has raced in FF1600 since the 1970s

It was in 1982 that our paths first crossed, when Dave Lowe's Lotus 61 stood out as something of an antique in Pre '74 Formula Ford racing. "My brother and I shared that car from the early 1970s," Lowe says, "but then he got married and I took it over. I only sold it in 2017, though I hadn't raced it much in recent times."

That's because he subsequently acquired a Lotus 69, with which he has just completed a 20th straight season.

"I used to mix and match Historic and Classic championship events," he says, "but now I focus on the Classic series. I've won the title 13 times, I think, but I'm not really chasing that any more. I missed the first couple of races in 2018, because they were quite early and I thought it would be a bit cold and wet, so I'm just here because I enjoy it."

And he still ended the season third in the standings, behind youngster Benn Tilley and veteran Stuart Kestenbaum.

Lowe acquired a taste for competition in his native Guernsey, autotesting an MG Midget and hillclimbing a borrowed March 722, but his main focus has always been FF1600. "I leave the car at a farm near Gatwick," he says, "which makes life a little easier. Commuting from the Channel Islands is time-consuming, but once I'm at the track I absolutely love it. How long will I continue? I've no idea. My next birthday will be my 80th, but I've just bought some new tyres so I guess that means I'm planning to race again in 2019."



MSV - THE UK'S LEADING MOTOR RACING CIRCUIT OPERATOR

BRANDS HATCH KENT | **DONINGTON PARK** LEICESTERSHIRE | **OULTON PARK** CHESHIRE | **SNETTERTON** NORFOLK | **CADWELL PARK** LINCOLNSHIRE | **BEDFORD AUTODROME** BEDFORDSHIRE

CHRISTMAS STOCKING THRILLERS

HIGH OCTANE GIFT IDEAS FOR THE PETROLHEAD IN YOUR LIFE

VISIT OUR WEBSITE FOR EXCLUSIVE MEGA XMAS DEALS

2019 RACE EVENT TICKETS

DRIVE A TOYOTA GT86 RALLY CAR

DRIVE A F4 SINGLE-SEATER RACE CAR

MSV

BUY DIRECT FROM MSV FOR THE BEST DEALS

EVENT TICKETS AND SEASON PASSES ❄ DRIVING EXPERIENCES ❄ PASSENGER RIDES ❄ JUNIOR DRIVING EXPERIENCES ❄ TRACKDAY VOUCHERS

Call 0843 453 1000 or visit www.msv.com/christmas

Calls will cost 7p per minute plus your telephone company's access charge.



DECEMBER 2018

COMING ATTRACTIONS

INTERNATIONAL *December 9 – Stock Car Brasil, Interlagos, Brazil*

Now in its 40th season, Stock Car Brasil has gained a cult following due to its competitive nature and star drivers. Former Ferrari man Rubens Barrichello is a regular, while Ricardo Zonta and Felipe Massa have also raced this year.

INTERNATIONAL *December 15 – Gulf 12 Hours, Yas Marina, UAE*

Abu Dhabi hosts this endurance race at the Formula 1 venue, with two six-hour 'heats' pitting GT teams against each other. Aston Martin is fielding three of its new Vantage GT3s, with Le Mans winners Jonny Adam and Darren Turner starring for WEC entrant TF Sport.

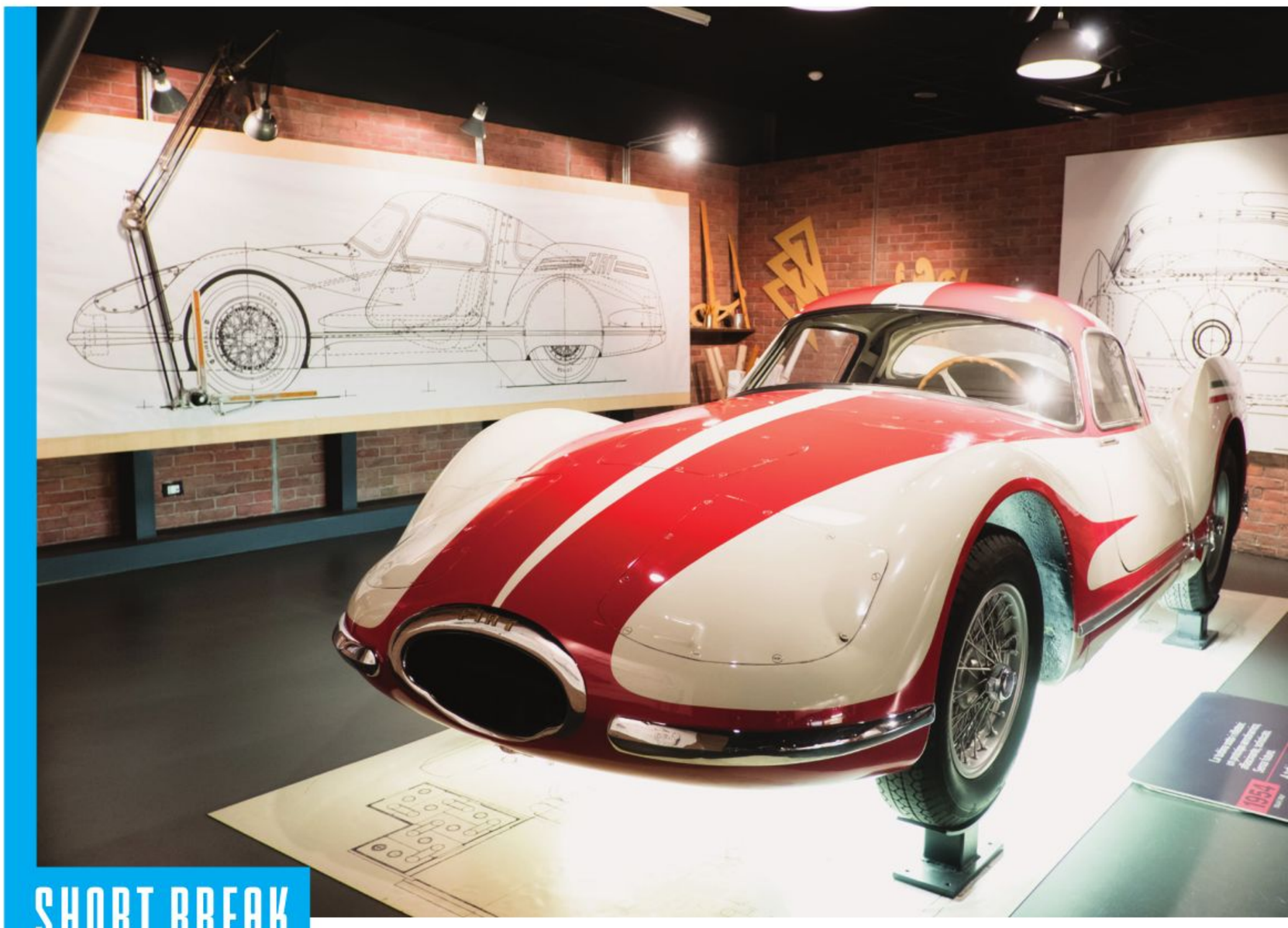
INTERNATIONAL *December 15 – Formula E, Ad Diriyah, Saudi Arabia*

The Gen2 Formula E cars make their debut as the fifth FE season begins. The 21-turn track is located outside Ad Diriyah, whose Turaif District is a UNESCO World Heritage Site. The Jaguar I-Pace eTrophy is the intriguing support.

IN THE UK *December 16 – Christmas Stages Rally, Croft* **Entries for the Christmas Stages at Croft are piling up and thousands of fans are expected to attend the eight-stage event. It begins at 9am and ends in complete darkness, with ex-World Rally Championship cars expected to take part.**

INTERNATIONAL *December 21 – Tropheé Andros, Andorra* **Tropheé Andros is rallycross on ice. Drivers take the opportunity to hone their skills in the off-season, and alumni include Alain Prost and Olivier Panis. It's big in France, but the series is popular with tourists as a more enthralling form of *après-ski*. Make sure to bring snow chains.**

DEC 1	VSCC DRIVING TESTS	Bicester Heritage
DEC 1-2	CATERHAM CHALLENGE	Laguna Seca
DEC 4-9	COPPA DELLE ALPI	Brescia
DEC 8	GRIZEDALE STAGES	Cumbria
DEC 26	PLUM PUDDING RACES	Mallory Park
DEC 29	PLUM PUDDING TRIAL	Buriton, Hants



SHORT BREAK

QUICK ON THE DRAW

The Italian national motor museum in Turin is one of the world's greatest – and it's in a spectacular setting

The Museo dell'Automobile di Torino is the holy grail for anyone passionate about motor sport and motoring. Currently, the Turin museum is hosting an exhibition centred around the work of Leonardo Fioravanti, the engineer and designer who spent more than 50 years working for Pininfarina before setting up his own studio in 1987.

The range of famous Ferraris designed by Fioravanti includes the Dino, Daytona, Testarossa and F40 – the exhibition features many of those models and sketches out the story of his life, using drawings from his school days and unpublished photographs from his time working with Pininfarina.



Some of his ingenious concepts are also displayed, including the pioneering Alfa Vola that featured a rotating roof – this convertible mechanism was then used in the Ferrari Superamerica, based on the 575 Maranello.

The museum itself expands beyond that particular exhibit, with more than 200 cars occupying more than 200,000 square feet. Turin's own motoring heritage is also documented thoroughly. It's an architectural masterpiece too – spacious and modern – and the collection of cars is exhibited in appropriate style.

Entry costs €12 for adults, with discounts for those over the age of 65, students, children and journalists.

HOW TO GET THERE

Return non-stop flights to Turin from Stansted start from just £20, or you can fly to Milan for the same price and drive to Turin for the day. There's a wide range of accommodation for every budget in either city.

ALSO GOING ON

The site of the first ever Formula 1 Grand Prix, held in 1946, is at the nearby Valentino Park, with Alberto Ascari's grid slot set in stone. From Turin, Monza is about a two-hour drive (traffic permitting).

DON'T MISS

One of the museum's many highlights is a horde of Italian-built Grand Prix racing cars, from the 1950s through to the millennial Formula 1 cars of the Michael Schumacher era.

AMELIA ISLAND
CONCOURS d' ELEGANCE

THE 24TH ANNUAL

AMELIA ISLAND CONCOURS d'ELEGANCE

THE RITZ-CARLTON, AMELIA ISLAND THE GOLF CLUB OF AMELIA ISLAND

MARCH 7-10, 2019







HONORING

JACQUES – BERNARD "JACKY" ICKX

CELEBRATING

MERCEDES-BENZ 500-540K, PORSCHE 962, CARS & GUITARS,
CUSTOM COACHWORK VOLKSWAGEN AND 50 YEARS OF NHRA GAINESVILLE RACEWAY

BENEFITING

THE AMELIA ISLAND CONCOURS d'ELEGANCE FOUNDATION
A 501(C)(3) NONPROFIT CORPORATION

FOR ADVANCE TICKETS & EVENT INFORMATION, VISIT
WWW.AMELIACONCOURS.ORG

WINNER — THE INTERNATIONAL HISTORIC MOTORING Awards — OF THE YEAR •2013• — MOTORING EVENT

WINNER — THE INTERNATIONAL HISTORIC MOTORING Awards — 2016 — MOTORING EVENT OF THE YEAR

MERCEDES-BENZ 500K PHOTO COURTESY OF THE NATIONAL AUTOMOBILE MUSEUM,
THE HARRAH COLLECTION, RENO, NV . GT40 PHOTO COURTESY OF DAVE WENDT
JAGUAR XK120 PHOTO COURTESY OF JOSEPH LIMONGELLI



Spanish veteran Jordi Gené has already tested the Cupra-built, 670bhp ETCR prototype

ELECTRIC TCR

BOOST FOR NEW TIN-TOP INITIATIVE

Powerful plug-in saloons set to race in 2020 as manufacturers show interest

Jack Phillips

TCR's electrified sibling has put its flag in the sand and announced that it expects to be racing in 2020. That comes a month after Electric GT's Tesla-based series was put on hold pending a new investor.

The future of TCR seems rosier than that of Electric GT, which has been beset by delays after plenty of PR bluster. It had announced a calendar of sorts - rough dates pinned to rough circuits or regions and a few TBCs - that would be beginning as early as, well, now. But announcements dried up, one car was 'delivered' and that appears to be that.

It now says its start date will be confirmed once the funding is in place. It later intends to open up the series to move away from the self-developed Teslas to a prototype series, according to its five-year road map. But the road itself still seems some way off.

ETCR, meanwhile, was initially announced by TCR promoter WSC in the early part of 2018, its Seat Cupra-shelled car soon took to the track (in July) and things seem to be rattling along.

WTCC and TCR race winner Jordi Gené drove the test car, which has been developed by Cupra Racing and boasts a maximum power of 500kw (equivalent to 670bhp) and a 0-62mph time of 3.2sec. Cupra Racing used to be SEAT Sport, but it has since been cut loose from the mothership and become a brand in its own right. The company also builds all of the VW Group's TCR cars: the Audi S3 LMS, Golf GTi and Seat León.

The series confirmed a number of manufacturer representatives were present at the series 'launch' event.

"The ETCR applies electric power units to the very same chassis concept of TCR cars," Marcello Lotti, president of promoter WSC, said. "It is already attracting the interest of different car manufacturers that also regard it as a tool to restore the role of motor sport as a platform for research and development that can transfer experience and innovations to the standard products.

"Our ultimate goal is to show fans that electric races are as entertaining as those for cars with internal combustion engines."

The promoter had previously confirmed existing TCR shells and chassis will be able to accommodate the new technology.

Manufacturers will in future be permitted to develop their own technology, after a period of using what Lotti called 'the common electric kit'. In effect, it is adopting the Formula E model for its tin-tops.



HOT TOPIC

HANDHELD RACING

F1 and WSBK release mobile games

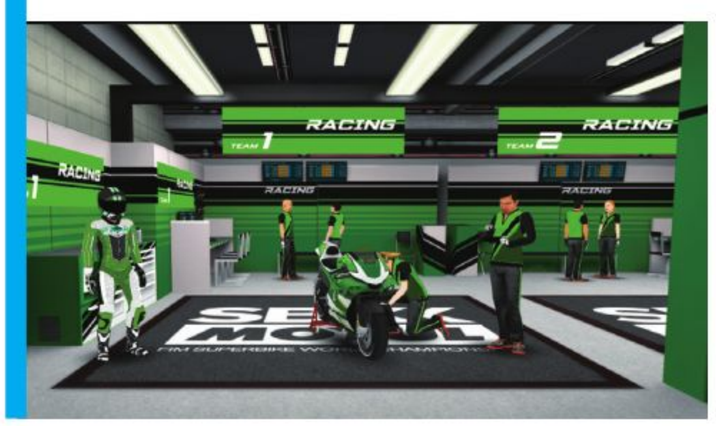
Handheld gaming is nothing new, but Formula 1's latest release looks a world away from the 8-bit Nintendo Game Boys of three decades ago.

Developed by industry giant Codemasters, which also creates its console software, *F1 Mobile Racing*'s graphics are spectacular. The game is free, too, albeit with in-game purchases to tempt fans to dip into their Apple Wallets. 'Upgrades' can also be acquired without payment as you progress. It's only available on Apple devices at the minute, but an Android version is currently under construction.

The game is simple enough: race through the season and develop as you go (paying for extras here and there, they hope) and while away the commute.

World Superbike's *SBK Manager* game (below) is slightly different, going down the administrative route instead and hoping the *Football Manager* model translates to two wheels. You chase sponsors, develop your 'bike, sign riders and adjust strategy. Unlike the F1 game it costs £1.99. And like last year's *Motorsport Manager*, it quickly consumes your time.

The third new arrival is *MotoGP*, which, like *SEGA Rally*, features a series of checkpoints that need to be hit around the lap. There's no steering, but you need to brake and accelerate at the right points. An interesting take, and it's free to download.



CARNET DE PASSAGES EN DOUANE
PROVIDED UNDER AGREEMENT WITH FIA AND AIT

Tel: +44 (0) 1284 333 812
Email: carnetservices@carseurope.net

CARS

Classic Automotive Relocation Services

TRADITIONAL VALUES
MODERN THINKING

Delivering Beautiful Toys for over 25 years!



- SEA AND AIR FREIGHT
- WORLDWIDE CUSTOMS BROKERAGE
- INTERNATIONAL STORAGE
- RACE AND RALLY TRANSPORTATION
- UK AND EUROPEAN TRUCKING
- UK REGISTRATION

DUBAI
+971 (0) 4882 1334
info@carsmiddleeast.com
www.carsmiddleeast.com

JAPAN
+81 (0) 45 306 7043
info@carsjp.net
www.carsjp.net

NEW YORK
+1 (718) 947 2277
info@carsusa.com
www.carsusa.com

LOS ANGELES
+1 310 695 6403
info@carsusa.com
www.carsusa.com

NETHERLANDS
+31 (0) 252 682 526
info@carseurope.net
www.carseurope.net

UNITED KINGDOM
+44 (0) 1284 850 950
info@carseurope.net
www.carseurope.net

ALLIANCE BOSS GHOSN ARRESTED

Renault-Nissan saviour faces uncertain future

Andrew Frankel

As if the boardrooms of the automobile industry had not been sufficiently shaken to their cores by Dieselgate, news came as *Motor Sport* closed for press that Carlos Ghosn, chairman of Nissan, Renault and Mitsubishi, had been arrested. Seen as a whole, the organisation known as the Renault-Nissan-Mitsubishi Alliance sold 10.61 million cars in 2017, placing it ahead of Toyota, General Motors and Ford, and the merest fraction behind the Volkswagen Group, still the largest car company in the world.

Ghosn's detainment came as a shock to the outside world. However, it was subsequently revealed that he had been the subject of a lengthy internal investigation. This had revealed a massive under-reporting of his salary over a five-year period, amounting to a sum equivalent to £34 million. Ghosn, who has reportedly denied any wrongdoing to prosecutors, is yet to make a public statement.

Nevertheless, Nissan ousted him from the company and a few days later Mitsubishi did the same. If the accusations levelled at him prove accurate it is impossible to see him continuing in his roles at Renault.

The French company's share price fell 13 per cent on the day the news became public. Some have speculated that this is a boardroom coup but, whatever the truth, unless the charges from the months-long probe turn out to be entirely baseless, Ghosn's reputation would seem to be irrevocably tainted.

Of course, company chairs come and go with nary a blip to the stock value, but Ghosn is anything but another chairman and the market reaction reflects not just the knee-jerk shock of the allegations, but how important Ghosn has been to the companies that, at the time of writing, he still runs.

If there is a demi-god figure in the car industry today, a modern Henry Ford or Ferdinand Piëch, that person is Ghosn. The 64-year-old French-Brazilian masterminded complete turnarounds in the business fortunes of Renault and Nissan, forging a partnership between the two ailing giants as culturally unlikely as it was commercially successful. He made radical cuts, re-asserted the brand identities of both companies and exploited the economies of scale brought by the Alliance to the maximum. It was also Ghosn who decided that Renault and Nissan would become synonymous with zero-emissions vehicles in this decade, in much the same way as Toyota became a byword for hybrid in the last. To that end Nissan launched the Leaf in 2009, the world's first mainstream electric production car from a major manufacturer.

It is far too early to say what the consequences of Ghosn's arrest will be. But with Renault owning far more of Nissan than vice-versa – yet Nissan providing most of the profit – and with the French Government's substantial stake in Renault thrown into the pot and the rehabilitation of Mitsubishi barely underway, it is hard to see another talismanic figure with the clout and reach of Ghosn being able to exercise such total control over such Byzantine corporate structures. It is therefore understandable that leading industry authorities are already starting to question the Alliance's long-term survival.

ASTON CONFIRMS DBX

Aston Martin has confirmed what we all already suspected, namely that the DBX codename for its forthcoming SUV will also be its model name. It has also published images of an apparently lightly disguised DBX being put through its paces on a Wales Rally GB gravel special stage.

The significance of the DBX to Aston Martin would be hard to overstate. When it is unveiled next year, it will be a decade since Aston Martin last launched an all-new model line (rather than replacing existing product) and it will sit on a brand-new platform unrelated to any from its technical partner and minority shareholder Daimler. The same platform will also provide the basis for both new models from Lagonda, due to relaunch as the world's first zero-emissions luxury car brand with an SUV in 2021 and a saloon in 2022. In addition, while the 155-off electric Aston Martin Rapide E will be the first car to be produced at the almost completely new plant in St Athan, Glamorgan, next year, the DBX will be its first full-time mainstream production car.

The DBX is not just a significant car, however, but a vitally important one intended to transform Aston Martin's business fortunes. Indeed, it is predicted to sell in quantities at least equal to all other Aston Martin models combined. To do that it will need not only to provide convincing opposition to the Bentley Bentayga, but also newcomers to the sector like the Lamborghini Urus (reviewed on page 129), Rolls-Royce Cullinan and Ferrari's forthcoming SUV. Powertrain options are likely to include its own 5.2-litre V12, Daimler's 4.0-litre V8 and, early next decade, a hybrid drive likely to lean on Daimler technology.



RISE IN CO_2 OUTPUT

Those who continue to vilify diesel for its exhaust emissions might pause to ponder this. The recent collapse in demand for diesel has resulted in a dramatic rise in the UK's tailpipe CO_2 emissions, reversing a long-term falling trend and putting levels back to where they were in 2013.

Department of Transport data shows a rise in average from a low of 119.2g/km in August 2016 to 128.3g/km last September.

PORSCHE'S 'RING RECORD

As night follows day, so do Porsche and Lamborghini's attempts to outdo each other at the Nürburgring. Lamborghini held the production car lap record with the Huracán in 2016, then Porsche took it away in 2017 with its 911 GT2 RS, to which Lamborghini replied with an Aventador and a lap of 6min 44.97sec. That should have been that because there is no new, faster Porsche in the pipeline.

Porsche, however, teamed up with Manthey Racing to create a road-legal GT2 RS with a standard powertrain, but specially set up for the 'Ring. The result: a lap of 6min 40.3sec from a production street machine wearing road legal tyres. How fast is that? Well, the last time the Nürburgring 1000Km was run it would have been quick enough to place the Porsche fifth on the grid, ahead of the works Lancia LC2 of Michele Alboreto and Riccardo Patrese and the Porsche 956 of John Fitzpatrick and David Hobbs. Yes, the track is not precisely the same now as then, but the GT2 RS didn't have the benefit of prototype construction, ground-effect bodywork, enormous slicks or an 800kg weight limit...

BRISK NEW 3-SERIES

It's not the new M3, but for now the new BMW M340i will be the next best thing. Featuring a 3.0-litre straight-six turbo similar to that already found in the M240i, it comes with automatic gears, four-wheel drive and a limited slip differential as standard. Deliveries will begin next year at a price tipped to be below £50,000.



FERRARI PARTS SPECIALIST

SUPERFORMANCE

01992 445 300 SUPERFORMANCE.CO.UK

CELEBRATING 35 YEARS FERRARI PARTS EXPERIENCE

UNIT G1 RD PARK STEPHENSON CLOSE HODDESDON HERTFORDSHIRE EN11 0BW

DELIVERING WORLDWIDE EVERY DAY



F1 FRONTLINE

Mark Hughes

The black art of aerodynamics determines so much of Formula 1's pecking order, and it goes hand-in-hand with the financial clout of the leaders and 'Class B' runners

"We're not racing in Formula 1. It's more like Formula 1.5. I don't know how those cars are so much faster," said Gene Haas about rivals Mercedes, Ferrari and Red Bull back in Austin in October. "But I talk to Ayao [Komatsu, Haas engineer] and he says you have got a couple of tenths on your tyres, a couple of tenths on your aero and your chassis is off a couple of tenths. That is your second or two.

"I know that we put a huge effort into trying to address all those parameters, but I don't see how we are ever going to make up 1.5-2sec to these guys. They are just so much faster."

Throughout the history of the sport the top teams have used money to go a lot faster than the smaller teams. But the mechanism by which the money translates into lap time changes. Money can find a way around whatever the barriers are, breaking down the obstacles that keep the smaller teams forever trailing.

The critical path to that lap time is invariably formed as the accidental consequence of specific technical regulations. The regs throw up the randomly generated barriers, the money dissolves them - and eventually that knowledge spreads to the smaller teams. Then the regs change again and the process begins anew.

In place since 2017, the wide tyre/wide body regulations have determined the competitive picture to which Haas refers. In the first three years of the hybrid era, the competitive hierarchy was largely driven by differences in engine performance. Mercedes was dominant but even a Mercedes-powered independent like Williams could often out-perform Ferrari or Red Bull.

As the spread between the engines narrowed (and even disappeared in the case of Ferrari), so the second-order differences began driving the competitive balance. The big teams' budgets were unleashed on those until they were no longer second-order. The 2017 introduction of the wide tyre/wide floor cars of today brought about a particularly demanding set of aerodynamic requirements that are challenging the modelling accuracy of the simulation tools.

Wider front tyres in combination with the pre-existing type of front wing - with its outer ends stopping half way across the width of the tyre, effectively imposing the extreme outwash endplates we now see - have made the critical flow down the side of the car potentially very unstable. The flow relies on spinning vortices of air to accelerate it down the sides after it has been out-washed around the front tyre; but if those vortices are in the wrong place or they burst, the downforce can suddenly reduce drastically.

"The flow around the wider front tyre, with an endplate sat in front of it, has got a higher pressure rise than before," explains a former technical director, who shall remain nameless. "And that just disturbs what you're trying to achieve. Similarly, with the rear corner - with the diffuser change and the wider rear tyre - you've got a similar thing going on there and you need to get the car to somewhere where it's performing aerodynamically sensibly, then after that you can start working it.

"In the barge board area, where there is now a lot more real estate to work with, you have to start with something where, while you're looking for load, you're not throwing vast losses at the car. The danger is that you leap in too early on and try to crank load into it when you haven't got the basics under control..."

This has been a contributory factor in McLaren's tough 2018 season as performance director Andrea Stella explained. "With the current regs the capacity to keep delivering downforce in the corners is critical. This is the reason why there are cars that belong to another category, just because they can control the downforce through the corner in all the conditions of yaw, crosswind etc."

The brittleness of that outwash flow, so difficult to model accurately, seems to be the biggest difference between the cars of the top three teams and even the very best of the rest. In McLaren's case there have been additional barriers.

"We tried to expand and consolidate some concepts of the 2017 car into this one. In hindsight, after lots of methodical investigation, we had embedded some aero issues in the car, creating a bottleneck, making development of the car very difficult," surmises Stella. "The fundamental capacity to keep delivering downforce through the corners had gone beyond our calculation."

When the airflow down the sides cannot be accelerated in the desired manner, it seriously degrades the diffuser's performance, which relies partly on the draw being made on it by the airflow that has travelled down the sides and then been squeezed between the rear tyre and diffuser. As the flow exits that gap it pulls on the flow coming through the diffuser, thereby making the underfloor work harder.

The consequence of not getting those vortices in the right places and losing the consistency of airflow down the sides of the body therefore usually mean a shortfall in rear downforce.

To get around the resultant lack of rear stability, McLaren had to run a much bigger rear wing than ideal - and its cars were consequently very draggy on the straights.

> ***McLaren had to run a much bigger rear wing than ideal, so its cars were very draggy on the straights***

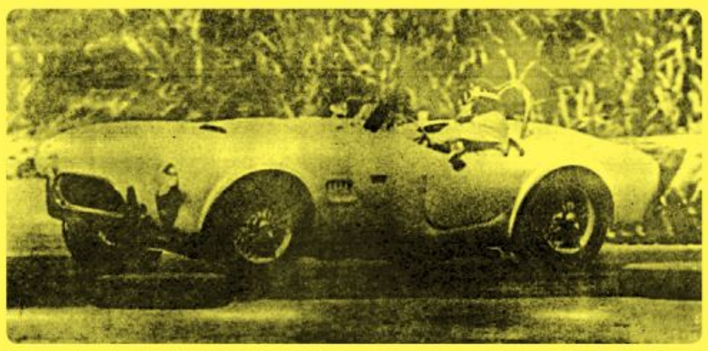
This knowledge has been painfully gained. But it will likely be of little value next season, when new aero regulations will define a wider front wing that runs to the full width of the tyres and a banning of the big outwash endplates.

This fundamentally alters the way the aerodynamics of the cars will work - and so those gains made by the smaller teams in catching up to the advances of the bigger ones will be wiped clean. M

Since he began covering Grand Prix racing in 2000, Mark Hughes has forged a reputation as the finest Formula 1 analyst of his generation

Pendine is proud to offer...





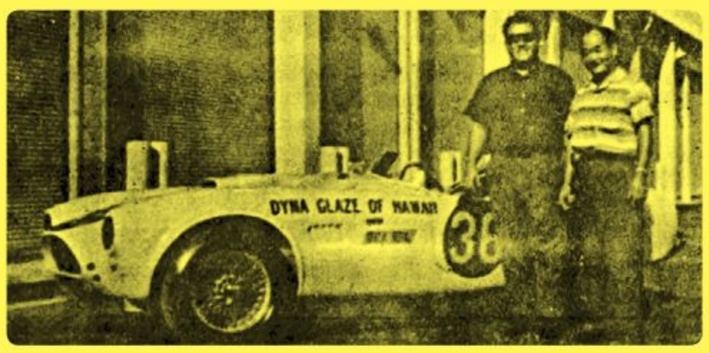
Hairy Canary



1963 SHELBY COBRA (CSX 2151)

Originally sponsored by Dyna Glaze of Hawaii, the 'Hairy Canary' is one of the few SAAC confirmed Independent Competition Cobras and has raced all its life. From winning the 1963 Hawaiian Grand Prix Cup in the hands of its first owner, Dick Neil, to competing at the Goodwood Revival no less than 11 times, chassis CSX 2151 is one of the most recognisable and widely raced Shelby Cobras in the world.

Apart from Hawaii and Goodwood, it has competed in the Modena Cento Ore, The Shelby 50th at the Monterey Historics, Springbok Trophy in South Africa, Le Mans Classic, along with countless European historic meetings.



PENDINE
Historic Cars for Road & Track

+44 (0) 1869 357126 www.pendine.com cars@pendine.com | Located at BICESTER HERITAGE



RACING LINES

Dickie Meaden

With modern drivers becoming increasingly dependent on technology to improve, our resident racer laments old-fashioned race schooling

I was never one for schooling. Exercise books were for making doodles of Porsche 911 Turbos and my homework was mostly reading *Autosport*. At college, further education meant watching Danny Sullivan and Bobby Rahal go wheel-to-wheel in CART races in America that I'd taped overnight ready for illicit viewing at home when my parents were at work and I should have been in a double period of History.

Needless to say I did appallingly badly in my History A-level (and all the others, come to that) which meant university was a bit of a no-go. Not that I was really that bothered, for those hours spent watching the kings of the premier Stateside single-seater series broadened my horizons far more effectively than studying the monarchy of the Tudors and Stuarts.

It was higher education of a different kind that left the greatest impression upon me and taught me lessons I still use to this day. The seat of learning in question was much more my style, because it was fitted with a four-point harness and bolted into one of the Jim Russell Racing School's near-standard Vauxhall Astras.

The year was 1994 and I had just embarked upon my first full season of racing, in the inaugural VW Vento VR6 Challenge. I'd got my race licence the previous summer as part of a magazine assignment to race Hyperion Motorsport's BP-sponsored guest car at Cadwell Park in a round of the Caterham K-Series championship.

I can still recall the overwhelming terror and wonder of that first race; completely unfamiliar car on a completely unfamiliar track in the hands of a complete novice. I honestly thought my head was going to explode in the final moments before the start, but by the end of the race I knew I had experienced something that would change my life.

Thanks to Hyperion boss Magnus Laird I landed a seat in the Vento Challenge for '94. Well aware his driver was green as grass and about to join a field of seasoned professionals and one-make specialists, Laird arranged for me to attend the Jim Russell Racing School's International Course at Donington Park – an intensive, week-long residential programme designed to take drivers from complete novice status on the Monday morning to obtaining their race licence on the Friday afternoon and doing their first race on the Saturday morning.

As soon as we sat down for our first classroom session I knew this was the kind of education system I could buy into.

The process was methodical, intelligent and exhaustive, with the perfect mix of theory and practice, honed over decades by some of the best instructors in the business. Everything we did was designed to fast-track us without ever pushing individuals too fast too soon. We learned about the friction circle. We walked every inch of Donington Park and learned how to read the wet and dry racing lines. We were taught how to approach a race weekend, both mentally and physically. Best of all, we spent many hours behind the wheel of our cars putting all of the theory into practice.

I loved every single minute of it and soaked up what we were told like a sponge. Perhaps if I'd applied myself like this at school or college I would have a proper job by now.

Then again, no subject ever gripped me so completely as trying to extract the absolute best from myself or the car I was driving, just as no syllabus ever culminated in a more revealing examination than a 10-lap race against your fellow students. To this day it's the only thing I've ever passed with distinction.

I don't consciously think about specific things I learned during my time at the JRRC, but I know that collectively they still help me every time I step into a racing car. It must be a bit like what members of the armed forces describe when saying their training takes over. Proper race schooling doesn't give you all the answers on a plate, but it does equip you with the tools to work them out.

Why the nostalgia trip? Because sadly the JRRC has long since gone out of business in the UK, and racing schools in general have pretty much disappeared.

Generally speaking they've been replaced by superficial 'experience' days offering punters the chance to drive anything from supercars to Formula 1 cars. Driving coaches (who are often racers themselves) armed with portable data and video recording systems have filled the void left by racing schools. Some are very good, but I'm firmly of the belief that data-driven instruction alone does not a driver make.

It's perhaps a symptom of modern life that our sense of value has become skewed; witness the resistance to the cost of a monthly print magazine, yet the willingness to spend almost as much on a coffee in Starbucks. Every single morning.

The JRRC International course cost a good couple of grand – a ton of money almost 25 years ago – but it was the pinnacle of race school tuition. Then as now quality costs, and experience now tells me it was worth every penny.

With the demise of the race schools, today's generation of driver has little choice but to place their faith in a data logger such as a VBOX, or on simulator sessions, yet these methods create a dependency on technology by highlighting deficiencies, rather than nurturing a reliable and instinctive level of analytical self-sufficiency.

The Jim Russell Racing School approach might be expensive and outmoded – now a thing of the past, sadly – but I'll be forever grateful for the skills it taught me.

Data overlays and repetition will whittle away at a lap time, but racecraft can never be learned by rote. M

> ***Collectively, what I learned at the Jim Russell Racing School helps me every time I step into a racing car***

Dickie Meaden has been writing about cars for 25 years – and racing them for almost as long. He is a regular winner at historic meetings

MOTOR SPORT

BACK ISSUES

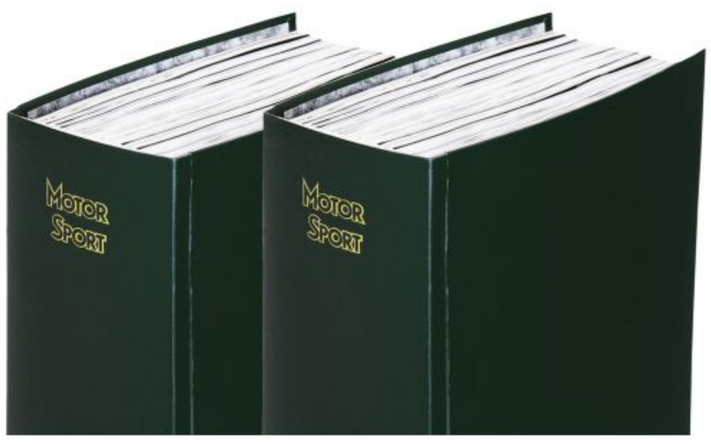


MORE THAN A DECADE OF BACK ISSUES AVAILABLE TO BUY

Missing an issue? Complete your collection with print copies of your favourite magazine to find the best articles, features and writers from 2006 to the present.
Subject to stock and availability

Browse back issues now at
shop.motorsportmagazine.com/back-issues

BINDERS



KEEP YOUR FAVOURITE MAGAZINE IN PRISTINE CONDITION

Motor Sport binders are designed to preserve and protect your magazine collection. Each binder can hold 12 issues and is bound in racing green leather. Free worldwide delivery.
Save over 30% with our special offer when you buy more than five

Shop binder offers now at
shop.motorsportmagazine.com/binders

Footman James
We share your passion

Insurance solutions* for **classics** and **more**.



Did you know, at FJ we don't just arrange cover for the classic vehicle owner? We also arrange insurance for **competitors**, **collectors** and **motor traders**.

Call our friendly UK team for a quote.

0333 207 6038

footmanjames.co.uk

Gold Trusted Service ★★★★★ feefo

***All cover is subject to insurer's terms and conditions, which are available upon request.** Footman James is a trading name of Towergate Underwriting Group Limited. Registered in England No. 4043759. Registered Address: Towergate House, Eclipse Park, Sittingbourne Road, Maidstone, Kent ME14 3EN. Authorised and regulated by the Financial Conduct Authority. Telephone calls may be monitored or recorded. FP ADGE.1076.5.18

MOTORCYCLES



Mat Oxley

Suzuki has yet to conquer the MotoGP world championship but wins many other races, thanks mostly to Hideo 'Pop' Yoshimura

Suzuki hasn't had much success in the four-stroke MotoGP world championship. The company, which started out producing cheap two-strokes in the 1950s to absorb empty production capacity in its weaving-loom factories, has won two MotoGP races since the championship's inaugural 2002 season. Over the same period Honda has achieved more than 130 victories.

Suzuki has enjoyed much more success in other four-stroke formulae - those powered by tuned streetbike engines. This is largely thanks to one man: a wannabe Second World War fighter pilot by the name of Hideo 'Pop' Yoshimura, who became the world's most famous motorcycle tuner.

Yoshimura joined the Imperial Japanese Army Air Force in the late 1930s. The teenager had almost completed his fighter training when his plane suffered engine failure. Yoshimura ejected, but his parachute didn't open until shortly before he hit the ground. Badly injured, he wasn't fit to be a pilot, so he became a flight engineer instead and learned all about aircraft engines.

After the war there were 300,000 US troops and airmen stationed in Japan, many of them with too much time on their hands. Yoshimura opened his first shop near a USAF airbase, selling BSA and Triumph motorcycles to the dollar-rich Americans. And then tuning them.

"My father had studied engines so closely during the war that there were no competitors with half his experience," says Yoshimura's son Fujio. "He had so many crazy ideas and could challenge so many things, all by himself."

Yoshimura's world changed in the 1970s when Honda, Kawasaki and Suzuki created a new kind of high-performance motorcycle that inevitably spawned a new kind of racing. Superbikes ran under production-based, silhouette rules, so the bikes looked exactly like those that everyday motorcyclists could buy from their local dealer. The category was such a hit in the USA that in 1971 Yoshimura moved to Los Angeles, where he established Yoshimura Racing.

Superbikes were the Wild West of motorcycle sport. The engines of these machines were the most powerful four-strokes around, smoking rear tyres out of corners, while their chassis were frighteningly inadequate, often throwing bikes into terminal speed wobbles. Yoshimura had a huge job in front of him: squeezing yet more horsepower out of the engines, then somehow keeping the bikes on the racetrack.

"I'll never forget the camshaft development and the ideas that Pop had - file in hand, grinding a cam from billet and profiling the cam to a spec he liked," recalls R&D assistant Don Sakakura. "We learned many different crafts and skills because we were converting what were normal motorcycles into motorcycles that could go around a racetrack. We were looking for levels of engine performance and durability for which the bikes weren't designed. That forced us not only to find more horsepower but also to identify weak points. When we discovered weaknesses it was hard work to make sure they didn't affect the way the bike went around the track, which got us thinking a lot more. It was enjoyable, being deep, deep into those areas: hands-on grinding, welding, bending, whatever you had to do to get the job done."

The association with Suzuki started in the late 1970s, with the marque's first one-litre superbike, the GS1000. 'Pop' breathed so hard on the 1000cc inline-four that he increased performance from 100bhp at 8700rpm to 150 at 10,500. However, although technical regulations allowed tuners to do pretty much what they liked to the engines, standard frames were compulsory, with only minor gusseting allowed.

Eventually, it was a case of either break the rules or break your rider. Eventually, the big teams - Yoshimura Suzuki, Honda and Kawasaki - secretly built replica frames, using stronger, lighter chrome moly tubing. And because all them were at it, the scrutineers opted to turn a blind eye.

Yoshimura-prepared Suzuki GS1000 machines won the 1978 Daytona superbike race, took first place in the first-ever Suzuka 8 Hours, monopolised the Daytona podium the next year and won the US superbike championship. Into the 1980s, Yoshimura came to dominate everything: more Daytona and Suzuka success, plus its first Isle of Man TT wins and victory in the endurance world championship.

Fujio still remembers the 1980s as the golden age, because he loved helping his father to transform sows' ears into silk purses. "We had a lot of fun with the old road bikes because there were so many areas into which we could put our ideas," he says. "To me, the 1980s were the peak. There was so much engineering going on back at the shop, because after every race we needed to do something different for the next one."

Since the 1980s Yoshimura-tuned Suzukis have won dozens more world championships and hundreds of national crowns, most recently the 2016 world endurance and the 2017 US superbike titles.

Racing is very different now, says Fujio, who took over the company when his father died in 1995 and is now back in Japan, running a team in the All-Japan superbike championship, while Sakakura runs the US operation.

"Back in the 1980s, all you needed to go racing was a rider, a few mechanics and a team manager, whereas now I need five or six people to run one goddam motorcycle!" Fujio laughs. "Everything is so specialised: tyres, electronics, engines, chassis and so on. This can mean that the satisfaction you personally get from racing is less, because your responsibility is divided by five or six." M

> ***Eventually, it became a case of either break the rules or break your rider***

Mat Oxley has covered premier-class motorcycle racing for many years – and also has the distinction of being an Isle of Man TT winner

1977 Alpine A310

POISSON DIEPPOIS

Unique piece of Alpine heritage
Le Mans 24 hours of 1977
Entirely restored



www.ascottcollection.com

Xavier Micheron
Phone: + 33 (0) 9 67 33 48 43
Mobile: + 33 (0) 6 17 49 42 50
Email: cars@ascottcollection.com
Paris - France

Ascott
COLLECTION
L'EXCEPTIONNEL PAR PASSION

1990 SPICE SE90C / 1992 TOYOTA CELICA ST185 / 1971 Surtees TS9B / 1987 PORSCHE 962 C
1988 MARCH 86G MOMO / 1988 TIGA GC 289 / 2009 ORECA FLM09.



THE ARCHIVES

Doug Nye

The swell of interest in historic racing has led to the creation of wonderful, world-class events, but is everything really as it seems?

This will set the spirits of The Bod and Jenks absolutely bouncing off their ethereal rev limiters, but just for once I do feel moved to quote Shakespeare. Where present-day top-level historic racing is concerned, as Marcellus says in *Hamlet*, "Something is rotten in the state of Denmark."

Very sadly, the days when historic races were populated mainly by genuine old-car enthusiasts seeking merely to conserve and preserve the great cars through keeping them running, and competing in the public eye, are now long gone.

The accent within historic racing – as founded by the VSCC, then extended by the HSCC and HGPCA and ultimately elevated to truly world-class international level by the Goodwood Revival and Monterey meetings, plus the Silverstone Classic and the retrospective Monaco and Le Mans events – has very much changed. And it is just one of the largely unforeseen consequences of this genre's rampaging success.

It used to be based upon active conservation of at best truly great cars, augmented by a broader base of perhaps not-so-great but still genuinely historic machinery. Even the most fiercely competitive owner-drivers through the 1970s, and even far into the 1990s, still generally cared enough about what made their prized cars great in period that they would not – to quote one of them – "bugger about" their piece of automotive treasure in search of such a fleeting prize as a marginally improved lap time.

The best of those fiercely competitive owner/drivers would seek more to generate a performance improvement simply by making themselves a better driver – a sportsman more worthy to sit where a past sporting great once sat, to emulate his (or her) actions and to perform at something at least approaching that past star's level.

Well in most cases that has changed. It really has. Today the accent, it seems to me, is very much more upon experimentation than upon conservation. Technical development to achieve higher performance regardless of past technology, and in some cases regardless of what pass as the present rules, has now taken precedence. In this regard historic racing at its leading-group levels is today just the same as any other form of modern-day racing. Its guilty practitioners will retort that "this is what proper racing is all about". Well, yeah, but historic racing used to comprise a community pretty much united by the notion of it being an affordable sporting category involving a huge variety of cars of character – some fast, some slow, some mighty, some truly pathetic – but every one of true historic pedigree; the way racing used to be. And to a very great extent that meant you did not "bugger about" with a design's contemporary technology. It didn't take long before the realisation widely dawned that 'hysterics' offered a fun way for enthusiastic amateurs to go motor racing and what's more – if you were lucky and owned the right kind of car – you could probably sell it for a handy profit even after having worn it out through racing it almost every other weekend.

So that was the good news. But the values of significant historic cars took off in the late 1980s, stalled and dived through the early '90s and since then have flown ever higher. This has promoted at least two really significant changes. Firstly, as the value of important historic cars has inflated, so generally fewer owners are prepared to risk them in racing.

And those who do, commonly seem far more interested in accelerating their great car's market value by being able to advertise huge success which too often results from only two things – firstly by ever-improved lap time capability achieved by out-of-period technical modification and, more simply, by employing a hot-shoe professional driver to pedal the thing. Hot-shoe preparation – often by specialist companies new to the historic world, but finding it an easier (and money-rich) arena in which to shine than, say, the touring car or minor-formula current-racing world from which they have come – regards updating a car spec to enhance its performance as simply "what you do". This cheerfully uneducated, happily soulless, mob cannot see that such go-for-broke preparation is by itself a process of obliteration. If they do, then they just don't care. With achieving ever-faster lap times as their prime target, this uncomprehending group's car modifications will simply erase what really makes a historic car historic in the first place.

And where the engagement of full-time professional drivers by an ambitious owner is concerned – seeking to enhance his investment's on-track record through ever-more promotable success – there is a big character-changing downside too. Any career-building pro driver worth his pay will regard gaining a place on track not just as a satisfying bonus, but as fulfilling his commitment to the owner. "That's what we do" is a justification I have heard too often in recent years. Where an owner/driver or true enthusiast familiar with their historic car will have in their DNA at least some preservation reflex – for the car I mean – hired-gun drivers just do not, beyond the normal human trigger when one's pink body itself seems in sudden jeopardy. A pro seeking to justify his pay will, regardless of car damage, go for a closing gap when he really should not, and won't back off for safety's sake... until perhaps the other guy's amateur status makes it all too late. And scared-off owner/drivers also leave the sport, for good. I am not painting all pro drivers in historic racing with the same brush – there are those who do understand, and who do care, but there are certainly many who have absolutely no concept of this perhaps being a different arena to front-line contemporary racing in which one really can build a career.

Maybe that then is another facet of 'The Problem'. Today a pro driver really can build a career within historic racing, because there are numerous great-car owners who really do want a pro to drive for them. And there are numerous

> *A true enthusiast familiar with their historic car will have in their DNA at least some preservation reflex*



Big crowd, big entry, big bucks. But has historic racing's spirit been subverted?

LAT

preparation outfits that will - for a sizeable bill - make your 1965 this, or 1959 that, several seconds per lap quicker than it has ever managed before. That's how we see Lotus Cortinas that don't three-wheel around the turns, whose wheel arches might appear to be in funny places, and with driver-adjustable brake bias etc. Minis that don't trail front-tyre smoke through every corner, Jaguar E-types dragging their bellies along the road, Cobras with hydraulic lifters and tucked-away engine management ECUs - and maybe 1950s saloons with bodywork to which no magnet will ever stick...

I am, however, reminded of a Group C race, maybe 30 years ago, in which a driver in his final stint had just got the car into a podium place when he was radioed from the pits: "Fantastic," his crew chief told him, "We're all pumped, really *pumped*, really, really *PUMPED!*" - which was really his reminder to pump up the dampers from the illegally low ride-height they had been running to help achieve that result. Today that technology would still be a genuinely illegal, yet genuinely also a historic feature.

But for a racing-minded amateur owner/driver - no matter how capable they might be - an assault by a pro in a spectating owner's car will leave them at least understandably aggrieved. Against this background, an increasing number of one-time owner/drivers of proper cars will no longer (understandably) risk them on track. And an increasing number of one-time owner/drivers (and owners only) of really exotic historic cars will not race them for another reason - because they don't want to see their long-preserved original-spec treasure being demeaned, blown off by a cut-price special, or a made-last-Tuesday replica of a car that in period would not even have approached the same performance envelope.

There was a brutal example of this at the Revival a few years ago, when a 'Brooklands Riley' caught and beat a well-driven Alfa Romeo *Tipo B Monoposto*. When the Riley lunged inside the Alfa into the last corner, the Alfa's owner/driver simply stepped aside and gave the Riley space to pass. His calculation was simple. "My car's genuine and worth millions. His car is a new-built lookalike standing him in barely five figures. Which of us has more at stake? And all just to win a fridge magnet..."

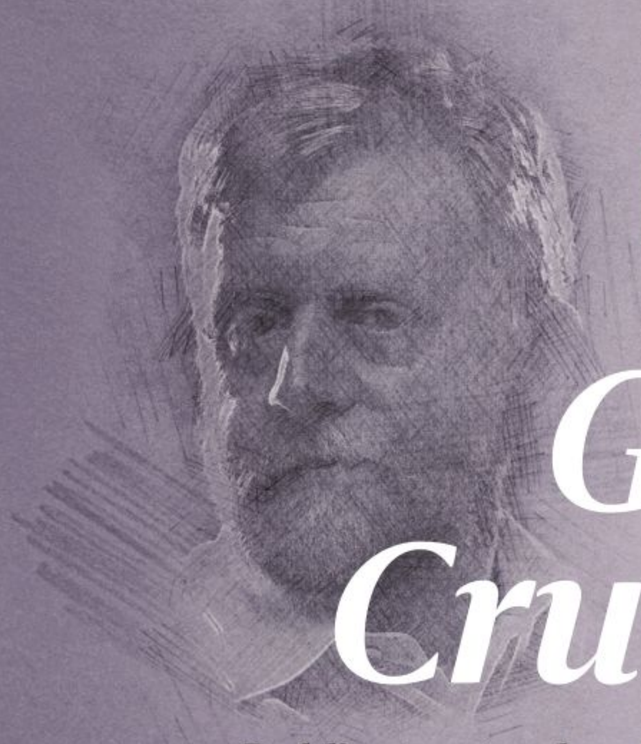
Obviously it's the race organisers' responsibility to filter and sterilise their race entries to prevent such incidents. There are numerous reasons and considerations why that is not always possible. At least in the Goodwood Revival, in which I am involved, there's been an attempt to provide the stage on which real cars can compete most adequately in some races, leaving the tricked-up, crowd-pleasing hyper-performance specials to strut their stuff in others.

The development/obliteration approach is more prevalent in the lesser classes than in, say, the Formula 1 categories - where cars are rarer, values higher, the technologies more difficult (and thereby costly) to improve. And, of course, some major-car owners have indeed stayed in racing by running tacitly unspecified replicas of the real exotics that they also own, and which they keep safe back home. But this can cause tremendous confusion when thousands of enthusiasts see the supposedly ex-superstar Antarctic Grand Prix-winning 'real car' badly damaged before their very eyes, yet 'it' is subsequently described as being remarkably well-preserved and genuine, and never crashed in historic racing. Well of course, it wasn't crashed. The real car was never there. To some extent, such deception is entirely justifiable - but it's another difficulty, another moral maze.

Am I concerned unduly? Should one just go with the flow - regard such change as inevitable? It has certainly been associated with the genre's ever-soaring profile, but what do you think?

Let us know...

Doug Nye is the UK's leading motor racing historian and has been writing authoritatively about the sport since the 1960s



HISTORIC SCENE

Gordon Cruickshank

Public streets echoed to the sounds of race engines in memoriam of two racing greats, and the crowds loved every minute

Two High Streets, two groups of racing cars, two successive weekends to commemorate two famous figures in British motor sport. It was mere chance that timetabled a Mike Hawthorn parade through Farnham just a week before Dorking resounded to racing engines with a Rob Walker connection, but both drew enthusiastic crowds to see thoroughly un-road-legal cars flexing their muscle outside WHSmith.

Hawthorn would have recognised many of his drives as they assembled outside Farnham Maltings before burbling in a loop around his home town where, despite the drizzle, people lined the route: a Lotus XI he raced 11 times, a Cooper-Bristol, the works triumph TR3A he rallied in 1958, the Riley Ulster Imp that started his career, wearing its spotted bow tie in homage, Doug Nye's C-type rep and Nigel Webb's exact evocations of Mike's Jaguar MkI and the D-type that took a hollow victory at Le Mans in 1955. No Vanwalls or Grand Prix Dino Ferraris braved the rain but the static Thinwall Special sheltered under canvas.

Hawthorn supporters held a small service at his graveside beforehand, laying a wreath before the parades began, and organiser Mike Ballard at the wheel of his XK120 that Mike also drove was delighted with the turnout. Adding to the spectacle were scores of classic cars - from tiny Abarth to huge Rolls-Royce - which braved the dreich weather to entertain a crowd who may now know a bit more about local world champion Hawthorn on this 60th anniversary of his Formula 1 title. Afterwards, invited guests retreated to the dry for tea and cakes below a screen showing films of Mike in action in sports cars and single-seaters, clinching that first championship for a Briton mere months before his sad end.

In Dorking, the Walker gathering focused on cars that Rob Walker either raced or fielded for his famous team, based at Pippbrook Garage in nearby London Road. The Delahaye 135 he ran at Le Mans in 1939 and 1950 was on static display alongside the Brooklands straight-eight Delage - Walker had a pair in 1950, entering one for Tony Rolt as a way in to single-seaters; on the road a brace of Coopers, the T43 Moss took to a historic victory in the 1958 Argentine GP and Trintignant's T45 Monaco winner, were joined by the 4WD Ferguson P99 driven by Stuart Rolt and both of the TT-winning 250SWB Ferraris. A recreation of the team minivan was a nice extra touch as the blue and white parade motored up and down the High Street in front of, apparently, 7-8000 onlookers. David Brabham appeared too as his father Jack drove for Walker.

Sam Bird had a bit of trouble keeping the DFV lit in the Surtees TS14B that came fourth in the '73 German GP once Rob had joined with Big John, but a burst of applause rewarded the blare of noise when it relit and Bird's catch-up blast in the screaming V8 provided drama. Around 3pm the cars formed up on a grid complete with track markings outside Dorking Museum where Robbie Walker opened an exhibition about his father's exploits, clad in pin-stripe suit like the one Rob donned to finish his first Le Mans. It's a small exhibition but worth catching (it runs until January 26), tracing the whisky heir's switch from racer to private entrant and those golden years when S Moss was his chief pilot. Also present was Tony Cleverley, Walker's mechanic from the 1950s Connaught days right through to the end, and he recounted what were obviously very happy memories as he pointed out some of the exhibits to me, including models of every car the team ran, samples of the team newspaper and a 1968 letter from Rob to Rob Rennie, who 50 years later curated this day of celebration. Tony was involved when Brooke Bond tea put chimps in a Walker car for a TV advert, but also had the task of collecting a new Ferrari SWB from Maranello and driving it back to Dorking. Tough work.



> *Amanda Newey shared a note from last year's winner Damon Hill congratulating Adrian on the prize*

WHAT DO YOU DO AS A BREAK FROM DESIGNING F1 cars? Play with motorbikes in Kenya. That's where Adrian Newey was on the evening his *How to Build a Car* won the RAC Book of the Year award, but in his stead his wife Amanda accepted the trophy - well deserved for a fascinating outline of how the hugely successful designer approaches the process of making the next car even quicker - and read a message from him which said that he wrote it partly "to give my family an insight into what makes my mind tick" - i e, why he's so driven. It's a revealing picture not just of the cars but also the drivers he has given the tools to win GP after GP.

In front of a packed room in the RAC's Pall Mall clubhouse, Amanda also shared a note from last year's winner Damon Hill to Newey, congratulating him. (The book later also won the Michael Sedgewick Award from the Society of Automotive Historians in Britain.)

For the RAC Specialist Book of the Year, covering books outside the £75 main prize limit, we judges selected Karl Ludvigsen's 848-page *Reid Railton: Man of Speed*, from Evro Publishing, expounding one of Britain's greatest engineers who extracted ever more speed for Tim Birkin, Malcolm Campbell, Raymond Mays and John Cobb. We thought it a superb piece of dedicated research.

It was a tough choice though: among the short





Hawthorn's first racer, Tim Ely's Riley Ulster Imp, left. Below, Lotuses included XI that Mike raced often. Bottom, both Walker Ferrari TT winners



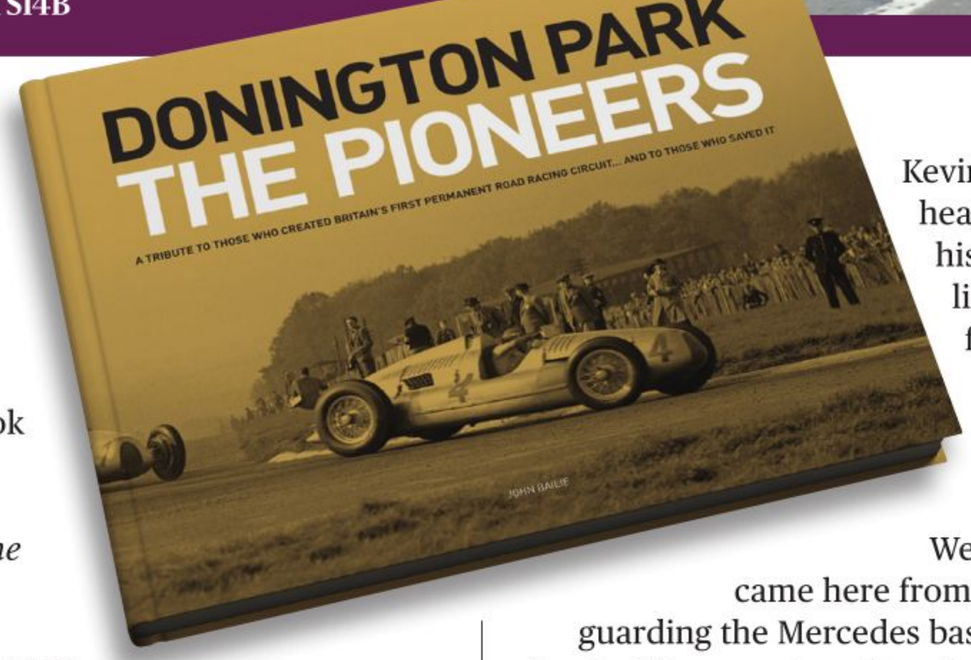




SIMON HILDREW



Top, D-type recalled Hawthorn's Le Mans victory in sad 1955 race. Centre: wreaths at grave of Britain's first F1 champion. Above, Sam Bird aboard Surtees TS14B



list for Book of the Year were *Hobbo*, the entertaining David Hobbs autobiography, and an attractive and comprehensive Dorling Kindersley offering by Giles Chapman, *Drive: the Definitive History of Motoring*. Rivals in the Specialist category included *Inside Track*, the magnificent book Doug Nye assembled with Phil Hill's own photographs (GP Library), and David Tremayne's impressive *Jim Clark: Best of the Best*. It was a close call overall.

ANOTHER BOOK TOOK ME FOR A LAST VISIT to the once-magnificent Donington Collection, where John Bailie launched his long-awaited *Donington Park: The Pioneers*. The halls echoed emptily until I got to the packed venue – a huge crowd for a book launch, including one-time track owners the Shields family, Howden Ganley, Willie Green whose dad contested the first car race here, Jonathan Palmer whose MSV group now controls the circuit, Kevin Wheatcroft – and 'Nuvolari' looking healthy despite the 80 years since he took his Auto Union to victory here. (He is *eerily* like the great driver, although the magic faded when I saw him whip off his red helmet and climb into his Transit to go home.) And Bailie was able to hand him the actual race winner's trophy, which the real Tazio never got to hold.

We heard tales from Robert Heelis, who came here from 1937 on and recalled stormtroopers guarding the Mercedes base, and Ian Phillips, who ran the track after its '77 reopening, described how the wind that conveniently blew down some awkward trees somehow left bulldozer tracks behind...

It was nice to see Bill Boddy's daughter Nondus, too as it was WB's Donington writings that triggered the book – 20 years ago. Ⓜ

Long-time staffman Gordon Cruickshank learned his trade under Bill Boddy, and competes in historic events in his Jaguar Mk2 and BMW 635

Luxury Cruise to the Barcelona Grand Prix

ITINERARY: Barcelona > Marseille > Genoa > Naples > Messina > Valetta > Barcelona

Embark on an epic voyage around the Mediterranean onboard the brand new MSC Bellissima. You will be spoilt for choice onboard, with 20 bars and 10 restaurants to choose from. For entertainment, enjoy 2 brand new Cirque du Soleil® shows designed especially for MSC Bellissima. For kids and families, take advantage of the onboard water park! Your cruise will take you on a journey around the beautiful sights and sounds of Barcelona, Marseille, Genoa, Naples, Messina and Valetta!













Following your cruise, you will disembark in Barcelona ready for a 3 night stay - prepare to feel the thrill of the F1 Grand Prix at the Circuit de Catalunya! General admission Grand Prix Tickets are included in your package - Free Practice, Qualifying and finally Race Day!



MSC BELLISSIMA
10 NIGHTS • 3rd MAY 2019

Your experience includes:

- Return flights from UK to Barcelona
- Overseas transfers
- 8 Day / 7 Night cruise on MSC Bellissima
- Full Board basis on MSC Bellissima
- Free entry to an on-board Cirque du Soleil show
- All entertainment, port taxes and fees
- 3 night 4* hotel stay in central Barcelona
- General Admission Grand Prix Tickets. Grand Prix Ticket upgrades available

MSC CRUISES

Inside Cabin *from* **£1,399 pp**

Outside Cabin *from* **£1,599 pp**

Balcony Cabin *from* **£1,799 pp**

PARAMOUNT CRUISES

FREEPHONE **0800 368 5018**

www.paramountcruises.com

Email: **enquiries@paramountcruises.com**

40-42 Riding House Street, London W1W 7ES

Trustpilot

ABTA The Travel Association · CLIA · ATOL PROTECTED · IATA ACCREDITED AGENT

Write to: *Motor Sport*, 18-20 Rosemont Road, London NW3 6NE
or e-mail: editorial@motorsportmagazine.co.uk

The boys next door

I read Laurence Baker's inside report on the Mercedes disasters at the 1999 Le Mans 24 hours with much interest as that year was my third Le Mans participation with the Chamberlain Viper GTS, ending in a memorable podium finish!

That year my team was pitted next to Mercedes and at times we could peek inside.

Mark Webber's first flip was just after Mulsanne on the very fast part leading to Indianapolis. He was just ahead of me in the Viper and I had to swerve around carbon-fibre bits on the road. I didn't see the car fly but I did see the last part of the accident with the car coming to a stop on the left side of the circuit.

But before the Webber car was back in the pits, we noticed a bare tub being worked on by the German mechanics, when secretly looking in the area behind the Mercedes pits. A new car appeared to be being built up to replace the car that had just crashed.

At Le Mans, once a car has been scrutineered there is no way you can replace the chassis, so the Webber car should have been withdrawn. But to our team it was obvious what was happening and possibly the ACO official assigned to the Mercedes team didn't "see" what was happening. When I tried to take a photo a very angry Mercedes mechanic closed the area off.

Baker ends his report with doubts about the cause of the cars flying; we learned at the time that the Mercedes GT1 had a system that lowered the rear of the car at high speed, which would then lower the rear wing angle giving less drag and therefore higher top speed. It also meant that as a result the long front overhang would go up slightly causing more air to pass under the splitter and having the car take off, especially when following another car or going uphill.

Ironically Norbert Haug came out after Le Mans saying that not doing Le Mans was not really very important... Very strange considering the huge testing programme they went through. Blaming the accidents on Le Mans not being safe, not suited to high-speed sports cars, etc, tarnished the Mercedes image further on this occasion!

Hans Hugenholtz, Schilde, Belgium

Beyond compare

With Lewis Hamilton's fifth world championship seemingly inevitable ever since Sebastian Vettel slithered off at Hockenheim, I felt fairly unengaged immediately after the Mexico Grand Prix. But any sense of repose was quickly shattered by rowdy media speculation: "Is Hamilton the greatest of all time?"

There is one national broadcaster that manages, with its shrill coverage, almost to alienate someone who has loved motor racing since the advent of the Vanwall. Surely the role of the commentators and pundits is to report and analyse in a measured, knowledgeable manner. That particular station has a penchant for hiring recently displaced F1 drivers, who are unable to offer a real achiever's insight yet also fail to speak with the (sensible) enthusiasm of an 'ordinary' fan.

Could the suggestion that Hamilton is perhaps equal to Fangio really come from people who are professionally involved in F1 coverage? Just a cursory inspection of the stats would tell anyone that the comparison is misplaced, in terms of number of races run alone. Indeed, given his actual entries/championships metric, had Fangio started as many races as Hamilton, Juan Manuel would have been champion no fewer than 22 times, though I admit that as he'd have had to be 63 at the youngest to complete that haul, my statistic might be somewhat theoretical!

But think also about the context of the earlier era: lack of passive safety in the cars, quality of helmets/clothing, track safety measures, vehicle reliability, ease of driving, level of team support, rudimentary communications between pit and car, no widespread karting to teach racecraft and so on.

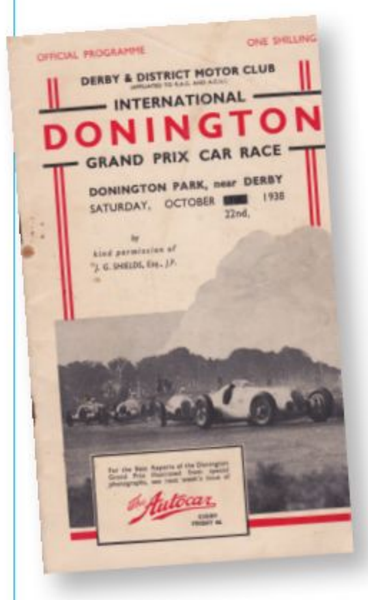
I for one am genuinely grateful for *Motor Sport* magazine as an antidote to such hype. Your coverage is most definitely enthusiastic, but proves at the same time that really knowledgeable broadcasters/writers can enhance a fan's understanding of issues, incidents and achievements. This is well exemplified by Mark Hughes and I'm sure that Mark, like me, would say that you can only rate drivers in their specific historical context.

David Buckden, Walmer, Kent

Fruitful Kiwi

I was fascinated by the recent article on the 1938 Donington GP and its on-off history.

A few years ago, I bought a very tidy copy of the race programme from a local auction house. Sure enough, the date of October 1 on the cover had been blacked out and a '22' substituted. There was no other indication in the programme of the flurry of activity that preceded its staging.



As well as pen pictures and photos of the 17 drivers, the 40-page programme contained adverts for such delights as *The Light Car* magazine, the Ford Ten car and Silkolene Oil. There also was a competition for correctly guessing the top four finishers; entry boxes were to be sealed at 1pm on race day and the winner would receive £5.

The winner of the race was to receive a trophy and £250, with a generous £100 for the fastest lap and a similar amount for the first British car driven by a British subject. It's a lovely piece of motor sport nostalgia; I would love to know how it ended up here in the Antipodes!

Mark Holman, Wellington, New Zealand

Classically strained

To hear of Jackie Oliver's reaction to his penalty at Goodwood should be thought-provoking to many historic racers. Are we, in our 70s, really up to the demands of full-on motor sport? Clearly, Mrs Oliver - "It's not appropriate for you to do this any more, Jackie" - doesn't think so.

But Martin Donnelly's comments on the "diabolical driving standards" in the St Mary's Trophy reflect a belief I have had for 10 or more years, from club racing to international events. Track manners and discipline have got worse.

I used to run a team of classics every year in the 750MC's Birkett Six Hour Relay Race, but found it more and more difficult to recruit drivers, tired of being cut up and damaged by those driving 'moderns'. There were two classic cars and no teams in this year's Birkett.

John Davies, Lancaster

End of the road

On the matter of the Dickie Meaden/Jackie Oliver Goodwood incident, I am very pleased to know the race stewards took action, investigated and penalised the offender. In 1982 at Thruxton, my Alfasud was punted off the circuit by a rival who, realising he was in the wrong, fled the paddock after the race before my car was retrieved. The officials then refused to discuss the incident as the other driver was not present!

This broke my seasonal budget and it proved to be it was my last race - a hurtful end to my decade as a competitor.

Philip Clarke, Rockland St Mary, Norfolk

Sky's the limit

Living in New Zealand I have watched live F1 races on Sky for many years, generally recording the races that run in the middle of the night and watching them before I go to work as though they were live.

We have recently been informed that our local Sky service is now dropping F1, for financial reasons. I hear much about Liberty Media wanting to increase its viewing base, but from my perspective it would seem that it is just talk. Maybe we are just too small an area for them to worry about, but with New Zealand's history of involvement in F1 that would be a very sad thing indeed.

We have Formula E live here free-to-air. I watch this with interest, and to be honest I actually enjoy it a lot - the racing is much closer than that in F1. I have discussed Formula E quite a bit with friends who like myself follow F1, and interestingly enough I have felt from time to time that I should give up F1, but it's a bit like a drug: I just can't.

Richard Andrews, New Zealand.

ZENITH

Back in 2016 the Zenith brand announced a collaboration with Land Rover that would lead to a range of watches inspired by the maker of "the best four-by-four by far", the first of which was a limited-edition chronograph dedicated to the Range Rover SV Autobiography.

That was followed last year with a Chronomaster El Primero coinciding with the launch of the Velar - it was a chronograph, with a ceramic-coated aluminium case, a brushed grey dial with copper-coloured details and a strap made from the same leather used for the car's upholstery.

We're told these two represent the tip of an iceberg of Land Rover/Range Rover watches. Special versions will be launched to complement every model, including the new Defender - which is due in 2020.

According to Zenith CEO Julien Tornare, the Defender watch will be something "super tough and a little bit crazy" (he even hinted that it might incorporate features such as a compass or other, similarly adventuresome gadgets) and it will be created as a joint effort between both design teams with considerable input from Land Rover's Gerry McGovern.



We're clearly going to have to wait a while for the Defender watch - but at least some buyers of the new, second-generation Evoque will be able to sport the correct wristwear thanks to the recent arrival of the Defy Classic Range Rover Special Edition. Just 200 examples of the watch will be available, which seems at odds with the sales of over 800,000 Evoques around the world.

Tornare says producing such a small number keeps the model exclusive, although its slim, light, 41mm brushed titanium case has been designed to appeal to both sexes.

The most distinctive feature is the open worked dial based on an Evoque road wheel, while the car's quilt-pattern upholstery is echoed in the diamond motif on the rubber strap (there's an optional titanium bracelet).

The blue seconds hand and winding weight - visible through the transparent case back - also lend a nod to the Arctic Petrol colour accents applied to the Evoque's interior.

Zenith Defy Classic Range Rover Special Edition, £6,100. zenith-watches.com

WATCHES

KEEPING AN EYE ON TIME

Powerful players in the watch world

Simon de Burton



REC RJM Spitfire

REC

Danish brand REC has attracted a strong following with its watches incorporating metal salvaged from classic cars - and now it has moved on to aircraft with the new RJM featuring a dial made from untreated aluminium cut from the wings of a Spitfire. The 'plane was among 1,100 supplied to the Russians under the allied lend-lease programme, but crashed in 1945 after 29 hours of flying. The wreckage was recovered in Murmansk 20 years ago. The watch's name is taken from the initials of Spitfire designer Reginald Joseph Mitchell. *€1095. www.recwatches.com*



NOMOS Glashütte Autobahn

NOMOS GLASHÜTTE

Minimalist German brand Nomos has called on the talents of Berlin-born furniture designer and interior architect Werner Aisslinger for a new addition to its Neomatik line, the result being this, 41mm sports watch called Autobahn. The crescent-shaped relief on the dial is said to have been inspired by elements of car design from the '60s and '70s and will glow in the dark. Three colour combinations are available. Which reminds me - I must dig out that Kraftwerk album... *£3,800. nomos-glashuette.com*

THE PERFECT FIT FOR MODERN DRIVING

– CLASSIC –



CLASSIC INFOTAINMENT SYSTEM

The new Land Rover Classic Infotainment System fits perfectly with the authentic interior design of your vehicle and is packed with modern technology.

Providing route guidance in either 2D or 3D, the GPS Navigation System has a choice of up to 32 languages. 4 x 45 watt digital amplification delivers a rich, complete sound, whether your music is classic or modern. DAB+ lets you enjoy your favourite stations with the highest sound quality. Smartphone integration enables you to make hands-free calls and lets you transfer up to 1,250 existing contacts.

The Infotainment System comes in a choice of black or silver finish to perfectly fit your Land Rover's interior.

Land Rover Classic Infotainment System is available at **classicparts.landrover.com** and from your local Retailer.

For more information, contact our Technical Advisors on +44(0)2476 565 708 or lclassic@jaguarlandrover.com

The new Land Rover Classic Infotainment System is designed to fit the following models*

Defender 90, 110, 130, Range Rover Classic (1993-1996), Discovery 1 (1994-1998) and Freelander 1 (1997-2004)

Key features include:

– DAB/DAB+ Radio

– Bluetooth® Connectivity: hand-free calls and music streaming

– Satellite Navigation

– Smartphone Integration

– 3.5" digital Touchscreen

– AM/FM Radio

– 4 x 45 watt digital Amplifier

*It is possible to fit the Classic Infotainment System in other vehicles, but this may require an additional bespoke fitment solution. This product should be fitted by an audio specialist.

MOTOR SPORT
www.motorsportmagazine.com

Membership Offer

Simply complete the order form, attach your payment and send it to:
Freepost RTTA-KJXE-ERAZ, Motor Sport magazine,
18-20 Rosemont Road, London NW3 6NE, UK
(No stamp required if posted from the UK.)

☐ **Yes, I would like to subscribe to *Motor Sport***
☐ **I am an existing subscriber. Please renew my subscription with this offer**

Bundle options

	12 issues	24 issues
UK	☐ *£55.99*	☐ *£95.99*
Rest of World	☐ *£70*	☐ *£126*
USA	☐ *$94*	☐ *$159*

Print options

	12 issues	24 issues
UK	☐ *£49.99*	☐ *£89.99*
Rest of World	☐ *£64*	☐ *£120*
USA	☐ *$85*	☐ *$150*

Digital Only ☐ 12 issues *£49.99* ☐ 24 issues *£89.99*

Digital Plus ☐ 12 issues *£52.99* ☐ 24 issues *£92.99*

MY DETAILS

Title *Forename* *Surname*
Address
Postcode *Country*
Telephone
E-mail

GIFT RECIPIENT

Title *Forename* *Surname*
Address
Postcode *Country*
Telephone
E-mail
A valid email is required for all Bundle and Digital subscriptions

PAYMENT OPTIONS – 3 EASY WAYS TO PAY

☐ **1.** ***I wish to pay by Direct Debit (UK only). Please complete the form below (or a copy) and send to the address above, or call our subscription hotline***

Instruction to your Bank or Building Society to pay by Direct Debit

To the Bank Manager (Bank/Building Society)
Address
Postcode
Name of account holder
Bank/Building Society account number ☐☐☐☐☐☐☐☐
Bank sort code ☐☐ ☐☐ ☐☐

Banks and Building Societies may not accept Direct Debit instructions for some types of account

Originator's identification number 5 5 6 9 6 5

Please pay Motor Sport Magazine Ltd from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may stay with Motor Sport and, if so, details will be passed electronically to my Bank/Building Society.

Signature
Date

☐ **2.** ***Please debit my:*** ☐ ***Visa*** ☐ ***Mastercard*** ☐ ***Amex*** ☐ ***Maestro***

Card no: ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry Date: ☐☐☐☐

Maestro: ☐☐☐☐ (Start date) ***Issue number:*** ☐☐ (If applicable) ***Security number:*** ☐☐☐ (Last 3 digits on reverse of card)

Signature ***Date***

☐ **3.** ***I enclose a cheque for*** _____ (payable to Motor Sport)

Terms & conditions: Offer is subject to availability. Free gift will be sent to subscription donor. Offer closes 31 December 2018. Subscriptions by Direct Debit will automatically renew upon expiry. Should the price increase thereafter you will be notified in advance. You can cancel at any time and receive a full refund on any issues yet to be mailed, with no questions asked. This offer is for new subscribers only. If you would like your email address to be shared with carefully selected 3rd parties and partners for information about their related products and services, tick this box ☐. A full list of our partners and 3rd parties is available at www.motorsportmagazine.com/magazine/privacy-policy.

Available in...



Save 70%

Bundle

The total *Motor Sport* experience

Get monthly delivery of your print magazine and instant access to the interactive digital version, as well as uninterrupted access to the *Motor Sport* online archive for more than 90 years of content.

Print

Save on the high-street price and receive issues direct to your door before they are in the shops.



Save 40%



Save 40%

Digital

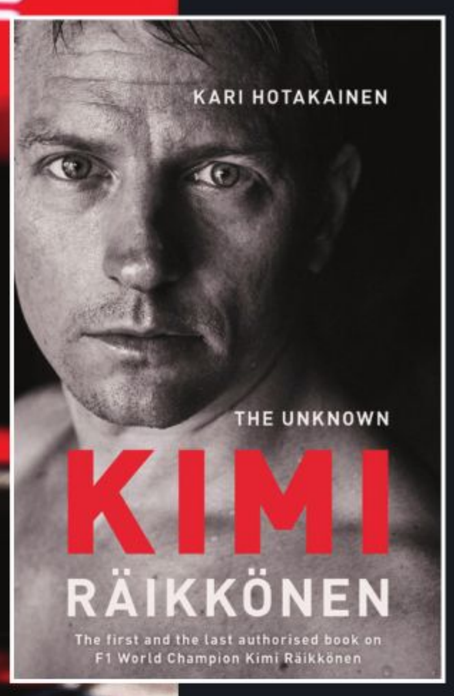
DIGITAL ONLY Get instant access to the digital magazine, which contains fantastic interactive articles and videos. Also includes access to all our digital supplements such as GP reports. **DIGITAL PLUS** includes Digital Only, plus access to the *Motor Sport* online archive.

NOW AVAILABLE ON DESKTOP, SMARTPHONE & TABLETS

XMAS SPECIAL OFFER

free

Kimi Räikkönen biography
when you subscribe to Motor Sport



A magazine subscription is the perfect, long-lasting gift for any motor racing fan – the recipient will receive an issue of *Motor Sport* magazine every month for a year and, for a limited time only, get a free hardback copy of the brand-new book *The Unknown Kimi Räikkönen*.

***Motor Sport* is the world's longest-running motor racing magazine, enjoyed by tens of thousands of avid readers every month. It is packed with breathtaking images, exclusive interviews and insights from across the sport's full spectrum. It is sure to be appreciated by any racing enthusiast and will make a fantastic gift this Christmas.**

3 EASY WAYS TO SUBSCRIBE

VISIT WWW.MOTORSPORTMAGAZINE.COM/LP18

CALL +44 (0) 20 7349 8484
or USA Toll Free on 1-866-808-5828
and quote LP18

COMPLETE AND POST THE FORM ON THE OPPOSITE PAGE

2018 F1 season review

In the end it was remarkably straightforward for Lewis Hamilton. He had his fifth world title in the bag with a couple of races to spare, his frequently scintillating form complemented by Ferrari's self-destructive tendencies

WRITER Mark Hughes



ALL IMAGES LAT

"Vettel and Ferrari's relationship was undermined by mutual ambivalence which crept in around the edges like a slow-acting poison"

Formula 1 had quite a championship contest on its hands until the late season implosion of Ferrari's challenge to Mercedes. That sentence could be the summary of either 2017 or '18. The pattern was remarkably similar, the outcome essentially the same. Statistically, Mercedes continued its clean sweep of the hybrid era with a fifth consecutive championship for constructors (one short of Ferrari's record from 1999-2004) and Lewis Hamilton became only the third quintuple champion in Grand Prix racing's history. It was actually a much tougher and more pressurised fight than those stats make it sound.

The competitive swings between Mercedes and Ferrari in the first two-thirds of the campaign were quite remarkable. "I've never known a season like it," said Merc's technical director James Allison. "We kept thinking we'd punched them to the floor, but then they are back at you. I'm sure they felt exactly the same. You'd think, 'OK, we've got the edge we need now,' but it hasn't been like that at all. It's been the only year I remember where the leading contenders have actually pulled away from the rest of the chasers."

But it wasn't the respective pace of the two cars that decided it. It was the stark difference in that intangible chemistry between lead driver and team. Hamilton and Mercedes continued to build upon the foundation of prior success as each completely trusted in the other, and the partitions between each entity dissolved yet further to became a sum greater than their parts. In contrast, the relationship between Sebastian Vettel and Ferrari was undermined by mutual ambivalence, which crept in around the edges of the two like a slow-working poison.

That became a self-reinforcing position, Ferrari's operational mistakes undermining Vettel's mental pitch and surely contributing to his own errors, further undermining the team's confidence in its lead driver. A vicious downward spiral that was only disguised by the quality of the car provided by the technical department.

In these polar opposite driver/team relationships, the position of the respective second drivers was a good marker. Valtteri Bottas was further embraced by Mercedes and Hamilton as a unifying force for good. Fast enough to be a strong support and even to assume the lead role on the rare Hamilton off-days, but without any of the psychological warfare that Nico Rosberg used to employ as a competitive tool. Bottas's calm persona was crucial to an environment of serenity and trust that has allowed Hamilton to reach new heights by more fully accessing his own potential. By contrast, Kimi Räikkönen - performing much the same role as Bottas and with much the same personal qualities - was deemed by Ferrari as not strong enough to put Vettel under pressure and was therefore to be replaced.

No.1
THREE BEST RACES

– SILVERSTONE –

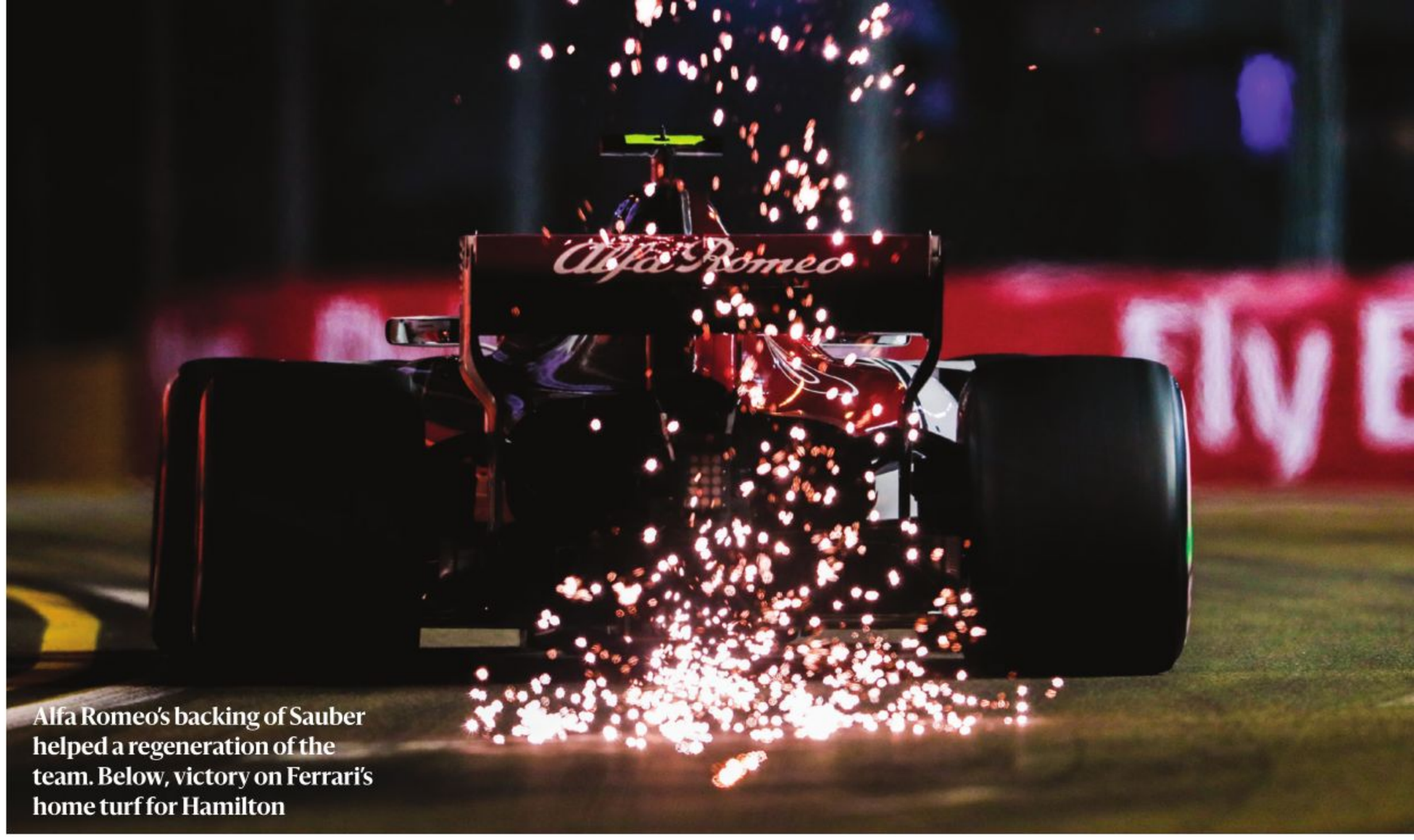
Silverstone, late afternoon sun low in the sky, pit stops and safety cars all played out, 15 laps to go - and two silver cars, two red: Bottas, Vettel, Hamilton and Raikkonen, closely-spaced but on different-age tyres, are going hard at it. Any one of the quartet has a realistic shot at victory and the crowd is beginning to stir. Hairs on the back of the neck.











Alfa Romeo's backing of Sauber helped a regeneration of the team. Below, victory on Ferrari's home turf for Hamilton



Chaos at Spa as Fernando Alonso is launched over the top of Charles Leclerc's Sauber after contact with Hülkenberg's Renault

It wasn't a case of one approach being right and the other wrong, but just reflective of the contrasting psyche of the two sides. That psyche was, at least in part, formed by the raw, relentless performance of the Hamilton/Mercedes combination over the years. If Vettel and Ferrari could just stave them off for long enough, then the respective psyches might have had a chance of switching polarity. For a while there, early season, it looked feasible as Vettel took the lithe and powerful SF71H on a heady sequence of poles and wins. But they couldn't get the steamroller going, not against the depth of Mercedes and the sometimes inspired brilliance of its lead driver. Ferrari's car was up to that challenge, the team ultimately was not.

That whole difficult dynamic was further complicated by the sudden death of Sergio Marchionne during the summer. Quite aside from his leadership qualities, he had been the managerial architect of the Scuderia's renaissance, the enabler who had liberated the technical department and allowed it to shine. The politics began just as soon as the news was received...

The silver cars and their red rivals formed the season's skeleton - and there was much technical interest in that they each continued to pursue the quite different philosophies of their 2017 forebears. Mercedes stayed true to its now-unique low-rake aerodynamic concept, with Ferrari pursuing the Red Bull-inspired high-rake approach but lengthening the wheelbase significantly - not to Mercedes lengths, but enough to maximise the downforce-generating area without overly compromising weight. The Maranello and Brixworth engine departments had made good gains during the winter, too, and the regulation tweaks banishing oil burn as a calorific help in stretching out the formula's fuel-flow restriction had the effect of equalising the special qualifying power modes of the two engines. No longer could Mercedes rely on an extra couple of tenths to rescue the front row whenever it had an imbalance, as had been the case in '17. But even without that facility, it was still delivering a higher peak than the '17 engine - as was the Ferrari. In fact, for the first time it was generally agreed between the various teams analysing GPS data that the Ferrari seemed to have a small but definite power advantage.

In what turned out to be its final season with Renault power, Red Bull conjured something quite different again, its RB14 featuring a very different sidepod arrangement, without the fashionable undercut, but with a layout that allowed a fantastically in-cut rear end in plan view, a crucial part in allowing its extreme high-rake philosophy to work. On tight tracks, it was enough to overcome a power disadvantage that started the season at about 35bhp and grew from there.



Quotes from the season

Criticism, arguments and sheer joy. Here are some of the year's best anecdotes

"This is getting silly. I'm using up my tyres for no good reason. Don't you see the tyre temperatures? So, what are you waiting for?"

Sebastian Vettel on the radio to his team at Hockenheim as he was held to the pace of the older-tyred Ferrari of Kimi Räikkönen, on a different strategy and compromising Vettel's chances of victory.

"He could have been in Apollo 13 the way he was dealing with problems today."

Christian Horner in admiration of Daniel Ricciardo's amazing performance in winning Monaco minus the MGU-k and its extra 160bhp for much of the race.

"It was just so difficult to overtake. I was on fresher tyres than Max. With these cars, more so maybe at this track, following is even worse than I can remember before. Being that it was really windy, as soon as you get like four seconds behind, you start to feel – it's a long distance, it's like a hundred metres or something, maybe more – behind another car and you can feel the effect of the car ahead. You shouldn't be able to feel it until you get right up their tail but it starts affecting the car already and you start to lose the momentum as you get closer, and with these tyres."

Lewis Hamilton on the greater-than-ever difficulty of passing with this generation of Grand Prix car.

"Lift it up, you'll crush the fing floor!"***

Vettel on the radio to his crew, Spa qualifying, as they attempted to man-handle the wheel-less car without lifting it up on the front jack.

"Could I point out that the Mercedes does a slow out-lap and we need a fast one? Don't put me out behind them."

Vettel to his team after it twice sent him out behind a Mercedes during qualifying in Singapore.

"For those who don't know me, now you do..."

Hamilton at his showman best, addressing those booing him after winning the German GP from 14th on the grid.

"This sport is just crazy. In Bahrain I was so frustrated by it. All the variables that are out of your control. Sometimes I question why I chose this sport. It gets you down a lot – but when you have a day like this it's worth 50 of those bad ones."

Daniel Ricciardo after his late-race ambush for the win in China, 24 hours after only getting into qualifying with just 45seconds to spare, following an emergency engine change.

"What are we doing here?"

Vettel to his team after it contrived to use him to tow Räikkönen to pole at Monza.

"We'll talk later."

Vettel to the team, also at Monza...



Vettel and Ferrari started strong, but the challenge fell apart later in the season

FIRST THIRD
(Australia-Canada)

Advantage Ferrari

In the first seven races the Ferrari was the faster car five times. But it scored only three wins, Mercedes two, the results not always following the underlying form as safety cars and strategy variations came into play. Mercedes lost Melbourne to Ferrari because of a wrong number input into its strategy software. Ferrari lost Baku to Mercedes by bringing in Vettel unnecessarily early, partly because Seb was obsessing about establishing track position over Hamilton. Having got the upper hand over a faster Ferrari through strategy, Mercedes (and Bottas) lost China to Red Bull by plain bad luck in the safety car timing. Bahrain, Monaco (dominated by Red Bull) and Canada ran to form in Ferrari's favour over Mercedes. Barcelona ran to form with a faster Mercedes vanquishing Ferrari.

In those races up to Canada, we saw: a startling Melbourne pole lap from Hamilton, a superb pressure victory drive from Vettel in Bahrain on old tyres, a great performance from Bottas in China that should have been rewarded with a victory, an utterly dominant Vettel in Montréal and an equally imperious Hamilton in Spain.

In the latter event Ferrari struggled with the thin-gauge tyres the teams had asked Pirelli to produce for Barcelona, Paul Ricard and Silverstone, sparking inevitable conspiracy theories that suggested the governing body was favouring Mercedes. A couple of weeks later the conspiracy theorists were insisting that the governing body was clearly favouring Ferrari in finding the latter's twin battery system fully legal after queries from Mercedes.

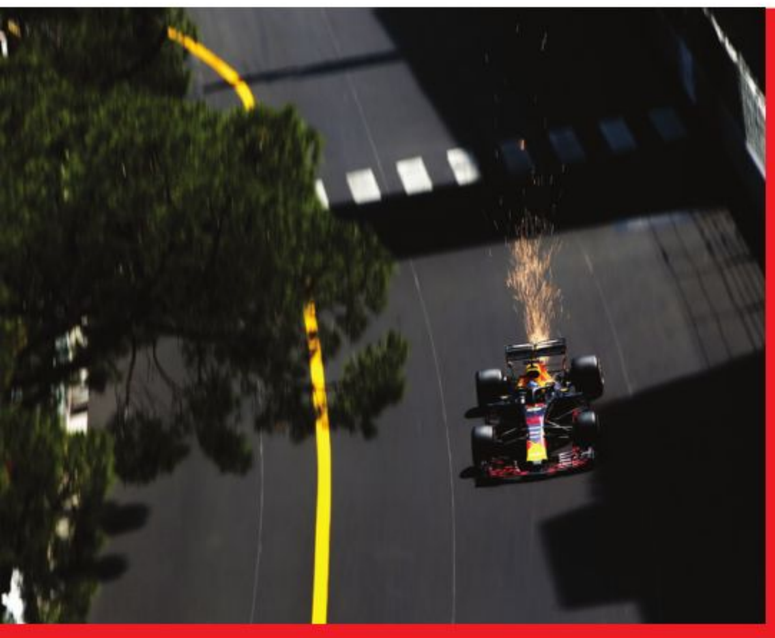
The thin-gauge tyres were a response to the increased blistering of the new softer 2018 Pirelli compounds around tracks with fast corners. Ferrari traced its problems to a rear suspension tweak and acknowledged it would have been in even deeper problems had they run the standard gauge. Or at least everyone at Ferrari who wasn't Maurizio Arrivabene, who does like a bit of propaganda.

Mercedes hit back with some of its own by leaking the reservations it had about Ferrari's battery system. So much so that the FIA looked into it very deeply. Yes, there was a twin battery system (just as since 2014) within a single casing. Yes, it did have two outputs. But no, there was no evidence that one of the outputs was by-passing the FIA sensor that limits the electrical deployment. As a safeguard, the FIA insisted that a second sensor be fitted (by Montréal). A couple of races subsequently, Ferrari's power jumped even further.

No.2
THREE BEST RACES

– INTERLAGOS –

As they sat on the grid, it looked like Ferrari's race to lose. It was on a more durable tyre than Mercedes or Red Bull thanks to its clever playing of Q2 the day before and Vettel sat on the outside of the front row. But then Hamilton won the start and Ferrari's expected tyre advantage simply didn't materialise – it couldn't lap any faster than the pace the Merc, constrained by its blistering tyres, was setting. And now there was another complication; Max Verstappen's Red Bull seemed immune to any sort of tyre limitation and was coming past the Ferraris and Mercs like a dose of salts. The track is perfectly configured for overtaking and drama. There was about to be plenty of both.



RED BULL TAG HEUER

Aside from the to-ing and fro-ing of the Renault/Honda engine decision, the RB14 was a solid prospect, when it held together. Verstappen's late-season run of podiums shows positivity ahead of 2019. Ricciardo's appalling reliability record after two early wins shows a move away from Renault may not be a huge gamble.



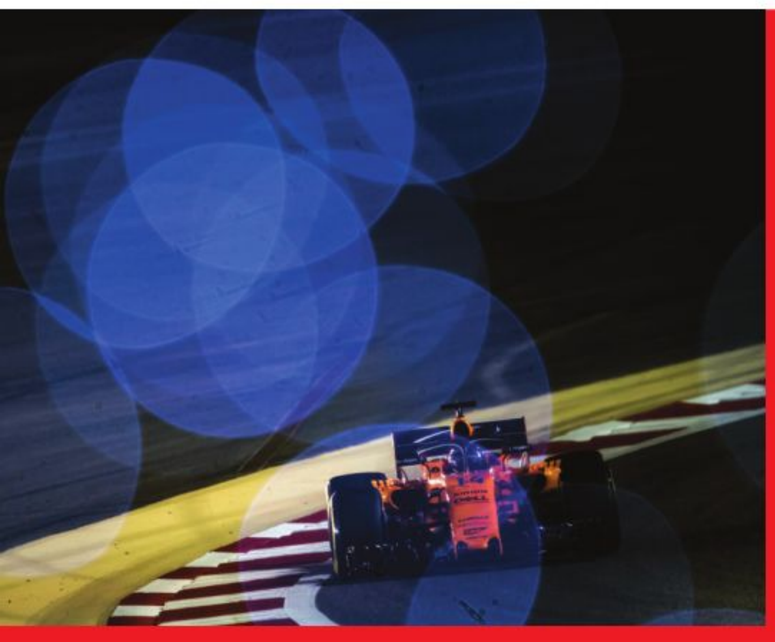
RENAULT

F1's sleeping giant is still snoozing. Renault was well adrift of the other factory teams, but has at least improved to being a regular point-scorer and frequent Q3 participant. It appears to have got to the bottom of its reliability worries and in Hülkenberg and Sainz it enjoyed two consistent drivers, even if it lacked remarkable results.



HAAS FERRARI

Arguably the surprise of the season, and controversial as always. Ferrari's influence was heavily noticeable this year, which rankled with its rivals, but brought a brilliant turn of pace. Magnussen was the pick of the drivers but his rather, ahem, robust driving courted more than a little criticism.



McLAREN RENAULT

The switch to Renault didn't catapult the team back to the front. It removed McLaren's excuses and exposed its deficiencies, causing team bosses to fall on their swords. Alonso drove the wheels off it, to little avail, while Vandoorne was made to look distinctly average in a less than average car.

THE OTHER GRID

This year wasn't all about Mercedes v Ferrari, with close battles in 'Class B'



FORCE INDIA MERCEDES

The points table lies. The seventh place Constructors finish looks a slump from its usual giant-killing position, but if you'd added the 59 points it had before being stripped of them after a mid-year ownership change, it's a superb fourth. Both Perez and Ocon drove superbly all year – well, they did when they weren't hitting each other!



SAUBER FERRARI

Another example of Ferrari's support of its partner teams. The perennial backmarker this year became a genuine threat for 'Class B' honours with Alfa Romeo badging, mostly thanks to Leclerc, who proved a revelation after some early teething issues. Ericsson's final F1 season proved disappointing in contrast.



TORO ROSSO HONDA

Remember that useless Japanese powerplant that was rubbish on the straights? We bet everybody at McLaren tried to as the Toro Rosso blew past them at Bahrain. Honda made big steps in terms of power, and TR's year was essentially a development exercise ahead of Honda's 2019 Red Bull deal. Gasly was the star as Hartley struggled, admittedly with bad luck.



WILLIAMS MERCEDES

A total write-off. A fundamental aerodynamic flaw with the FW41 meant it was anchored to the rear of the field with two young drivers unable to build any confidence with the snappy, unpredictable car beneath them. Williams traced the issue to poor wind tunnel correlation and says it's improved drastically for 2019. And it really needs to.



Five Pivotal Moments

Points swings, flat-out turns and a slice of humble pie

1) Bahrain. Pierre Gasly.

Having already made his pit stop in the Toro Rosso-Honda, Gasly is about to pass the yet-to-stop Fernando Alonso's McLaren-Renault in front of McLaren's shareholders. McLaren pit Alonso just before that is allowed to happen.

2) Signes, the legendary corner at the end of Paul Ricard's Mistral straight.

The last time F1 raced here, the big challenge was if the corner could be taken flat on low tanks and fresh tyres. Only the bravest guys in the best cars could do it. Twenty-eight years on, F1 returned to the track. The Mistral had been dissected by a chicane – but it was a long way before Signes and the cars were back pretty much to terminal velocity by the time they approached the turn. Despite a tricky cross-wind, every single car on pretty much every single lap was flat through there, the Red Bulls even managing a mid-corner upchange from seventh to eighth....

3) Sebastian Vettel, lap 51 Hockenheim.

Leading by 9sec with 16 laps to go but being caught on the damp track by Lewis Hamilton (three places back) at a prodigious rate. Hamilton, from 14th on the grid and on fresher, softer tyres than Vettel, had cut a 21sec deficit down to 12sec in six laps. At an average of 1.5sec per lap (including a couple of laps in which he was over 2.3sec faster than the leader), Hamilton was due to be up with the Ferrari within six laps. It's not that Vettel was lapping slowly – he was consistently the second-fastest man on track. It's simply that Hamilton was taking his grip advantage and amplifying it to outrageous effect. For Vettel, how could this be happening? He'd taken a beautiful pole on his home track, as Hamilton suffered a hydraulics problem that had left him starting 14th. But now here was Vettel being informed of the gap back to the unfeasibly advancing Merc. On lap 51 the rain came down yet heavier and teams up and down the pitlane began preparing ultras. Vettel knew he couldn't afford to leave anything on the table and went a full 2sec faster than the third-quickest guy – a lap that was only barely beaten by Hamilton. He was pushing hard. Then, approaching the big home crowd in the stadium's Sachs Kurve, the Ferrari's rear axle briefly locked as he braked. Being on the outside approach, that twitch couldn't be corrected before the car was already on the grass – and in a blink of an eye, into the barriers. That was a 32-point swing right there. Just at the moment that Ferrari had the momentum, Hamilton had used sheer virtuosity to force the most crucial pressure error onto his rival.

4) Barcelona, Friday. Robert Kubica.

Having taken part in an official F1 practice session for the first time since his rallying accident, Kubica is making no bones about how bad the Williams FW41 is. "Just keeping it on track is an achievement," he said after lapping significantly quicker than Lance Stroll in the sister car. "Its problems are exactly the same as they were when I drove it in testing three months ago."

5) Baku, early laps. Charles Leclerc.

Leclerc has made a breakthrough in understanding how to set up and drive the Sauber. He's running the car in eighth place, keeping the Red Bulls in sight, comfortably fending off Kimi Räikkönen's recovering Ferrari, lapping just 0.5sec slower than Vettel and Hamilton and 2sec faster than the other Sauber of Marcus Ericsson. Four races in, he'd got the hang of F1.



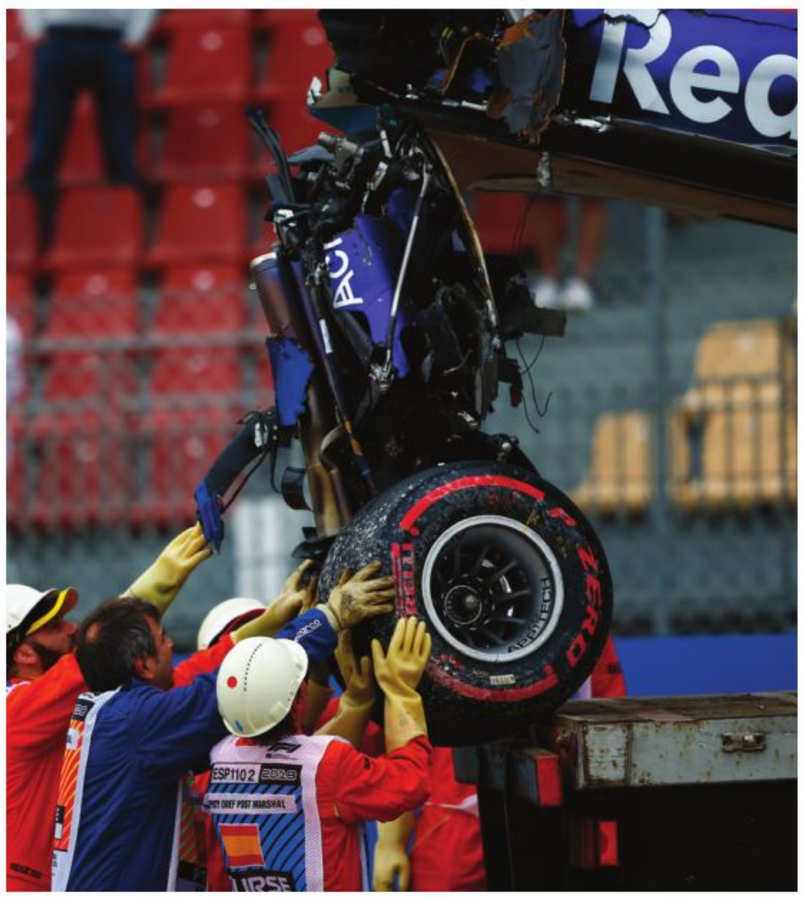
F1's advertising banner sums up the quirky Baku track in Azerbaijan, which has produced some bonkers races













Räikkönen secured his 21st career win by breaking Hamilton's streak in the United States GP



THE YEAR IN NUMBERS

Drivers' Championship

1	Lewis Hamilton	408
2	Sebastian Vettel	320
3	Kimi Räikkönen	251
4	Max Verstappen	249
5	Valtteri Bottas	247
6	Daniel Ricciardo	170
7	Nico Hülkenberg	69
8	Sergio Pérez	62
9	Kevin Magnussen	56
10	Carlos Sainz	53
11	Fernando Alonso	50
12	Esteban Ocon	49
13	Charles Leclerc	39
14	Romain Grosjean	37
15	Pierre Gasly	29
16	Stoffel Vandoorne	12
17	Marcus Ericsson	9
18	Lance Stroll	6
19	Brendon Hartley	4
20	Sergey Sirotkin	1

Constructors' Championship

1	Mercedes	655
2	Ferrari	571
3	Red Bull Racing TAG Heuer	419
4	Renault	122
5	Haas Ferrari	93
6	McLaren Renault	62
7	Force India Mercedes	52
8	Sauber Ferrari	48
9	Scuderia Toro Rosso Honda	33
10	Williams Mercedes	7

Race wins

1	Lewis Hamilton	11
2	Sebastian Vettel	5
3	Daniel Ricciardo	2
=	Max Verstappen	2
5	Kimi Räikkönen	1

Fastest laps

1	Valtteri Bottas	7
2	Daniel Ricciardo	4
3	Lewis Hamilton	3
=	Sebastian Vettel	3
5	Max Verstappen	2
6	Kimi Räikkönen	1
=	Kevin Magnussen	1

Pole Positions

1	Lewis Hamilton	11
2	Sebastian Vettel	5
3	Valtteri Bottas	2
=	Daniel Ricciardo	2
5	Kimi Räikkönen	1

Podium finishes

1	Lewis Hamilton	17
2	Kimi Räikkönen	12
3	Sebastian Vettel	12
4	Max Verstappen	11
5	Valtteri Bottas	8
6	Daniel Ricciardo	2
7	Sergio Pérez	1



Mercedes and Ferrari went wheel-to-wheel for much of the year, until Hamilton proved the difference

SECOND THIRD
(France to Italy)

Punch and counter-punch

Mercedes jumped ahead of Ferrari with a powerful engine upgrade (Spec 2.1) at the resurrected Paul Ricard. It was great to have a French Grand Prix once more, but they might have updated the access routes from the 1980s in order that people weren't stuck in traffic jams for up to seven hours... "Oh yes, it was always like this," recalled veterans in the media centre.

Mercedes followed up its engine boost with a powerful aero upgrade in Austria, paring the bodywork back from the sidepods to give a very significant gain in rear downforce, for a long time the main weakness of the low-rake car against the Ferrari. Hamilton and Bottas spent practice dialling out understeer, which was something of a novelty for them. They suffered a rare double mechanical DNF in the race, paving the way for a Verstappen win.

The combined effect of these two upgrades appeared to have given Mercedes a very significant advantage over Ferrari. But at Silverstone the Scuderia hit back with a big upgrade of its own that worked the underfloor much harder, while the engine department had given the all-clear for the power unit to be run much more aggressively. The sheer grunt of all the Ferrari-powered cars - including even the Phase 1 engine still in Räikkönen's car - was very obvious and set tongues wagging again. Ferrari had leapfrogged past a powerful upgrade that Mercedes had believed would keep it ahead for many more than two races. This was the two top teams slogging it out like a couple of heavyweights in the ring. Vettel took a great win in Hamilton's back yard.

The Ferrari advantage was very much there at Hockenheim and Hungary, but the weather gods intervened to gift Hamilton at crucial moments. Together with Vettel's disastrous Hockenheim crash while leading - but being chased down by Hamilton on fresher tyres on a damp track - it was the fulcrum on which the season turned. Right in the midst of it all, Marchionne died.

"We came to Spa with a massive upgrade," recalled Hamilton, "very confident." This was the Spec 3 engine. "And they came with an even bigger one." Vettel breezed past the Mercedes as if it were nothing on the run up to Les Combes, then held him off on the restart to win comfortably. At that point, despite the disastrous 32-point swing against him at Hockenheim, this still looked a winnable championship for Vettel.

Yet Ferrari just seemed to buckle. Unfathomably, it allowed Räikkönen to be the beneficiary of the Monza tow (worth 0.35sec) from Vettel rather than vice versa, putting the former on his first pole in five years, with Vettel 0.16sec behind. It chose Sunday morning to inform Kimi that his contract would not be renewed - and driving very much for himself, his defence into the Roggia chicane played its part in Vettel facing backwards at the back with a damaged car. Trying harder than needed to stay clear of Hamilton, Räikkönen blistered his tyres and Hamilton took his third against-the-odds win in four races. Up to this point, Ferrari had deployed the faster car 10 times in 14 races... but had won five times to Hamilton's six.

No.3
THREE BEST RACES

– SHANGHAI –

The one upside for Red Bull about invariably being in the no man's land between Ferrari/Mercedes and 'Class B' was that it could use its great tyre usage and lack of any undercut threat to run way longer than the others - and then wait for any possible safety cars. Late in the race in China, that strategy hit gold. Max Verstappen and Daniel Ricciardo got onto tyres newer and softer than those ahead and their earlier deficits were wiped. How were the two most exciting overtakers on the grid going to find their way by the Ferraris and Mercs? And how were they going to deal with each other? It was all about to play out in a brilliantly vivid way.

FINAL THIRD
(Singapore to Abu Dhabi)

Ferrari's collapse

When Ferrari twice put Vettel out behind a Mercedes in Singapore Q3 (the Merc needs slow out-laps, the Ferrari fast, because of their different tyre usage) and Hamilton delivered the qualifying lap of his life to take pole, it seemed Ferrari had again squandered its pace. But hindsight showed it was actually more than that. The new rear wing and suspension fitted for that race were just not working – and neither was the new floor introduced at the next race, in Sochi (where Mercedes took a 1-2, Bottas moving aside for Hamilton).

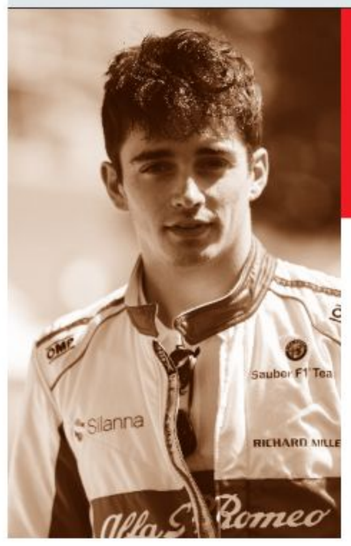
After the Ferrari felt similarly unresponsive on Friday at Suzuka, third driver Daniil Kvyat got busy on the simulator back at Maranello. The car felt better, he insisted, with the old floor, rear wing and rear suspension. Overnight the updates were removed and into Saturday Vettel and Räikkönen agreed that Kvyat had been correct. The car was back on form – but Ferrari then blew it by putting them both on inters on a briefly dry track at the start of Q3. So another Hamilton victory, another Vettel race compromised by an early collision (following on from Ricard and Monza and foreshadowing Austin).

When Vettel lost pole to Hamilton by hundredths of a second in Austin, he shouted out an expletive. But it was only partly because he'd missed top slot. It was also because with the car back very much in standard form, minus all the developments of the last two months (apart from a new front wing, which stayed), it was back to being the contender it had been in the summer.

"We've basically lost two months of development," rued Vettel later. He'd again compromised his chances, this time with a red flag infringement in practice that cost him a grid penalty – and put Räikkönen on the front row. With the Mercs off-form because of a cross-weight set-up error that was blistering their tyres, Räikkönen stood on the top step of the podium for the first time since 2013.

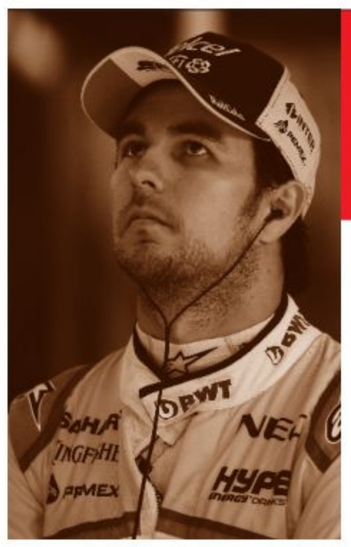
Mercedes sort of stuttered across the line to seal its titles in Mexico (drivers) and Brazil (constructors) amid continuing tyre difficulties. Hamilton actually won Brazil, but only after the much faster Verstappen was denied a second consecutive win by a collision with the lapped Esteban Ocon.

TOP 10 DRIVERS OF THE YEAR



10 CHARLES LECLERC

The pace of his GP3 and F2 titles was not immediately apparent as he made his debut. He was trying to get the Sauber to behave like those cars, with a lot of front end, and getting himself into bother trying to hang onto it. Calming down the set-up for the walls of Baku turned out to be a pivotal moment. He was quite remarkable in that race, running up with the 'class leaders' in a car that, back then, was mediocre. As the team made progress with the C37, he went with it. By Silverstone he was pushing Hülkenberg for 'best of the rest'. At Russia he finally made that breakthrough and, by the end of the year, was even outpacing the identically powered Haas. He's an exciting prospect.



9 SERGIO PÉREZ

The Mexican remains a truly formidable force, not the very fastest guy out there but strong in every single supporting quality. Great racecraft (he's terrific on the first laps), fantastic with the tyres, totally uncompromising wheel-to-wheel, a great understanding of the dynamics of a race from the cockpit. The hot-headedness can occasionally surface – and his frustrated actions against Sergey Sirotkin at Singapore were worthy of a race ban – but in all he remains a fantastic asset to Force India. His Baku drive to third, with a late pass on Vettel and some extraordinary pace, was one of the performances of the season.



8 ESTEBAN OCON

"I don't know where [the Force India] should be qualifying," said Vettel at Spa, of Ocon's performance that day, "but I don't think it's third." The young Frenchman generally had the upper hand over the very tough Pérez and delivered some beautifully composed races, none more so than his sixth place at Monaco. There was another incident with Pérez at Singapore that was the latter's fault – but Ocon should have known better than to place himself in such a vulnerable position against such an uncompromising foe. Similarly, when trying to unlap himself on Verstappen at Interlagos. His best stuff, however, suggests a potential future champion. It's ridiculous that he might not be on the grid next year.



7 NICO HÜLKENBERG

If there had been a championship for the 'Class B' section behind the big three teams, Hülkenberg would have dominated it. The Renault wasn't always the fastest car in that sub-section, but every time it was, he delivered. For one so experienced he can still make the odd surprising error – hitting the wall at Baku, his disastrous first corner at Spa, for example – and he can still struggle with the tyres, but he remains super-quick. His initial pace advantage over Carlos Sainz was significant and although the latter subsequently corrected that, 'Hulk' remained the guy who more usually brought the result home. It will be intriguing to see how he compares against Ricciardo next year.



6 VALTTERI BOTTAS

He played a crucial part in winning Mercedes this title with his unquestioning support of Hamilton late season, his calm equilibrium inside the team and some great 'blocker' drives, notably Hungary. Also, he was desperately unlucky not to have two early wins (China and Baku). On merit, he'd won those races but fate intervened. There was a surrendered victory to Hamilton at Sochi (a track where he has still never been outqualified by a team-mate) and he agreed to call off his fresh-tyred attack on his team-mate at Hockenheim. Had Hamilton not overridden the team's confusion about whether to pit, that would have been Bottas's race. Four victories would have been a truer representation.

Hamilton's late-season surge came just as Vettel and Ferrari's relationship began to crumble



In perspective

Ultimately, in the strain applied by the competitive ebbing and flowing between the top two teams, Mercedes and Hamilton proved much more robust than Ferrari and Vettel. This was a title won on character and unity more than any performance difference between the cars. In addition to that, Hamilton on at least two occasions made the difference and conjured a result that transcended the car.

Even in the fifth year of the hybrid formula, power unit development remained on a steep improvement curve. Renault was left increasingly behind, neither powerful nor reliable. Honda, meanwhile, made real progress with little Toro Rosso and by the end of the year was believed to be significantly in front of Renault (making McLaren's switch to Renault look disastrous and paving the way for Fernando Alonso's exit from F1). Honda's form was hugely encouraging not only for Red Bull as it looks forward to 2019 and beyond, but to all of F1, which could really benefit from a competitive shake-up.

The pre-season issue of the cockpit halo fell away pretty much as soon as the wheels began turning in Melbourne and everyone stopped seeing it, other than those who were determined to do so. It then almost certainly saved Charles Leclerc's life at Spa. The Sauber rookie looked quite sensationally good at times and must surely be giving Vettel some cause for concern as he graduates to the Scuderia. Especially within a team that seems to have fallen out of love with the German.



5 DANIEL RICCIARDO

He remains F1's best overtaker, he's a smart, shrewd operator, great with the tyres and his competitive composure is of the highest calibre. But ultimately, Verstappen's speed as he's gained experience has finally overwhelmed him. It was this, as well as doubts about Honda's prospects, that pushed him towards leaving for a team that he usually laps. His Monaco drive was fantastic, from sure-footed pole to improvisational dexterity when the ERS-k shut down. Almost from the moment he announced his departure his car suffered terrible reliability and this did seem to grind him down. It's difficult not to think he's cashed in his chips too early, short of the title that might otherwise have awaited.



4 MAX VERSTAPPEN

He was on a crazily rich mix early-season, as if the final shortfall of the Red Bull to the front caused him to squeeze the lemon dry, induced him to attack yet more when he was already at the optimum. This though is the driver who concerns Hamilton the most. Lewis can still play him – Max fell hook, line and sinker for the invitation to try around his outside at China's Turn Seven – but at the same time he's wary of him, is less certain of how to beat him wheel-to-wheel than he is of, say, Vettel. Destroying his Monaco chances by repeating his 2016 crash finally seemed to bring him to his senses, and from there he was just a force. Stubbornness can still cost, as Brazil proved. But his approach is thrilling.



3 SEBASTIAN VETTEL

He made many errors but that makes it easy to forget the superb highs, the incredible turns of speed. His Hockenheim pole lap was a particularly great one, but presaged his most crucial error on race day. His banging of the steering wheel in frustration, embedded in the barriers, was in many ways the key image of the season. His victory over Bottas in Bahrain on ridiculously old tyres was one of the greatest pressure drives of all time, up there with Villeneuve at Jarama in '81. His pass of Hamilton in Austria, outside wheel kicking up the dust, was superb. Fighting for this title requires a driver to be at a heightened mental pitch, difficult to achieve when also trying to cover for the team's errors.



2 FERNANDO ALONSO

In what, for now, was his final season Alonso remained at the very top of his game, a game that remains extraordinarily complete. His fifth straight season in an uncompetitive car had no effect on his motivation to wring its neck every time. A couple of highlights: in Baku, after a first-lap collision, he had to utilise the barriers to get the three-tyred car just to turn, with a final nudge of the pit wall to get it to his apron for repairs. With much of the floor missing, he rejoined the race, lapped faster than his team-mate – and gave the team six points for seventh place. In Singapore he told his engineer after five laps that the tyres would last until lap 35. He pitted on lap 34 on his way to a car-flattering seventh.



1 LEWIS HAMILTON

This was probably his finest season. It's become routine to see the moments of brilliance, the special qualifying laps that sometimes put a car on pole when it shouldn't be (Silverstone, Hungary, Spa), or the stunning pace in the wet (Hockenheim where he was taking outrageous margins, not all explained by fresher tyres), but his 2018 season was about more than just that. His relationship with Mercedes has annealed him, taken away much of his competitive paranoia and allowed him to develop in other directions. The way he pulled together his technical core, allowing them to get more out of an occasionally tricky car than his earlier self could. In adversity, he remains supremely mentally composed.

DK Engineering

Est. 1977

McLaren P1

Presented in the iconic "P1 OOV" colour of Amethyst Black Metallic, with extensive MSO options and today having covered just 3,100 Miles.This single owner P1 is offered in EU specification and is UK registered. Full PPF and available immediately. **£1.25M**

RUF RCT Evo (LHD)

Supplied new in 1992, this RUF chassis numbered 964 RCT EVO is powered by a single turbo, 3.6 litre flat-six mated to a 6-speed gear box, making this 425hp car good for 199mph. Fully restored with just 8,000 Kms since. **£POA**

Ferrari F40

A 'Non-adjust' variant with Classiche Certification and excellent weave. This incredible F40 has covered 27,500 Miles from new, has been fastidiously maintained and has just been subjected to an annual service. **£884,995**



Ferrari 212 Inter Prototype

This 1952 212 (#0229EL) was bodied by Pinin Farina as the Prototipo for the 212 PF series. This matching numbers example has been totally restored to concours standard.



Ferrari 275 GTB/4 (LHD)

Owned by David Bailey during the 60s and early 70s. Now fresh from a total restoration returning the car to its striking original "Blu Ferrari". Matching Numbers & Classiche Certified.



Ferrari 365 GTC (RHD)

This rare RHD 365 GTC was delivered in 1969 to Maranello Concessionaires in Egham. One of just 22 UK cars, has benefited from extensive restoration work in 2014 and is well known to DK.



GT40

Based on an official Superformance chassis (P/2273), this example has been built to accurate period Race Car specs and comes complete with a period ZF gearbox, a current valid HTP and is fitted with a low hours Steve Warrior 289 engine.



D-Type

This Short Nose D-Type has recently received HTP papers thus confirming its accuracy. It competed in the Woodcote Trophy at the 2017 Silverstone Classic but remains equally suited to the road.



Aston Martin DB5 Convertible (RHD)

One of just 123 produced, this RHD example was first owned by the famous actress Beryl Reid. Following a restoration by the factory, this example now presents in Midnight Blue over Cream and features a Vantage spec engine.

Acquisition Consultancy | Sales | Service | Restoration to Perfection | Engine Building | Race Preparation | Rolling Road | Storage

Telephone: +44 (0) 1923 287 687 • Fax: +44 (0) 1923 286 274 • Email: info@dkeng.co.uk

Little Green Street Farm, Green Street, Chorleywood, Hertfordshire, WD3 6EA - ENGLAND

Chorleywood Tube Station - 2 mins

Heathrow or Luton Airports – 20 mins

M25 Orbital J18 - 3 mins

Helicopter Landing Facilities

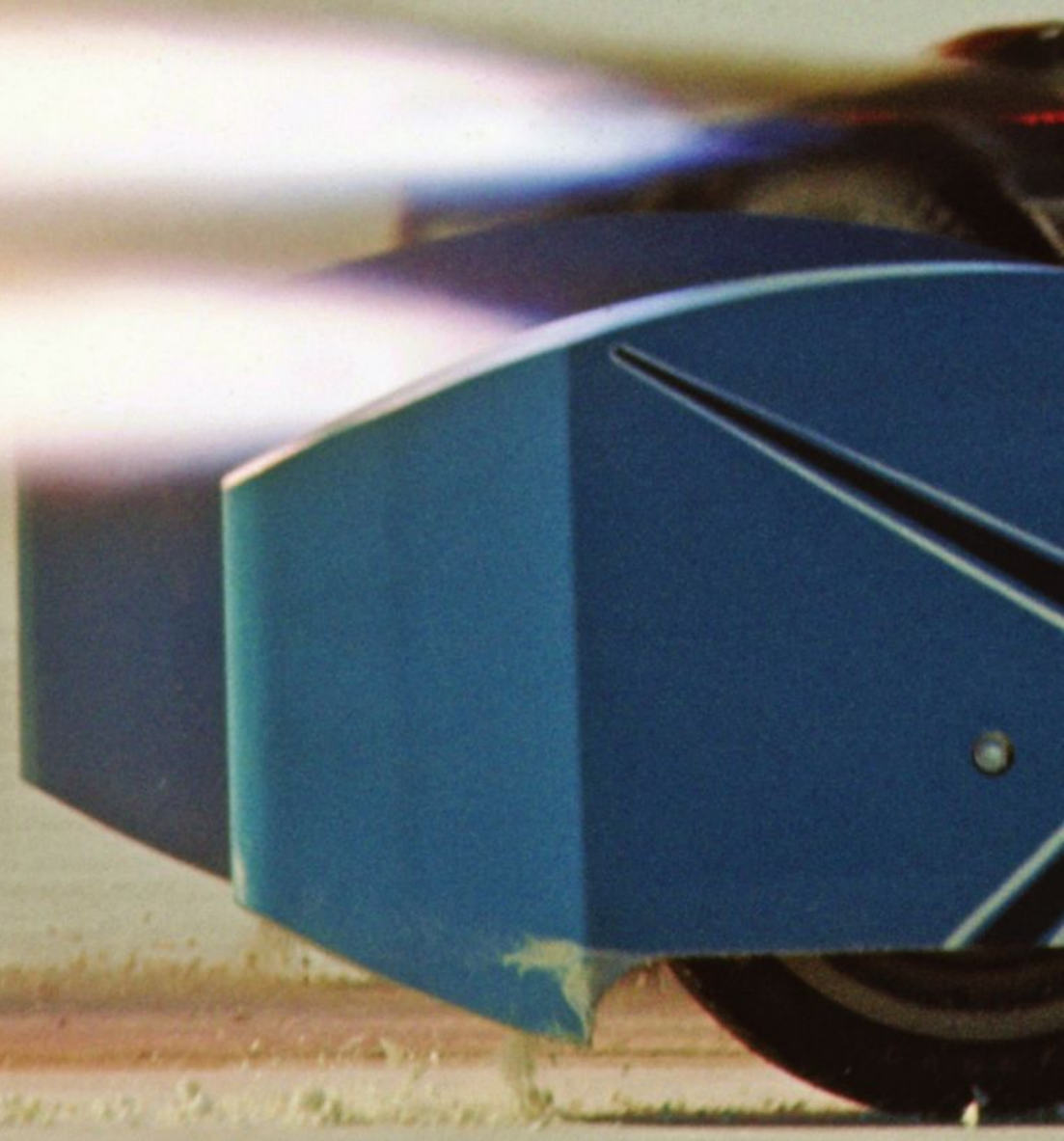
The Ferrari Specialists

www.dke.co.uk

A Cottingham Family Business.

DK Engineering

SPEEDING THROUGH THE HISTORY BOOKS



Setting the land speed record has driven men to immense effort and huge risk. But as Bloodhound SSC's audacious 1000mph project rolls to a halt amid spiralling costs, it's possible there may be no more contenders and no new land speed records. Since its inception* Motor Sport *has followed these heroic adventures; here we look back at our coverage over 10 decades

WRITER Gordon Cruickshank

GETTY

Land Speed Records *Is it the end?*

The lure of speed has been embedded in the human psyche since man first straddled a horse – the thrill that drives endorphins through the brain and makes the heart race. Some become addicted, pressing on to surmount the last figure with an ever higher one, and the motor car has been the perfect vehicle to combine engineering, effort and danger. The steam locomotive quickly surpassed the pace of that horse (by the 1850s trains could hit 80mph), but it was the car with its brave solo driver which brought heroism and speed together in front of the stopwatch, and the world's eyes. Even after the title 'Fastest Man in the World' had long passed to an aviator the Land Speed Record remained headline news, each new attempt garnering immense media attention, but as speeds soared through the sound barrier the technical challenge, the dangers, and the investment multiplied hugely. With Andy Green's Thrust SSC record already standing at a supersonic 763.035mph it has proved impossible to raise the finance to push Bloodhound SSC higher, while the challenges may simply be too great for smaller outfits. Thus it is possible that we have witnessed the final attempt on this great prize. It is an opportune time then, to raid our archives and look back at how *Motor Sport* reported on more uplifting record times.

MOTOR SPORT WAS NOT AROUND TO report on the earliest records but even then it was a contest between two speed demons as Gaston Chasseloup-Laubat and Camille Jenatzy edged over 40 and on to 65mph, foreshadowing duels to come.

Give or take official ratification, the car had surpassed the train by 1906 when Fred Marriott's Stanley Rocket steamer hit 127mph on Daytona Beach, and when the presses ran for Issue 1 of *The Brooklands Gazette*, our first incarnation in 1924, Britain had collared three land speed records around the rough Brooklands banking. The peak now stood at 133.75mph to K Lee Guinness in his 350hp Sunbeam – the car that would become the first Campbell Bluebird.

Clearly speeds were outstripping the wall-of-death Surrey track and in Europe attention moved to France, specifically a straight tree-lined road near Arpajon. For our second issue our reporter Frank Hardy was there, abandoning his taxi to walk to the site:

It was not an easy walk, but a pressman knows only duty... We arrived at the centre of the course where officials, timekeepers, and others of the cognoscenti were gathered. There was also a telephone installation, and a huge loud speaker which swung about and reported progress to the crowds up and down the course. Everything seemed to have been provided for, including a first-aid outfit discreetly hidden behind the official stands. Fortunately, the latter was called out but once, when a three-wheeler burst a tyre and made a dive towards the roadside and so scared a gendarme that he made a wild jump into a ditch, breaking his leg. Meanwhile I had toddled on to the parking point at the farther end where a happy party were hard at work helping our trio of speed cracks.

On the way back, I was passed by the big Fiat [Mephistopheles], Ernest Eldridge up, and marvelled at the lack of confidence in his steering abilities displayed by the onlookers who took cover behind tree trunks or in the ditch. But, then, they had not seen him pirouette around the brink of the Byfleet banking. René Thomas on his 12-cylinder Delage came by also. A sweet car this, finished in dappled aluminium, and streamlined in all except the tyres: what a 'bus' for a weekend run to Brighton! Eldridge, I heard later, had done 147.03mph, but as a reverse gear had been left out of the car, the performance could not qualify as a record. Thomas's speeds of 143.32mph for the mile were set down as records. Dissatisfied, Eldridge made arrangements for a reverse gear to be fitted, and on the 12th July, over the same course, put up the following figures: kilometre, 146.86mph, and mile 145.89mph. (August 1924)

That would be the last record set on a public road. Thereafter it was sand and salt that would be pounded beneath tortured tyres, and in that patriotic era *Motor Sport* trumpeted a golden run of British record-breaking:

The most wonderful racing feat which has ever been accomplished by the driver of any car was the record-breaking run made by Captain Malcolm Campbell in the 350hp Sunbeam... the remarkable speed of 146.16mph, constituting a world's record. (October 1924)

In 1925 we let Capt Campbell tell in his own words the story of breaking 150mph:

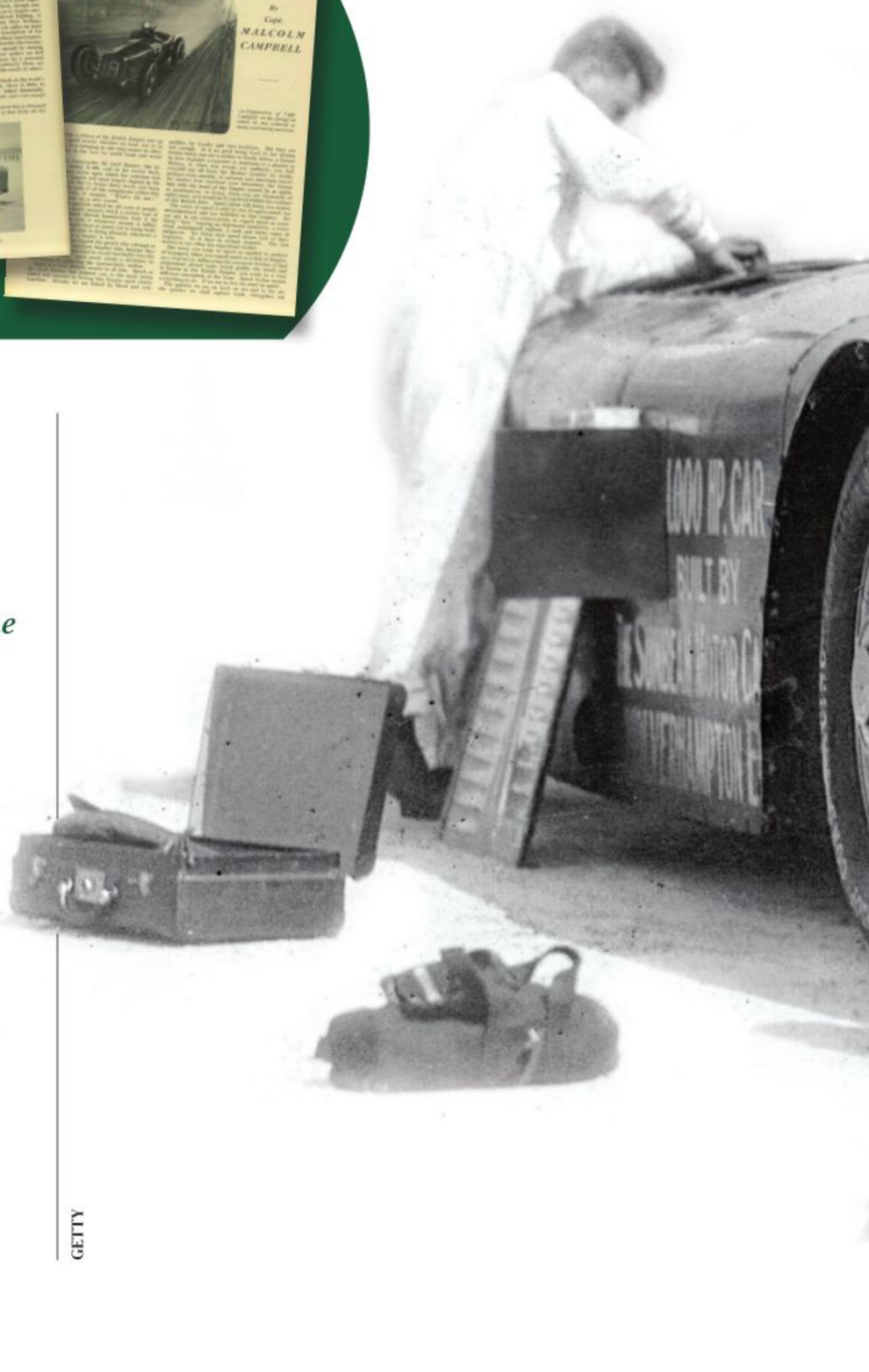
No one will deny that the joys of sheer speed possess an extraordinary fascination, but before taking the wheel of the Sunbeam I had no idea of the wonderful sensation of driving at a really high velocity. The outstanding recollection of my first fast trip on this car was the time occupied in slowing down and even when the brakes were applied, it seemed at the moment as if it would never stop again.

One has only to sit behind the big engine and let the car go on a stretch of good sand to feel as if some supernatural force were at work; a force which, though controlled by the hand of man, is so terrific as to inspire awe.

Any attack on the world's record is not a business proposition, there is little to be gained and a good deal to be risked financially. Perhaps it may seem rather futile to take so much trouble... but the wealth of technical information obtainable by such efforts cannot be over-estimated. One may take it for granted that the different factors making for speed gradually find their way into the composition of ordinary cars. (December 1925)

As peak record speeds shifted out of sight of track racing cars, demanding ever more specialist machinery, the record books burgeoned





GETTY

with kilometre, mile, 10-mile, standing or flying start records, spread across endless class divisions, and *Motor Sport* assiduously reported them. But to the general public there was one record that counted: the LSR, being wrestled over by a British trio: Welshman J G Parry Thomas, the flamboyant and confident Campbell and Sunbeam pilot Henry Segrave. Fur trader John Cobb and engineer George Eyston would later step in to complete a British stranglehold on the LSR that, barring Ray Keech's 1928 run of 207mph in the Triplex Special, would run from 1924 until jet power took over in 1963, and *Motor Sport* joined in the red, white and blue flag waving:

Parry Thomas, driving 'Babs.' the 27-litre Liberty-engined monster, has substantially improved on the figures for the flying mile and flying kilometre world's records, previously held by the two Sunbeams. Mr Thomas's speeds were 170mph for the kilometre and 169mph for the mile.

This performance is all the more remarkable when it is remembered that Mr Thomas, who is, comparatively speaking, a lone hand, has handsomely beaten one of the most powerful racing combines in the world at the first attempt. Congratulations! (May 1926)

But the lone hand would have a tragic fatal accident on Pendine beach, and his speed was soon eclipsed by Campbell and Segrave, who



LAT

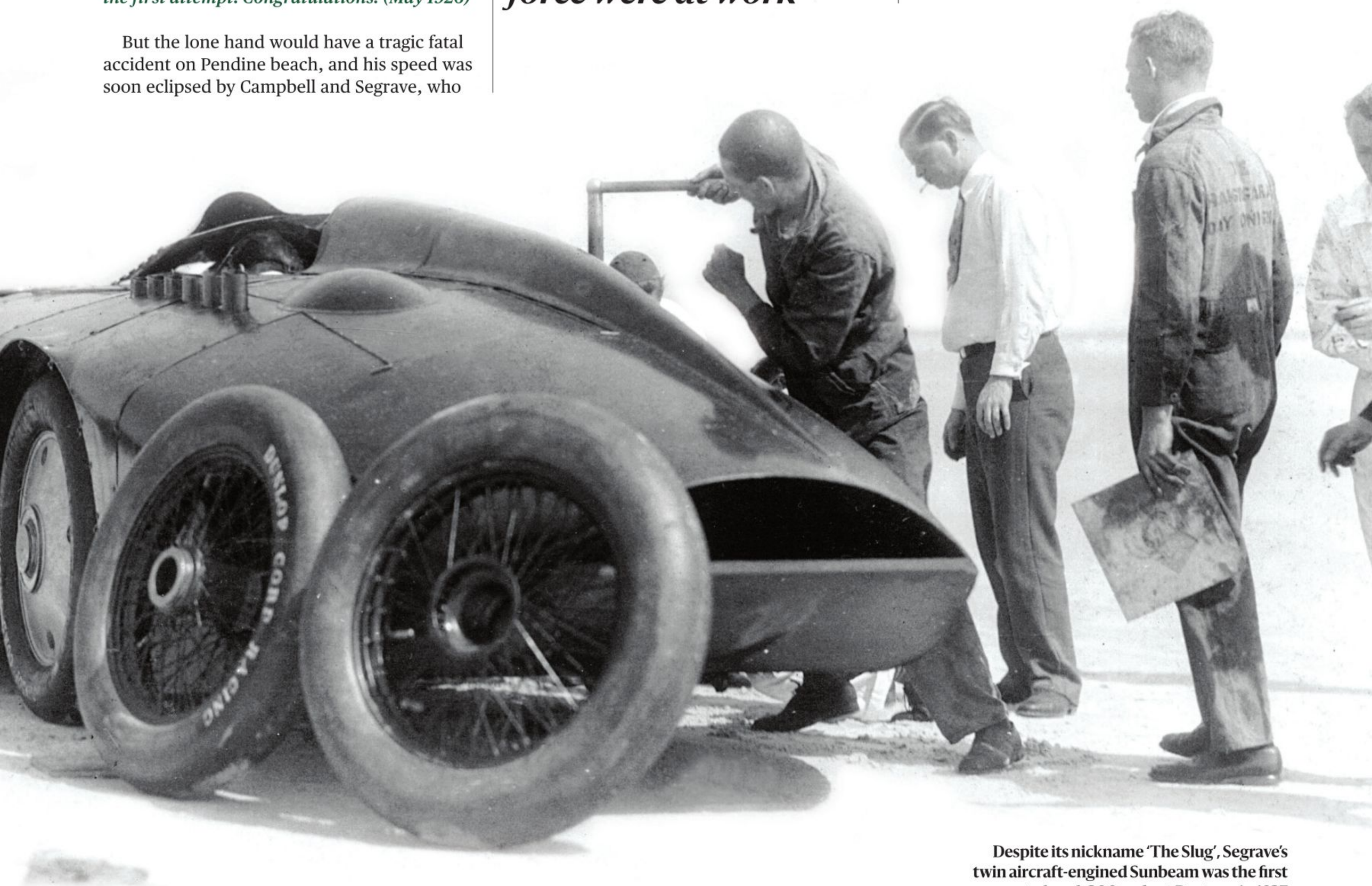
"One has only to let the car go on a stretch of good sand to feel as if some supernatural force were at work"

in ever-advancing Bluebirds and Sunbeams traded the record over the Daytona sands. And while there was never a land speed record trophy (because until 1964 there was no official record), Britain could still award its own prize:

We wish to tender our heartiest congratulations to Sir Henry Segrave on his being knighted and on his marvellous performance in raising the world motor speed record to the incredible figure of 231.36 miles per hour. Our readers, we are sure, are proud of the fact that the wonder car with which this record was achieved was 100 per cent British. (May 1929)

With this extra temptation to drive him, Malcolm Campbell commissioned a new supercharged, be-finned Bluebird, with the patriotic support of *Motor Sport*:

The attempt will be all the more important as the Americans are extremely keen on securing the world's record, for which purpose at least three special cars are new now being prepared. (November 1930)



Despite its nickname 'The Slug', Segrave's twin aircraft-engined Sunbeam was the first car to break 200mph, at Daytona in 1927

"These cars are attacking a mythical record which does not exist in any record books, but merely in the popular press"

John Cobb's sleek 4WD Railton Special and Eyston's massive 7-ton Thunderbolt, right, traded records above 350mph in 1938-39. Post-war, Cobb pushed on to 394.19mph

GETTY

On the other hand, in 1931 a reader wrote:

It has struck me that this country is wasting a lot of very good money on the land speed record. While agreeing that it is important for Britain to retain this record, I see no object in building two cars costing in the neighbourhood of £10,000 each to attack a record already held by a British car and driver. (January 1930)

Nevertheless, by November 31 Malcolm Campbell had broken 246mph and been knighted in his turn, *Motor Sport* congratulating him on:

The very real service he has rendered to England [after] the land speed record was once more raised further from possible attacks by other countries, with the amazing speed of 246.08mph. Meanwhile, things augur well for the future in regard to our high-speed records and reputation in those other elements – the water and the air. 'Miss England II' and Kaye Don are ready, and when the Schneider Contest is held, six months from now, we shall be there. With confidence, therefore, we can hope to show the world once again that for all the wailings of our tame pessimists, we are still the swiftest country in the world:

Indeed, Britain had just won aviation's Schneider Trophy too, and *Motor Sport* said:

This country now stands as the unchallenged producer of the world's swiftest-moving aircraft. This is a very pleasant thought. (October 1931)

Though the land record was seen as a contest of individuals, not marques, *Motor Sport* was quick to defend Kaye Don after the Sunbeam Silver Bullet had in 1930 lamentably failed its target speeds at Daytona:

As soon as it was found that the 'Silver Bullet' was not fulfilling the claims made for it, everyone started to shift the blame where it was in no way due. In ordinary parlance Kaye Don was accused by many of having contracted 'cold feet'. Such a thing only goes to show the colossal ignorance of motor racing, of a stupid and therefore noisy, section of the public. (May 1930)


MOTOR SPORT

SIR MALCOLM CAMPBELL'S GREAT ACHIEVEMENT.

272

SIR MALCOLM CAMPBELL'S NEW RECORD

By 1935 as the duelling ground shifted to the salt flats of Bonneville records of all types began to fall to the home team:

The series of records set up by John Cobb, T E Rose-Richards and C P Dodson on the Bonneville Salt Beds brings to a fitting close this magnificent effort of British drivers of an all-British car. This achievement together with the records of Sir Malcolm Campbell and [Australian] Wizard Smith's record of 164.08mph for 10 miles means that all world records, except for the short-distance standing-start ones, are held by citizens of the Empire. (August 1935)

MS was happy to report on rivals aiming to wrest this land-based blue riband, such as Ab Jenkins's Mormon Meteor, but clearly felt out of the loop as John Cobb prepared the streamlined Railton Special:

Never before has anyone kept so stupendous a task so quiet. The daily press news hawks only managed to get pictures of the partially completed monster as George Eyston sailed for America. Eyston aims to raise the record to about 350mph and... the new car has been given two engines of the make... which is accepted as best for our control of the sky – the Rolls-Royce. (September 1937)

However, it was George Eyston's turn next, as the eight-wheeled Thunderbolt achieved 312mph in 1937, and *Motor Sport* attended a dinner at the Savoy in his honour:

Since his return in triumph from the USA... a whirl of social activity has occupied the time of the fastest man on earth. George has certainly shown himself fully competent in this side of the record breaker's activities, which in modern times has become scarcely less important than skill at the wheel. (February 1938)

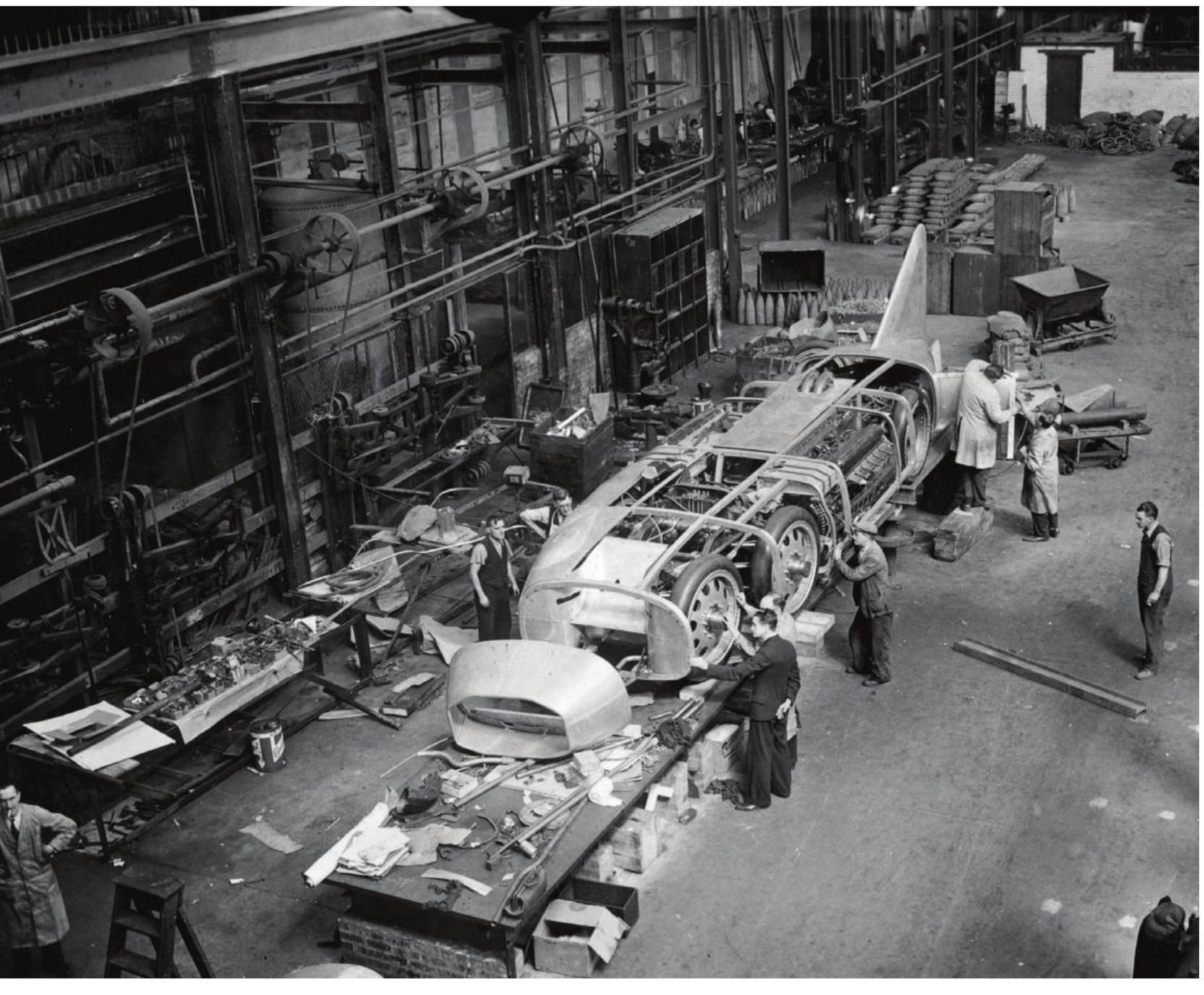
Clearly the need for media presentation skills is no new thing... In September 1938 the UK, and *MS*, basked in speed glory:

Seldom in the history of the land speed record has so exciting a duel been waged as that which took place in Utah last month between Capt G E T Eyston and J R Cobb. Apart from the honour of holding the record itself – or rather, the record for the mile or kilometre, whichever happened to be the faster – there were two landmarks to be reached, 350mph and six miles a minute, or 360mph.

Whereas George Eyston secured the major honour of bringing back to England the record, now standing at 357.5mph for the flying mile, John Cobb's was the distinction of being the first man to reach 350mph on land.

When Sir Malcolm Campbell raised the record to 300mph, he announced he would make no further attempts unless the land speed record was threatened by a foreign driver. Eyston and Cobb have rendered this possibility sufficiently remote, and Sir Malcolm has been pursuing his endeavours to make the water speed record equally safe.

Just as interest in the land speed record really became general when Segrave first


GETTY

attained his epic 200mph, so it was the same driver who focused attention on water speed by his duel with Gar Wood, in which, at the very moment of his tragic accident at Lake Windermere in 1930, he emerged victorious.

This record stood until Sir Malcolm Campbell entered the lists, and last year recaptured the honour for Great Britain with a speed of 129.5mph. Thus for a brief period he held the fastest speeds ever recorded both on land and water, a joint distinction which he shares only with Sir Henry Segrave. (October 1938)

It was Cobb who retook the land record after the war, in the same Railton, but attitudes were changing. After weary years of destruction and deprivation, Britain's expectations of superiority had waned, and speed records seemed indulgent. Even the Campbell name no longer sparkled and by the 1960s the press, barring *Motor Sport*, openly jeered at Donald Campbell's struggles with his turbine-powered four-wheel-drive Bluebird. Worse, an argument raged over whether a jet car record counted over a wheel-driven speed, with Bill Boddy taking the conventional view:

Voice and Vision Ltd, PR Consultants, claimed in a hand-out that the American Craig Breedlove holds the world land speed record and stated that "the previous record belonged to John Cobb".

No, Sir! Breedlove used a three-wheeled jet-propelled vehicle, timed at 407.45mph. The rules governing motor-car speed records insist on at least four wheels, a reverse gear and drive taken through the wheels. So, the late John Cobb and the Railton Mobil Special still hold the motor car 'land speed record' with a speed of 394.2mph. We ask Voice and Vision Ltd to give Britain the credit due to her; in fact, to eat their words. If they like to give Breedlove the 'fastest jet-propelled land projectile' accolade, that's another matter... (November 1963)

Typically, though, Denis Jenkinson differed, even over Donald Campbell's latest record:

These cars are attacking a mythical 'land speed record' which does not exist in any record books, but merely in the minds of the popular press and the lay public. A sub-division of Class A for vehicles propelled by turbines was created so that Donald Campbell's abortive efforts with Bluebird would not be meaningless. When Campbell did 403mph he set up a new record in this Class A – Turbine category, and Cobb's record remained in the book under Class A. (December 1964)

In any case, he continued, those were now irrelevant:

Recently there was a spate of high-speed runs that made Cobb and Campbell look like go-kart drivers, for the Arfons brothers each fielded a jet-propelled four-wheeler and Breedlove was out again with his three-wheeler and these three jet engines on wheels really settled all the arguments about going fast on land, for they took the fastest recorded speed up in leaps and bounds to well over 500mph. (December 1964)

A year later DSJ somewhat tempered his admiration of the US efforts:

The only disappointment in all this record breaking is the fact that all the activity was American inspired, built and driven. At one time the British were assumed to be the holders of land speed records and the leaders in this sphere, but those days seem to have passed. (December 1965)



Richard Noble did not agree, and in the 1970s set out on a new era of British speed. *Motor Sport* had first-hand reports on his efforts from David Tremayne, at first an observer and later part of the team:

Nine years of endeavour, frustration, patience and heartbreak finally ended for Richard Noble on

"And the future? I hope challengers will come as they have in the past, and we don't have to wait 14 years"

Tuesday, October 4 – when he piloted the 34,000hp jetcar Thrust 2 to a new mile land speed record of 633.468mph. For Noble, the latest in a highly distinguished line of British speed kings, the success was the culmination of a dream that had begun as long ago as 1952 when as a six-year-old he watched John Cobb's Loch Ness preparations for a water speed record attempt in the jetboat Crusader. (November 1983)

Despite a recurrence of the 1930s argument over the worth of beating one's own record, Noble then got himself and two Rolls-Royce Spey jets fired up to break the sound barrier on land, pilot Andy Green achieving that astonishing feat in late 1997 in ThrustSSC. We gave Noble the pages to report on his team's new record, and it was now clear that finding funds was almost a bigger hurdle that the engineering challenge. Luckily rivalry from the US was a useful spur after Craig Breedlove, the first man over 400, 500 and 600mph, announced a supersonic attempt:

With Breedlove committed to targeting Mach 1, this opened the doors for the greatest motor race of all time... surely we could find far-sighted sponsors.

Now to Wednesday, October 15. Run 65: by 550mph the car was 60ft out of line but Andy corrected it. As the car entered the measured mile it was an awe-inspiring sight, accelerating faster than you could believe in total silence. At the Press Pen there were no supersonic bangs but on the hills sharp cracks were heard and, in Gerlach, houses were rocked and the post-mistress nearly had a heart attack. Again the heart-stopping moment as it raced across the mile in silence. Mile 766.609mph; Mach 1.020. World Record: Mile 763.035mph; Kilo 760.343mph.

It was all over. Instinctively we decided not to run again. The barrier was broken, the tension gone, the project complete.

And the future? ThrustSSC has raised the world land speed record by 129.56mph and is the first car officially to go supersonic. Future challengers have to reach 770mph and that means safe supersonic performance before considering an attempt on the LSR. I hope challengers will come as they have in the past and we don't have to wait 14 years. As for the ThrustSSC project, we now have to fight to clear substantial debts before it can be finally laid to rest. (December 1997)

ThrustSSC was finally laid to rest, but not Noble's ambitions. With no challengers in sight, he selected a new headline figure of 1000mph and Bloodhound SSC was born. In the world of the internet its open-source educational approach seemed a new and productive angle, but the staggering costs raced ahead of it like its supersonic shock waves, and it seems we may have just heard the final boom. M

These reports and thousands of others are available via the archive section of our website, available free to subscribers.



ThrustSSC and its pilot Andy Green set a near-unsurpassable record of 763mph in October 1997, breaking the sound barrier

The high numbers

Significant dates in land speed record history

FEBRUARY 4, 1927
Last record set on UK soil, Sir Malcolm Campbell, Bluebird, 174mph, Pendine Sands

MARCH 3, 1927
First, and to date only, fatal accident to befall an outright land speed record holder. J G Parry-Thomas, Babs, Pendine Sands

MARCH 29, 1927
First LSR above 200mph: Sir Henry Segrave, 1000hp Sunbeam 'Slug', 203mph, Daytona Beach

SEPTEMBER 3, 1935
First LSR above 300mph: Sir Malcolm Campbell, Bluebird, 301mph, Bonneville

SEPTEMBER 16, 1947
Last LSR set by a wheel-driven piston-engined car: John Cobb, Railton Mobil Special, 394mph, Bonneville

JULY 17, 1964
First LSR set above 400mph: Donald Campbell, Bluebird-Proteus CN7, 403mph, Lake Eyre

OCTOBER 5, 1964 - NOVEMBER 15, 1965
Between them Craig Breedlove and Art Arfons break the LSR seven times, raising the LSR almost 200mph above Campbell's mark in little more than a year. Left with Breedlove at 601mph

OCTOBER 4, 1983
Richard Noble returns LSR to the UK, the first Briton to raise the record in 36 years. Thrust 2, 633mph, Black Rock Desert

OCTOBER 15, 1997
LSR raised to 763mph, sound barrier broken: Andy Green, ThrustSSC, Black Rock Desert. Current record

GETTY

The money has run out and the dream of reaching 1000mph is dead. So what does this mean for the future of land speed records?

WRITER Andrew Frankel

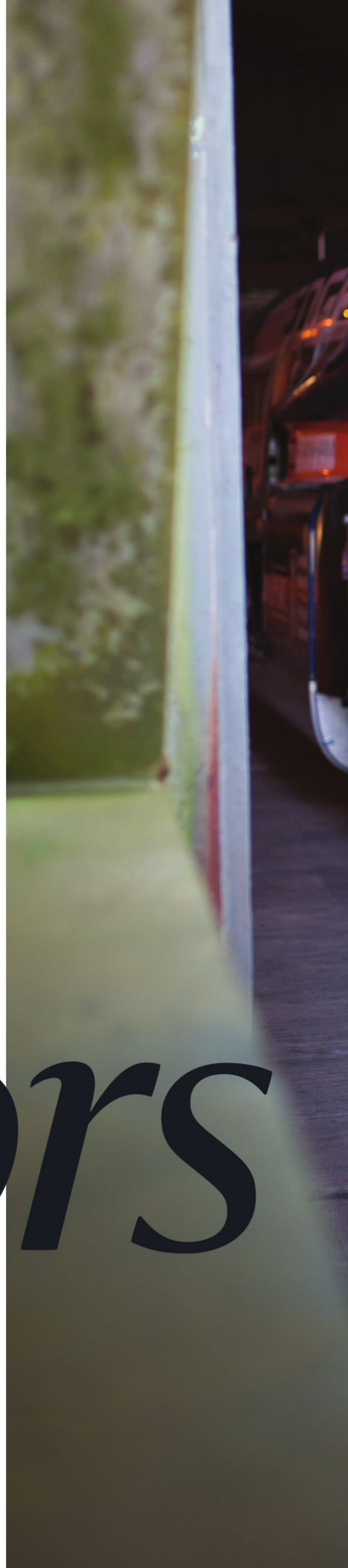
Are all doors closed?

It was little more than a year ago when it all appeared to come good. After 11 years of slog, sparked by a conversation in a Whitehall pub between two of the world's three surviving land speed record breakers, Bloodhound SSC was finally ready to run.

And run it did. Existing record holder wing-commander Andy Green lined up the superbly ugly craft at one end of the runway at Newquay Airport, turned on the reheat of Bloodhound's Eurofighter EJ200 jet engine and released the brakes. Eight seconds later the AP Racing pads bit into their carbon ceramic discs once more. Eight seconds during which Bloodhound SSC reached more than 200mph. "It's been an extraordinarily tough journey," team leader and former LSR holder Richard Noble admitted about an hour later, "and we've been itching to show the world something of what we can do, to make this project real in their mind. Today we achieved that."

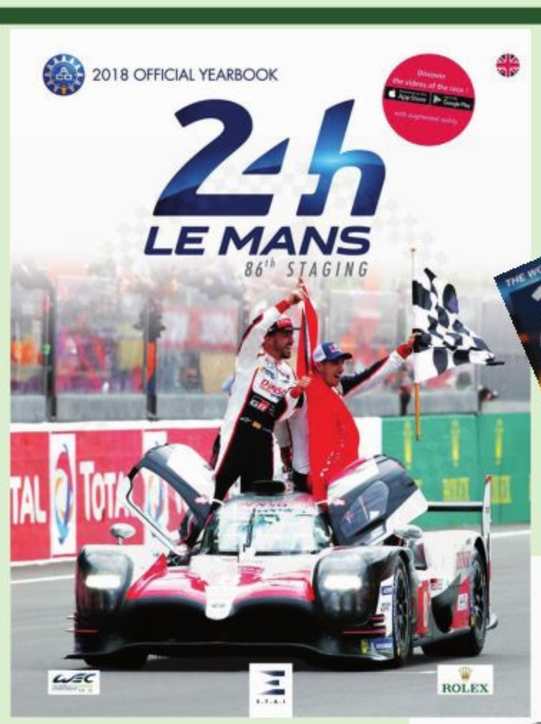
Fast forward to today and Bloodhound SSC is in administration, with at least £30 million spent and £25 million still required to realise messrs Green and Noble's dream of a quadruple-digit land speed record. There is a chance that a rich benefactor will ride to the rescue. If not, the future for the world's most ambitious LSR project looks grim indeed.

When he alerted me to Bloodhound's impending descent into insolvency, I asked communications director Richard Knight about Noble and Green's state of mind when faced with the possible collapse of their long-standing dream. "Andy's fine," he said, "he's a very positive person." And Noble? "Oh, you know Richard. He'll see it as an opportunity. He sees everything as an



closed for Bloodhound?

Toyota Wins Le Mans!







Relive Toyota's historic Le Mans victory with the official ACO Annual and DVD and Spark's fine 1:43 resin miniature (coming soon).

Book £44.95, DVD £13.45 & Model £48.55*

*RRPs, £49.95, £14.95 & £53.95. Quote voucher code **MSLM18** when ordering.

To view these and many more Le Mans related items visit our Banbury show-room which is open one Saturday per month 12 noon-5pm
Next open Saturdays - December 1st, January 5th & February 2nd

Grand Prix Models
4 Thorpe Close, Thorpe Way
Banbury, Oxfordshire, OX16 4SW, UK
Tel: 01295 278070
mail@grandprixmodels.com

www.grandprixmodels.com

OROURKE
SUPPLIES

Developed from experience, our range of care products will enhance your car's interior. Available now.

orourkesupplies.com



HORTONS
BOOKS



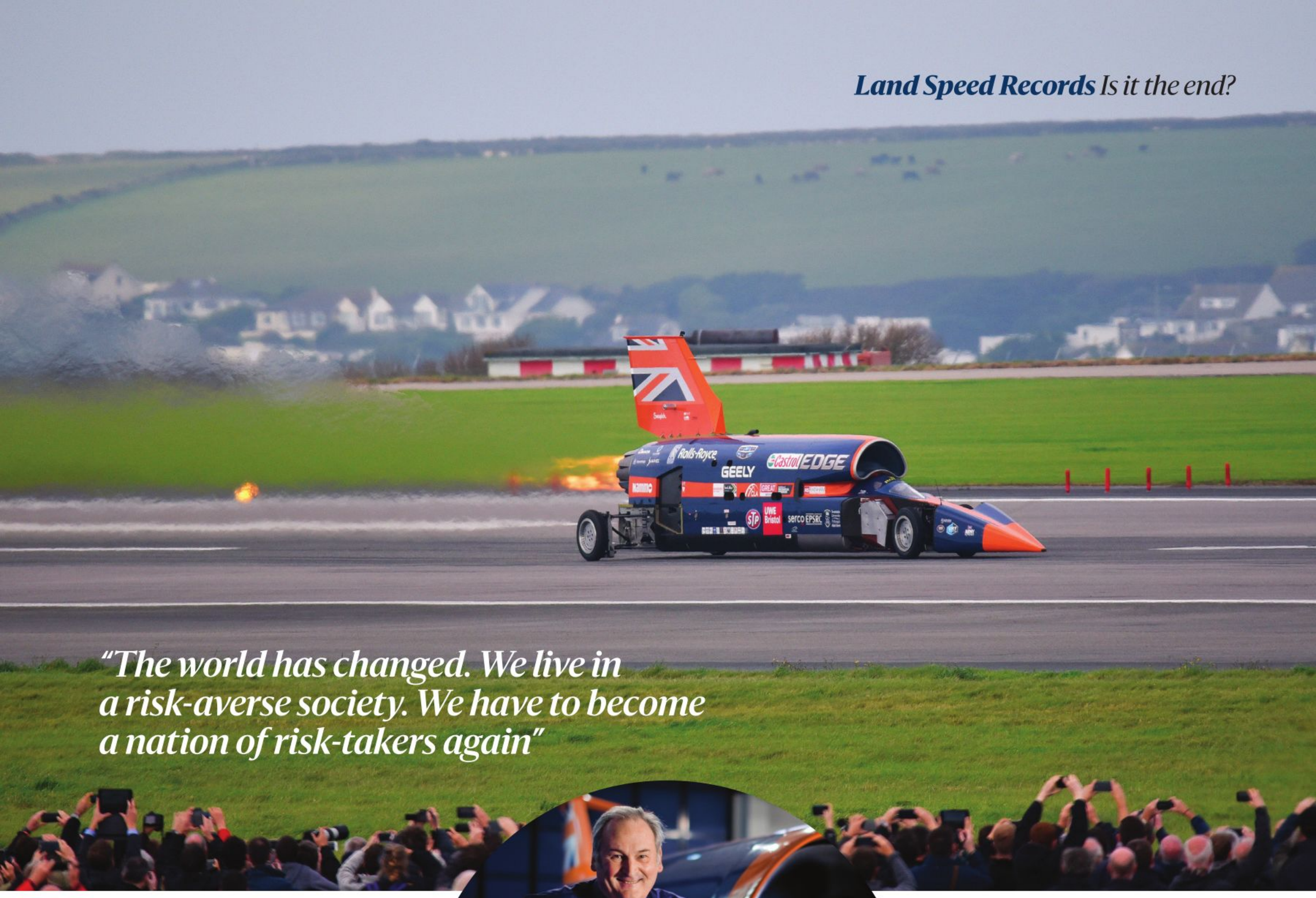
Hortons Books are the leading suppliers of new and out-of-print motoring literature

We are exhibiting at the following events throughout the year:

Autosport International: The Racing Car Show, UK
Retromobile: Paris, France
Race Retro: International Historic Motorsport Show, UK
Amelia Island Concours D'Elegance: USA
Goodwood Members' Meeting: UK
F1 British Grand Prix: UK
Automobilia Monterey: USA
Pebble Beach RetroAuto: USA
Pebble Beach Concours D'Elegance: USA
Goodwood Revival: UK

email: contact@hortonsbooks.co.uk **tel:** +44 (0) 1672 514 777

www.hortonsbooks.co.uk

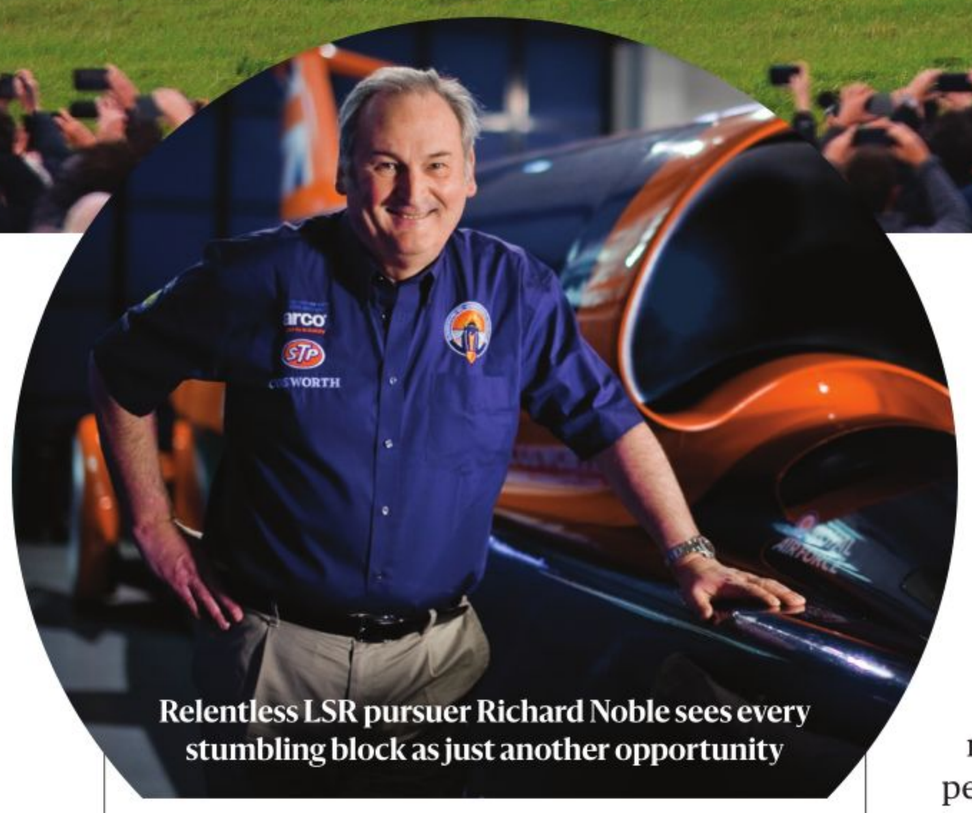


"The world has changed. We live in a risk-averse society. We have to become a nation of risk-takers again"

opportunity..." So at least the masterminds believe there remains a chance. Knight also told me the team believes that putting the project into administration will at least attract the publicity required to flush out the requisite investment, if indeed it's there to be flushed out at all.

SO WHAT'S GONE WRONG? "THE world has changed," Noble says. "We live in a completely risk-averse society. We have to become a nation of risk-takers again and whatever you think about Brexit, I think that will force that upon us." But there's more to it than that. David Tremayne, one of the world's foremost speed record chroniclers, suggests the fact that "we live in an increasingly virtual world" has had a bearing. "No one gives a toss about reality anymore," he says.

But maybe there's something else, too. Is it, for instance, simply a technological era through which we have now passed? If you'd suggested to Eugene Cernan as he lifted off the lunar surface on December 14, 1972 that 46 years later no one would have bothered to return, I expect he'd have laughed in your face. Almost as much as might Captain Brian Trubshaw had you told him after he first flew Concorde in 1969 that almost half a century later there would not have been a commercial supersonic flight for 15 years.



Relentless LSR pursuer Richard Noble sees every stumbling block as just another opportunity

I also suspect that Bloodhound's journey to a new land speed record would have been both shorter and easier if the team were not trying to break a record it already held. But the truth is that, Green and Noble aside, the last time anyone else set a new land speed record was Gary Gabelich when he did 622mph in the unsurpassably beautiful Blue Flame rocket car at Bonneville in 1970, some 48 years ago.

It took Noble six years and three attempts to add 11mph to that speed in 1983 with Thrust 2, and it is in that context that the achievement of Green and Thrust SSC in going 130mph faster in 1997 has to be seen. ThrustSSC was the greatest triumph in land speed record history, and by a simply ridiculous margin. And now they are trying to go 237mph faster still, the increment alone more than the speed reached by Sir Henry Segrave's Golden Arrow when he set a new land speed record on Daytona Beach in March 1929, almost 90 years ago.

But in truth ThrustSSC had something Bloodhound does not, a target that means something to everyone: the sound barrier. For more than 70 years, the sound barrier has had mystical qualities. To this day the only people who have ventured to its far side have been fighter pilots, astronauts and a clique of champagne-quaffing millionaires and celebrities on a clutch of long-defunct Anglo-French and Russian airliners. But restrict your trawl merely to those who have done so while still in physical contact with the planet and the search engine produces just one name: Andy Green.

AS EARLY AS 1942 FIGHTER PILOTS OF Mustangs and Spitfires were making unverifiable and, it seems, implausible claims to have broken the sound barrier in a dive. As aircraft fluttered, stalled and broke up around their hapless pilots as Mach 1 approached (including Geoffrey de Havilland in the beautiful, entirely lethal De Havilland Swallow, all three of which were lost in fatal accidents), the belief grew that the barrier could not be breached. As is well known, Charles Yeager put paid to that theory in 1947 when he reached

Mach 1.06 in the Bell X1 (albeit with the benefit of British design technology in an alleged information exchange that turned out to be a one-way street), but for the next half century people wondered if what Yeager had done in the sky could ever be repeated on the ground. Green and ThrustSSC provided the answer.

The sadness is that, without that unique point of focus and with the record already theirs, selling the dream of the Bloodhound team was always going to be harder. Even that nice round 1000mph only resonates in those countries that use miles as a measure, namely Britain, the United States, their respective overseas dependencies and absolutely nowhere else.

As a counter to this, the Bloodhound team designed a car so advanced, powerful and so well tested it stands as a kind of statistician's fantasy in automotive form. I was given a guided tour of the car by its engineering director Mark Chapman shortly before it left for Newquay and what follows are just a few of the weapons-grade facts it revealed.

The car has 135,000bhp, 25,000bhp more than the QE2 cruise ship. Its wheel rims would be subjected to 55,000*g* at 1000mph, while spinning at 10,200rpm. It will take 55sec to do 0-1000mph and 50 seconds to do 1000-0mph, and the CO_2 output of the entire project is equivalent to that of 4.1 lactating cows.

To make sure Green would be safe from avian interference, his protective acrylic canopy was tested by having a one-kilogramme bird fired at it at 900mph, while the armour around his cockpit needed to survive an impact from a detached piece of wheel rim equivalent to being hit by a cricket ball bowled at 2000mph. "The car is not so much credible," says Tremayne, "but incredible. By a mile it's the best and safest land speed record car ever built."

Whether Bloodhound SSC is rescued or not, the long-term future for raising the land speed record does not look good. If Bloodhound does 1000mph, that will be 378mph faster than any other team has gone, at least in officially recognised running, punting the record so far down the track it's hard to see anyone reaching it. If it fails with £30 million already spent and after 12 years of trying, there will be few more powerful deterrents to others who try and follow in its footsteps.



But others there are: the 68-year-old Australian Rosco McGlashan has been trying to break the land speed record since 1995. His latest car, Aussie Invader 5R, has been 15 years in development but is now built and due for public unveiling in the New Year, prior to a 1000mph attempt at an unspecified location in 2020. The rival North American Eagle project is even older, starting in 1998 with a plan to put wheels on a wrecked Lockheed F-104 Starfighter, but is now reeling from the death in September of its founder Ed Shadle. Craig Breedlove, America's greatest land speed record breaker, is also rumoured to be behind a new LSR plan, although there are as yet no details.

TREMAYNE THINKS THE FUTURE lies in the breaking of class records in general and, in particular, the wheel-driven record which at least has greater relevance to normal cars: indeed there was a time when only wheel-driven records were recognised, which is how Donald Campbell got to be the land speed record holder in 1964 at 403mph without ever being the fastest man on earth: Breedlove's jet-powered Spirit of America had done 407mph the year before.

The current wheel-driven record stands at 449mph, set by Danny Thompson at Bonneville last summer. If the surname is familiar, Danny is the son of Mickey Thompson, who in 1960 became the first person to drive through the measured mile at more than 400mph, although his record was never ratified as his Challenger car broke down on the return leg. Thompson built Challenger 2 in 1968 but was rained off. Plans to resurrect the car were aborted when Thompson senior and his wife Trudy were murdered in 1988, but in 2010 Danny removed the car from storage and restored and refitted it, breaking the record this August in the now 50-year-old machine. In the process he became the first person to drive at over 500mph – albeit briefly – in a piston-engined car. And if a car that old can go that fast, perhaps a new wheel-driven design could be persuaded to go a whole lot faster still.

But let us not forget that, for now at least, the Bloodhound dream is alive and it remains to be seen what results from the slew of publicity that has followed it being put into administration. Certainly, for it to have come so far and not to run in anger would be a terrible shame. As Tremayne succinctly puts it: "They've actually gone and built the bloody mountain. All they've got to do now is climb it." M



On hold: Bloodhound is built and pilot Andy Green (above) stands ready – barring £25m


The Original Irvin®
Photo with kind permission of the BBMF
Aviation Leathercraft
www.flying-jacket.com
+44 (0)1264 772811


Moto-Lita®
"A Fine Example of British Craftsmanship"
Sir Stirling Moss OBE
+44 (0)1264 772811
www.moto-lita.co.uk


H&H Classics
AND
H&H Classics
01428 607899
www.handh.co.uk
Thinking of selling your Classic Car?
H&H Classics are Europe's largest dedicated auction house of Classic Cars & Motorcycles.
We realise the auction process isn't for everyone, and to those clients we offer our Private Sales service, complete with dedicated showroom.
Competitive rates from one of the industry's most trusted service providers.
25 years of continuous trading history, we take pride in our integrity and heritage.
Database of over 50,000 classic car and motorcycle collectors and enthusiasts.
+44 (0)1428 607899
private.sales@handh.co.uk
www.HandH.co.uk
25 Years
Visit our Private Sales Showroom
La Source, Churt Road, Hindhead, Surrey GU26 6NL

A DIARY O

F DIGNITY

Each November, Anglesey Circuit plays host to a special event, where motor sport pays its respects to those who made the ultimate sacrifice

If you were at one of Britain's more remote circuits last month you would have seen a remarkable thing: a group of drivers and their teams switching off their engines for a blustery Service of Remembrance at 11am on Sunday, November 4.

It is a unique event and is orchestrated by Mission Motorsport. The organisation, *Motor Sport*'s charity partner for 2018, aims to help rehabilitate ex-service men and women through participation in racing. Since 2014, using its contacts with the British automotive sector, it has found jobs for 1700 veterans. And these are jobs that provide not just an income but also dignity and self-respect and, crucially, a launch pad back into the civilian world.

The annual Race of Remembrance is the charity's flagship event. But what does it take to put it on and how do you manage to get a rag-tag group of teams and cars to turn up on a shoestring?

Here James Cameron, Mission Motorsport's founder, explains all.

➤ December 2017

As soon the last Race of Remembrance – the fourth we have done – finished the whole team started planning for the next one. We ask participants to fill in a survey and assess the results. There's some lovely feedback... but we need to do something about the food.

Another problem: the Welsh male voice choir has disbanded. They supported our service on Remembrance Sunday in front of hundreds of people in the Anglesey pitlane, so hopefully we'll find another choir to perform at the 2018 service.

➤ January 2018

There's no 'off-season' for us.

Invictus Games Racing – a team that competes in the British GT Championship using two Jaguar F-type SVRs in GT4 spec – is launched. The project has been going on for a few months, as Mission Motorsport held trials to identify and train four drivers from the Forces who would gain the most from the Invictus Games team.

The Jaguar is unveiled at the Autosport International Show in Birmingham. We also have our very own F-type: the 'Poppy Car', which you may have seen at various events across the country and as the safety car for the 2017 Race.

The Poppy Car took centre stage at the show, and it was part of Jaguar Land Rover's fleet. More on why it's so special later.

There's only one problem with the Poppy Car. Jaguar wants it back, so it's our job to convince them that their generous offer of the car will pay off if it's displayed at the show in Birmingham's sprawling NEC. We want to hang on to this emotive car.

➤ February 2018

The Race is actually delivered by a volunteer committee which works year-round and the staff take care of the logistics, things like the marquee, and taking care of the beneficiaries.

Nicole Cummings is one such volunteer. She's the other half of the BARC's competitions administrator David Wheadon. From February she's sat there every evening with her young family. As our entries officer she's dogged in her pursuit of the teams, chasing details, securing entry fees, and herding cats. If RoR is to be a success, it is down to the hard work of Nicole and the committee members.

➤ March 2018

We celebrate our sixth anniversary this month at an event at Goodwood.

Beneficiaries are coming from across the world to the event in March – but we have a problem. It is snowing heavily, which means some of the cars can't run. François Perrodo, a Le Mans 24 Hours class-winner, is here and says: "We can't have this, let's get our cars on the skidpan for the beneficiaries". Things like Lamborghini Gallardos, McLaren F1s and a Carrera GT duly celebrate our sixth anniversary thanks to him. Excellent result!

At the event, we announce the 2018 Race of Remembrance. That's when entries open, around the fuss that's made about our anniversary. At that point, you get a lot of interest – and very little in the way of money, which is always a challenge. Nicole's work is cut out for her now.

And more good news: the Poppy Car's lifespan has been increased and it stays with us.

➤ April 2018

We secure accommodation at RAF Valley, the training station located on Anglesey, which will help us take care of more than 80 people including beneficiaries, staff and volunteers. Fifty bedspaces at service rates at RAF Valley helps shoulder a huge burden for the charity.

➤ May 2018

Another issue sorted: the Military Wives' Choir will attend the 2018 Remembrance Service to replace the Welsh Male Voice Choir.

The Remembrance Service is significant. Suicide statistics among Armed Forces types are painfully high at this time of year and we're desperately trying to understand why. In the years that followed the Falklands conflict, the same time period also saw a rise.

We're trying to work out the reasons and how to help this community.

What strikes me about Race of Remembrance is when you see the pictures of the service of Remembrance. For many it is the first service they attend since they saw the repatriation of one of their mates in the back of a C-130 Hercules in a coffin with a flag draped over it.

Every year you can hear a pin drop.

➤ June 2018

Securing trophies is a year-round project, and we've always innovated. Some of them have been more popular than others. By far the most

Mission Motorsport helps the rehabilitation of ex-service personnel, and also assisted Billy Monger with his recovery, left. James Cameron the charity's founder, below







popular, however, were the 18-pounder shells recovered from the Somme that resonate massively with people. They're hard to get hold of, this year being the centenary of the Great War.

In 2018, each shell used as a trophy is a piece of 'trench art' that has been decorated by a soldier during wartime.

The winner of the 'Heroes Trophy' this year receives a shell recovered from the wreckage of the SS Luis, a British steamer holding flour, oats, timber... and those 18-pounder shells, which was sunk by a U Boat in 1918.

➤ July 2018

Perenco is now on board as a sponsor. This oil infrastructure company is chaired by François Perrodo, who helped out massively in March at the Anniversary.

He's a mega bloke. He's a racer, and we were just excited to have him there... but to have his sponsorship is invaluable.

There are huge costs to running the Race. The marquee itself is a huge chunk of change. And to be honest the fundraising potential isn't big. Collecting change outside a supermarket would probably net us more money than the Race of Remembrance.

What really helps is the work of the major service charities that support us.

Help for Heroes has helped since the outset; the Royal British Legion has helped with our employment programmes; Walking With The Wounded sponsors individuals through educational training; City & Guilds delivers up to Level 3 diplomas in light vehicle engineering for people to access jobs; and Lantra helps with off-road certifications that are the standard for companies that use off-road vehicles, and hard evidence on someone's CV. There are so many more, which you can find on our website.

➤ August 2018

The Cameron family holiday gets diverted to the United States.

A long-time friend of ours is Grier Martin, a member of the House of Representatives in North Carolina who also served in Iraq, where we met in 2006, and he heard about Mission Motorsport on Radio Le Mans. He donated, I spotted it, contacted him and we're now very good friends.

Grier has been instrumental in growing our transatlantic connections. We did an exchange programme in 2013, which is natural as we train alongside our allies in the US and fight alongside them too. So it's only right that we're together in recovery.

A relationship with Canadian charity Operation Motorsport sprang up in 2017 and, through them, so did a partnership with Mazdaspeed in the United States.

Mazdaspeed helped Staff Sergeant Liam Dwyer return to motor sport after major leg surgery - involving the insertion of a titanium rod into the bone of his stump to attach to a prosthetic leg - sidelined him briefly in 2017.

It was mega-successful as an initiative, and even though his MX-5 didn't make it to the end of his race at the Virginia International Raceway earlier this year, it helped him back into motor sport.

How do we grow the Race of Remembrance? We can't move it to a month like July - Anglesey is full to capacity - and we can't make the cars any faster as it has to be a safe event. The answer is to internationalise it and increase its profile overseas.

"For many it's the first service they attend since they saw the repatriation of one of their mates"

John Doonan, Mazda's North American director of motor sport, ensured that he would make it to the 2018 Race of Remembrance. That's something I've aspired to do, get someone from the US here to race.

And Staff Sgt Dwyer is going to race in the same Global MX-5 Cup Car - a real weapon.

➤ September 2018

Race of Remembrance in November requires additional infrastructure to support the competitors. A huge marquee (BFOT, for the military) is erected to house relay team cars at one end, and at the other capacity for seating, entertaining and feeding 400+ at the Heroes Dinner. Huge TV screens, staging and a dancefloor - it also serves as shelter and a social hub for the weekend.

Teams qualify on the Friday, and while we run a fantastic supercar event for beneficiaries on the Saturday morning, there is a window of opportunity to do something creative - something memorable before the race starts at 3pm Saturday.

Fundraiser Ben Williams suggests a swim, circuit boss Annette Freeman suggests a run, and for reasons that I'll later regret, the 'Biathlon of Foolishness' is conceived. Starting in the pitlane, competitors run out onto the circuit, around the banking and turn left at Church, down a cliff path to the sea for a swim and some encouragement for press ups in the surf from an over-enthusiastic Royal Marine and Para pair of PTIs [Physical Training Instructors]. Each team is given an entry and they must field a runner or forfeit for £50. Leading from the front secures my entry, and a suitably Victorian swimming costume is procured. I'm pretty certain that other race organisers don't have to do this, but still...

➤ October 2018

Supporter since the very first RoR, Radio Le Mans confirms its attendance, and we explore bandwidth options to help the race reach a wider audience.

Eclectic queue for the skidpan at Goodwood, left. Reclaimed shells from the Somme are reworked for trophies, below. The 'Poppy Car' was used for an extensive tour before the Race of Remembrance, right







And we start planning the Heroes Dinner. Last year, Ben Norfolk - a beneficiary - was presented with a bottle of champagne as it was his last day in service. Instead of taking the bottle, he took the microphone and, in an incredible five minutes, he reduced everybody in the tent to being an emotional wreck. It was extraordinary, not the kind of thing you can plan for, but the kind of thing that can happen.

Catering is sorted, which is a relief. Tickets are sold in advance, and the 300-person capacity sells out in five hours... we really need more tables.

➤ November 2018

Radio Le Mans' coverage is an issue as we need a car to hold the satellite uplink, but there's no press fleet availability. So Land Rover comes to the rescue again, and provides a car for us.

It's a busy time for our Poppy Car, which is on a UK tour to support the Poppy Appeal including a stop in the centre of Birmingham where personnel from Jaguar's Castle Bromwich factory are selling poppies.

It's visited all of the recovery centres across the UK this year, visited the Somme, and even the factory where they make the Remembrance poppies.

The Poppy Car has also been nominated for a special award at the British Sign Awards, which I attend on the Thursday before the Race of Remembrance.

It sports a stunning wrap - applied by our beneficiaries, Lance Corporal Chris Read, Guardsman Chris Walker, Private Dan Elliot and Lance Corporal Francis Stokes - with the words of the poem "*In Flanders Fields*" repeated across the car.

Since completing the wrap last year one of the blokes now happily works for Williams F1, one for Jaguar Land Rover, while one has been hospitalised for pelvic restructuring, and one continues to battle mental health problems. Inadvertently, they represent a typical spread of Mission Motorsport's beneficiaries.

Due to the awards, I don't arrive at the circuit until the Friday morning, which feels very strange. A lot of the things that I used to do myself are delegated, happily to people more competent than I and so all is going smoothly. The 15-member committee and 48 volunteers step up to take care of the beneficiaries from across the UK and the world. We have 18 members in race control, five timekeepers, seven scrutineers, five in recovery and breakdown, 17 in the medical team, 19 paddock marshals and 109 track marshals. The sheer number of people makes for very effective camaraderie.

The weather's apocalyptic on Friday. We got through qualifying that evening, but our huge marquee nearly isn't up to the task of staying on the island. I can see the whites of the marquee bloke's eyes - and have to make the difficult decision at 6pm to evacuate the tent just as the RAF Valley Military Wives' Choir arrives. We open the paddock café temporarily, but using the RAF Valley and Carmarthen Air Ambulance's weather radars, are able to move everyone back into the marquee in time for the Heroes Dinner at 8pm.

Any hangover the following day is banished at the prospect of the Biathlon of Foolishness. Happily, I'm not standing there alone as teams, beneficiaries and mad marshals have entered into the spirit of it and, with safety swimmers in place and an encouraging crowd howling with laughter, we brave the Irish Sea. A Royal Marine amputee beasting large men, in full drag, in the surf will stay with me for a long time. We've raised a load of money, and no-one died. It will be run again next year.

"The racing is as compelling as ever, from C1s to Caterhams battling"

Anglesey in November is always going to entail the full range of weather - but I only care about the window from 1045 - 1115 on Sunday for the Service of Remembrance. In the past we've been incredibly lucky and somehow, again the skies clear and we stand in the sunshine together.

The service is incredibly poignant, regardless of military experience or religion it is hard not to be moved by the gathering of 500-plus in one place - mindful, silent as we mark the Centenary of the War. It is, rightly, the focus of the whole weekend, but ends with a bellowed "Let's go racing!".

The racing is as compelling as ever. From the C1s battling in the closest matched and largest class, to the Caterhams at the front of the field, RoR caters for everyone from novice teams to the two touring car drivers who joined Paul Roddison in his Mk4 MX-5. BARC does an amazing job of managing the event, working fast to permit the 91 Civic, which managed all but the last 20 minutes, to cross the line pushed by the exhausted pit crew bringing home the 'Spirit of the Race'.

Last frantic gasp to compose the prize giving, thank the 196 volunteers, marshals and staff who made the event happen, and finally we can relax. The MM staff are already picking up on themes exposed during the event, nudging, cajoling, encouraging beneficiaries and working to prevent that inevitable post euphoria come-down. RoR is an intense experience, but one that we love.

Only one thing left to do before we leave the circuit, and that's ask Anglesey if we can do it all over again next year.

Mission Motorsport's Jag livery incorporates the words of *In Flanders Fields* as a tribute, left. The Sunday morning Remembrance service is truly poignant, centre. Cars race into dusk, right.







Trustpilot

Regtransfers.co.uk
PERSONAL NUMBER PLATES

01582 967777 8am-10pm

ACA I	I BMC	GMM I	I KGB	LPW I	PCH I	SDR I
I AHH	BRS I	HAB I	KJG I	LRG I	PCJ I	I TEB
AMD I	CDT I	JCG I	I KMW	MEA I	I PFM	TEP I
APJ I	DCH I	JGJ I	KRB I	I MEC	PHR I	TJE I
ARW I	DGF I	I JHR	KRW I	MFF I	PMT I	TJJ I
ATB I	DLB I	JJF I	LAG I	I MKS	RBC I	TJL I
AVS I	DMM I	JKW I	LGS I	MPC I	RGD I	I TJM
BAE I	DVB I	I JLW	I LJH	MWT I	RJP I	TJS I
BGR I	I FAC	JMR I	LLS I	NRM I	I RPH	WCS I
BJT I	GJH I	KCG I	LPS I	PAA I	SAR I	WJP I



THE UK'S LARGEST PRIVATE NUMBER PLATE DEALER

Established 1982 • Over a Million Satisfied Customers
Over 48 Million Numbers Online • Free Celebrity Magazine

Bad boys

drugs, money & racing

A new book by Mitch Bishop and Mark Raffauf outlines IMSA's stellar growth. But, as the authors reveal here, it also had a seamy side

It's no secret racing takes talent and money – lots of it, especially if you want to compete for the top step of the podium. Most of the team owners at the sharp end of the grid in the Camel GT Series made their money by legitimate means. But no history of the series would be complete without telling the stories of the bad boys of IMSA, the few that made their racing money on the wrong side of the law.

The stories about these outlaws were outrageous and at times hard to believe. The tales about their rise to fame and inevitable falls from grace have taken on a life of their own over the years, both tainting the Camel GT Series and giving it the kind of spice that makes for the stuff of legends. "The running joke in the paddock at the time was that IMSA stood for the International Marijuana Smugglers Association," recalled driver Bobby Rahal. The truth was more mundane; the bulk of Camel GT fields were made up of honest businessmen, but the bad apples stood out and attracted all the wrong kind of salacious media coverage.

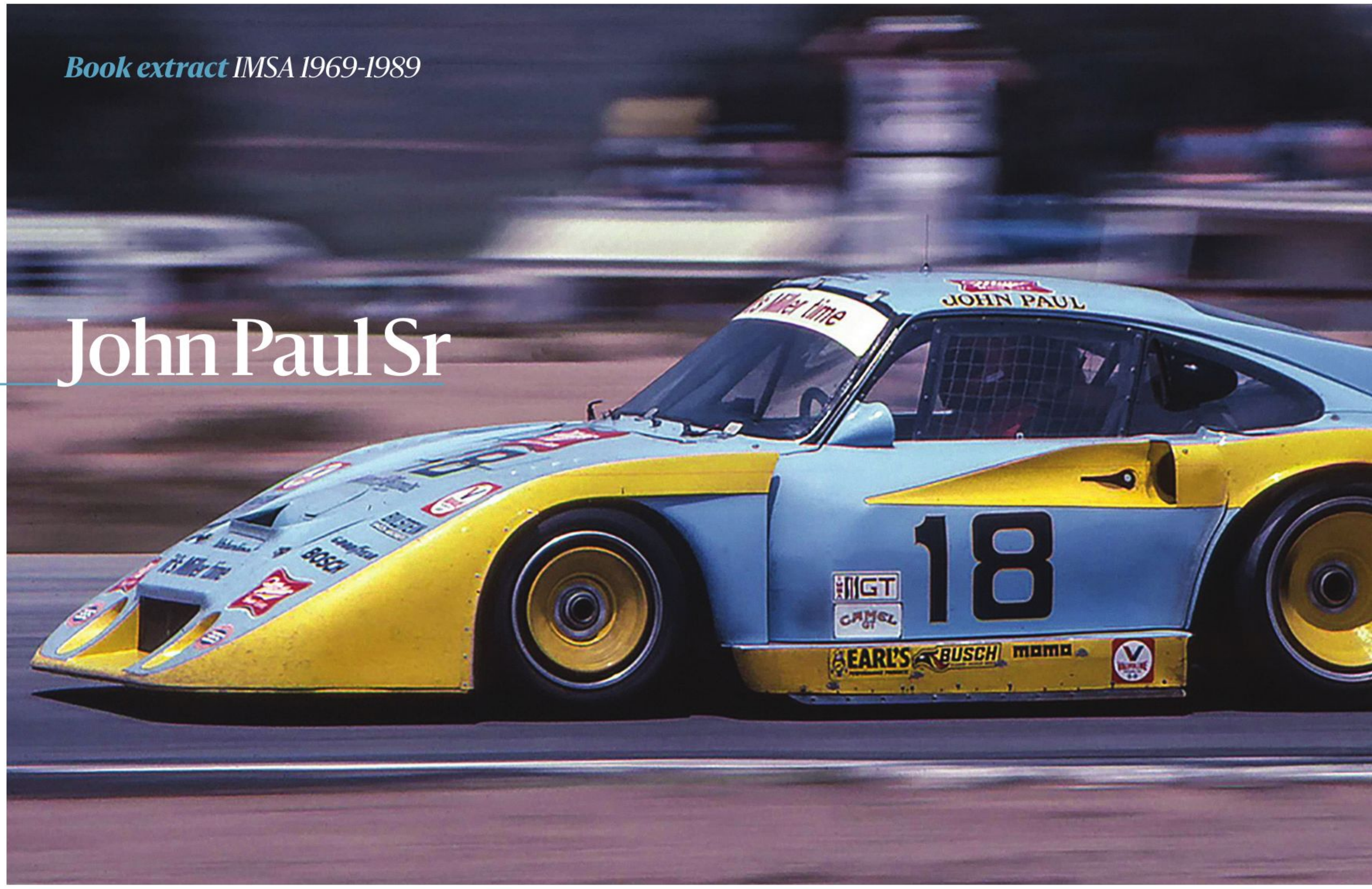




Tough guys: on the grid before the 1982 Camel GT race at Charlotte, the John Pauls, Senior and Junior, were fierce competitors on and off the track

PETER GLOEDE

John Paul Sr



The first of these characters was Hans Johan Paul, who emigrated from the Netherlands to the United States with his parents in 1956. He changed his name to John Paul, married, and in 1960 had a son that he also named John. After graduating from Harvard, he became a successful mutual fund manager and began to amass considerable wealth. John Paul Sr began his racing career with local SCCA events in the 1960s, winning an SCCA Northeast Regional Championship in 1968. Domestic strife derailed his racing career and estranged him from his son for a few years, but he resumed racing in the early 1970s, entering a Corvette in IMSA races.

The elder Paul shared a Porsche Carrera with John O'Steen and Bob Hagestad at the 24 Hours of Daytona in 1977. He would go on to contest the bulk of that season, sometimes in a Carrera, but mostly in a Chevrolet Monza. For the 1978 season, Paul Sr competed in the latest specification AAGT big-block John Greenwood Corvette, ultimately finishing a credible sixth in the points standings.

The next year he upgraded to a Porsche 935 and not only competed in the Camel GT Series, finishing 12th in the points standings, but also won the 1979 SCCA Trans-Am Category II championship in the same car.

It's not clear how John Paul Sr got tangled up in the drug trade, but his legal issues began in January 1979 when he was caught with $10,000 cash and more than 1500 pounds of marijuana in the bayous of Louisiana. Remarkably, he got away with just a fine and three years of probation after pleading guilty to marijuana possession. Not many in the IMSA paddock knew about his brush with the law, but whispers began circulating about the source of the money that supported his increasingly large racing budget. His light blue cars always seemed to be unsponsored, at least until 1982 when Miller jumped on board in the form of an Atlanta area beer distributor providing support.

The 1980 season turned out to be his best. By this time, John Paul Jr had begun racing in lower formulae and demonstrated a keen natural talent. Together, father and son won the 1980 Lime Rock Camel GT race. Remarkably, it was the younger Paul's first-ever IMSA race and the first time he had raced the 935. They added a win at Road America and Paul Sr went on to score another 10 top five finishes and ended up second in the Camel GT championship. He also won the 1980 FIA World Challenge for Endurance Drivers, which compiled points from selected long-distance races, five on the IMSA schedule and five FIA events at Monza, Silverstone, Nürburgring, Le Mans and Spa.

Taking advantage of the more liberal rules intended to keep the 935 competitive with GTP prototypes, Paul Sr had a full ground-effect 935 developed for the 1982 season, dubbed the JLP-4 to distinguish it from the older but very successful JLP-3, on which he had also spent an enormous sum. Although the car only faintly resembled the original 935, it was a rocket ship and helped propel John Paul Jr to the 1982 Camel GT championship. The elder Paul won the Camel Endurance Championship the same year. It was to be the last hurrah for the JLP team.

Out of sight, federal authorities had spent a year carefully building a case against Paul Sr, ultimately indicting him for marijuana smuggling. On April 19, 1983, Stephen Carson, the key federal witness in the case, was shot and nearly killed by Paul Sr at a marina in Florida. Apparently, Paul Sr arranged for the late-night meeting and, for unknown reasons, Carson agreed to show up. Without his testimony, the federal authorities didn't have much of a case. The plan backfired when Carson survived the attack. He and a companion both identified Paul Sr as the shooter and he was quickly arrested.

Charged with attempted murder of a federal witness, his legal problems had been significantly compounded.

Then, things got worse; Paul Sr skipped bail before his scheduled trial in December 1983. Some 13 months after jumping bail, he was caught living under an assumed name in Switzerland and extradited back to the United States.

On top of pleading guilty in 1986 to attempted murder, he was tried and convicted of tax evasion and drug smuggling charges in 1987. After serving 11 years in prison including



John Paul Jr aboard the JLP Racing Porsche 935 at Riverside in 1982. He would drop out after 79 laps, but still went on to win the Camel GT title that year

KURT OBLINGER

one attempted escape, Paul Sr was paroled in 1999. He was questioned but not detained in the mysterious 2000 disappearance of Colleen Wood, a woman who had joined him for an extended sailing cruise. She has never been found. Paul Sr subsequently disappeared to whereabouts unknown.

John Paul Jr was an extraordinary talent behind the wheel of a race car and was recognised by team owners, such as NASCAR's Junior Johnson, as one of America's top young drivers. His IMSA success gave him choices.

He moved to CART racing in 1983 and, in only his fourth start, passed Rick Mears on the last lap to win the Michigan 500, justifying predictions of future success. Continuing in IMSA on board the potent Phil Conte-owned RC Cola Buick-March, Paul Jr eventually got caught up in his father's illegal activities and was indicted while the manhunt for his father was ongoing.

After pleading guilty to federal racketeering charges in 1985, he spent more than two years in prison. Upon his release in 1988, the racing community opened its arms to him.

He had done his time, and many felt his father had bullied him into the drug trafficking trade against his will. Paul Jr resumed his racing career, scoring seven IMSA wins and an Indy Racing League victory at Texas in 1998 - fully 15 years after that inaugural Indycar win in Michigan.

He competed in seven Indy 500s, with a best finish of seventh in 1998.

Randy Lanier

Having relocated to Melbourne, Florida, with his parents when he was 13, a time when television's Don Johnson and Miami Vice were about to raise awareness of the South Florida drug scene, Randy Lanier was no stranger to the lure of a fast-paced lifestyle. More interested in going to the beach with friends or smoking pot than attending classes, he began selling marijuana to high school classmates as a way of earning some quick money and getting to smoke weed for free.

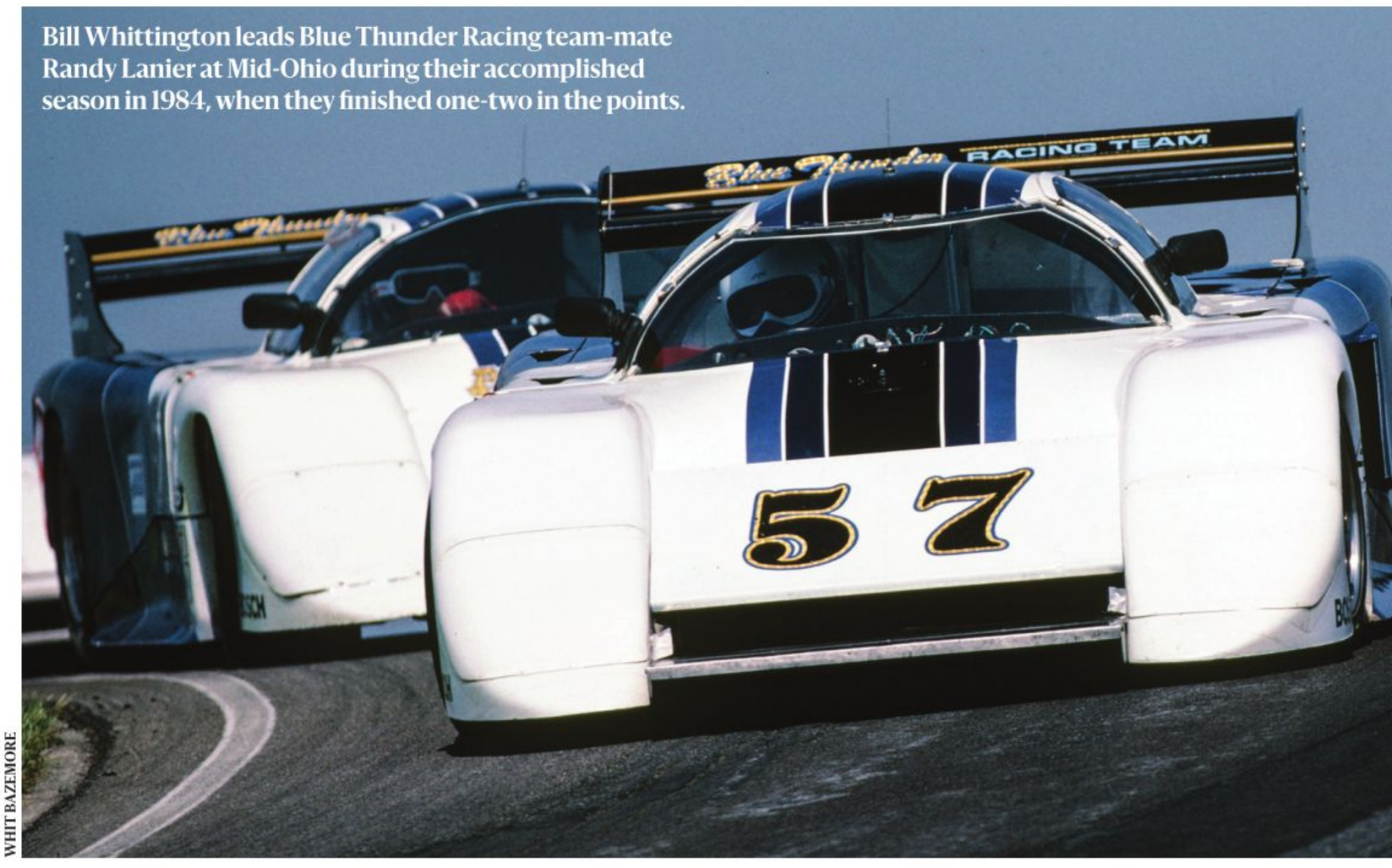
About to be suspended for selling a joint to a classmate, Lanier dropped out of high school and started working construction jobs. But he was soon selling pot to fellow construction workers. The money was good, way better than what he was earning with hard labour. The business escalated and, at the age of 19, he bought his first speedboat. From there, it was a relatively small jump to ferrying marijuana for the local mob from offshore ships to drop areas on the beach.

Over time, the boats became bigger, faster, and more elusive. Before he reached the age of 30, Lanier found himself in charge of a multi-million dollar trafficking business that was bringing in more than 100,000 pounds of drugs a year directly from Columbia to various ports on the East Coast.

Lanier's racing career was the definition of meteoric. It started almost by accident when he signed up for lessons at an SCCA booth at a local trade show in the late 1970s. After fixing up a 1957 Porsche 356 in his carport, he raced at SCCA events with enough success to earn himself a spot at the 1980 National Runoffs at Road Atlanta, where he met John Paul Sr. Having started to race relatively late in life, he was making up for lost time.

Lanier's first contact with IMSA racing happened at the 1981 season finale at Daytona, where he co-drove with Dale Whittington in a 935. Lanier made the rounds of the paddock at Daytona and instantly bonded with the other South Florida guys who were by then a regular part of the IMSA scene: the Whittington brothers, Preston Henn and Marty Hinze. At the 1982 24 Hours of Daytona, he was pressed into service as a last-minute stand-in for an ailing Janet Guthrie at the wheel of a NART Ferrari 512 BB/LM with Bob Wollek as the lead driver. Lanier crashed the car out of third place during his first stint in the car, 18 hours into the race.

By March, he was co-driving a 935 with Dale Whittington and Henn in the Sebring 12 Hours. He shared a similar ride with Hinze at Charlotte in May. At the annual Daytona Paul Revere race in July, he finished fourth overall with Henn, followed by a third-place



Bill Whittington leads Blue Thunder Racing team-mate Randy Lanier at Mid-Ohio during their accomplished season in 1984, when they finished one-two in the points.

WHIT BAZEMORE

podium with Hinze at Mosport in August. Lanier was building a reputation as a fast driver with means. From out of nowhere, he scored enough points in 1982 to finish 16th in the season standings and was invited by Preston Henn to co-drive a Ferrari 512 BB/LM at Le Mans that year. Lanier would finish in an impressive second place in the 1983 24 Hours of Daytona.

Along with Bill Whittington, Lanier formed Blue Thunder Racing in early 1984. The name of the team was purposeful and pointed to Lanier's growing recklessness around his business dealings. Blue Thunder referred to a 39ft, twin-hulled catamaran designed by Don Aronow, a world champion speedboat pilot and famous designer/builder of high-speed, cigarette-style boats. He sold 14 Blue Thunder boats to the US Customs Service on the promise they could outrun the single-hull boats smugglers were using, many of which were also designed by Aronow. Turned out, the Blue Thunder boats couldn't and the government wasted millions of dollars on the programme.

Years later, Aronow was gunned down in broad daylight on February 3, 1987, in Miami. Almost 10 years after the murder, a career criminal named Bobby Young and speedboat ace Ben Kramer, owner of Apache Powerboats and Lanier's sponsor during his 1984 Camel GT title run, each pleaded no contest to the killing. Apparently, the shooting was in retaliation for a business deal gone sour, but rumours have since swirled that the real story went deeper. At the time, Kramer was already serving a lengthy prison sentence with a group of inmates that included Lanier.

Helped with set-up and coaching by Bill Whittington, and armed with a March 84G-Chevy, Lanier won six races in 1984 and finished in the top five another five times to clinch the Camel GT championship in just his second year of full-time IMSA racing.

Ironically, his quick success sowed the seeds of Lanier's ultimate downfall. Without visible means of support, little sponsorship, and without the involvement of March Engineering, Lanier had somehow pulled off a miracle championship against seemingly better-funded and more skilled competition. Federal authorities, already on the trail of the Whittingtons [Bill and Don were both later jailed for drug trafficking], began investigating.

In 1985, Lanier turned his attention to CART's Indycars and entered the Indianapolis 500. He wasn't allowed to compete by race organisers due to his lack of oval experience, but he returned the next year to obliterate the rookie qualifying record. He started 13th, finished 10th, and earned Rookie of the Year honours. But by this time, the Whittingtons were busy dealing with their legal issues and the noose was tightening on Lanier.

Along with 10 other people, Lanier was indicted on money laundering and drug-trafficking charges in Miami federal court in October 1986, for bringing marijuana into Florida. The organisation was estimated to be importing in excess of 300 tons of marijuana every year from Columbia in a sophisticated operation that involved speedboats, barges, tugboats and trucks. Money from the operation was being laundered through a network of fictitious organisations and international banks. Lanier's business partners were also indicted: Ben Kramer (who would later confess to the murder of Aronow) and Kramer's father, Jack. Although recovering from a broken leg sustained in a crash during CART's 500-mile race in Michigan, Lanier surrendered to authorities and was released on bail. Lanier's legal issues worsened in January 1987 when additional federal charges were leveled in Illinois that accused him of being a "drug kingpin" who had smuggled more than 150 tons of marijuana into the country over the previous three years. The operation in Illinois had come unravelled when a state trooper came across a disabled truck on the side of the road that contained a small amount of marijuana. The trail led directly back to Lanier and his partners. Now facing the possibility of significant jail time, he fled the country, only to be recaptured while fishing in Antigua a few months later.

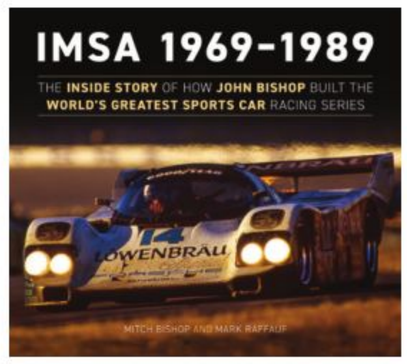
Following a three-month trial in 1988, Lanier was convicted of engaging in a continuing criminal enterprise, conspiracy to distribute more than 1000 pounds of marijuana and tax fraud. For these crimes, he was sentenced to life in prison without the possibility of parole. The harsh sentence was the result of a 1984 law called the "Super Drug Kingpin" provision of the Continuing Criminal Enterprise Statute, designed to deter others from going into the drug distribution business. After spending 26 years in federal prison and without explanation from the government, Lanier was released in October 2014.

The reaction from IMSA was predictably subdued. "We felt kind of sick inside," remembered [IMSA chief] John Bishop. "We were worried about the reaction from [sponsor] Reynolds, but they'd been through the same kind of thing with some NASCAR teams, so they weren't exactly innocent about the potential of the problem. We weathered that together and it wasn't as traumatic as it could have been."



Bill Whittington, on the left, celebrates a win with Lanier

"Lanier fled the country, only to be recaptured while fishing in Antigua a few months later"



Extract from* IMSA 1969-1989: The Inside Story of How John Bishop Built the World's Greatest Sports Car Racing Series *by Mitch Bishop & Mark Raffauf. Published by Octane Press in the USA and available from www.octanepress.com. Read our review on page 181

ROB HERMANN

A GRAND ENTRANCE

During race weekends at Road Atlanta and Brainerd [pictured here] from 1979 through 1983, circuit owners Bill and Don Whittington would often make a grand entrance by shutting down all track activity in the middle of the day so they could buzz the field in their matching P-51 Mustangs and then land on the back stretch. Once on the ground, the fighter planes would taxi up the hill, underneath the bridge leading onto the front straight, down the other side of the hill and into the pit area on the outside of the track. It's fair to say that these were the most spectacular arrivals in IMSA history.



MARK RAFFAUF

Meet the (un)Raceables

Britain has a great knack for loving an underdog. These three low-powered daily drives should never have been candidates for competition. Yet between them they're changing the face of team endurance racing

WRITER Robert Ladbrook PHOTOGRAPHER Lyndon McNeil

The looks directed at garage 3 at Brands Hatch said it all, even before a passer-by enquired: "What are you guys doing here, especially with this lot?" Oh yes, it's not all 917s and 250 GTOs here at *Motor Sport*, so when we got the chance to test three unlikely - yet incredibly popular in some cases - racing cars we jumped at the chance. This trio wouldn't be top of anybody's list when asked to dream up their ideal endurance racer, yet somebody took a gamble, faced the critics and did just that. And since then each has grown in its own right and prospered in a racing world constantly battling against rising budgets. They don't have screaming V12s or thunderous V8s, and some don't even possess four cylinders, yet between them they're luring hundreds of drivers, both new and seasoned, onto their grids and proving that you don't need big power to have big fun.


LIQUI MOLY
MOCAL
SSM
www.STEVENAGE SHEET METAL.com
GRAVES MOTORSPORT
LUCAS OIL
TOYO TIRES
33

ORIGINAL ODDITY

Citroën 2CV

FOR A MOMENT, AND JUST FOR A MOMENT, my mind flickers. It's now rural France. The 1950s. The sight of the rolling countryside whistling by outside the window and the smell of fresh baguettes mixed with, wait, is that Castrol R? That's certainly a pit wall...

The snap back to reality fortunately comes just in time for Paddock Hill Bend. But, stereotypes aside, those mental associations are one of the things that simply force you to smile when you're driving a Citroën 2CV flat out - well, as flat out as one will go.

The 2CV, aside from being 70 years old, is the UK's longest-running, and perhaps most lovable, racing oddity. Despite being intrinsically French, it arguably best embodies the British underdog spirit. Our ability to place fun and self-effacing humour over sporting prowess and preconceptions of image. It simply shouldn't be near a race track. It should be delivering bread in villages around Europe, not piling into the steep gradient of Brands Hatch's famous first turn with its 602cc engine screaming at 7000rpm. It's all so wrong, but in a funny way that makes it so right.

"Nobody gets out of one without a smile," says multiple 2CV 24 Hours winner Simon Turner, whose car we've kindly been loaned. "I was racing a Honda Civic, and when I first got the chance to drive a 2CV about 10 years ago I had no idea what to think. But after I had a go, I sold the Civic and switched. These are just so much fun to drive."

I can see his point. Truth be told, the 2CV was the one car here I was apprehensive about. It's by far the oldest, and oddly most valuable due to its increasing rarity. I'd heard horror stories about its indecipherable gearbox, its roll-prone and tail-happy nature. In my mind that added up to something quite intimidating.

But I needn't have worried. As you slip inside you immediately get the sense of stepping back in time. It feels small and snug. There's no dash, instead you're greeted by a steel panel bedecked with retro dials and many visible wires. There's no clutter, it's pure and stripped back. But it's also immaculate. Turner's is a fresh build from the leading Tête Rouge team. There's no obvious clue as to how old the chassis is (Citroën was still producing 2CVs up until 1990), but the prep is fresh. Everything is bathed in red, from the roll cage to the horizontal bracing strips across the floor, which Turner tells me are fitted to stiffen the ladder chassis to aid handling.

Turner talks me through the gearbox. It's a column or 'umbrella' shift that you push, pull or twist to find gears, like an H-pattern mounted sideways. Anybody who's ever driven a 2CV will know what I'm talking about, anybody who hasn't basically has to re-learn part of the driving process. With first established by pulling the shifter out and rotating down, I head out on track. Second is a swift bash to the middle for neutral before straight forward. Third toward me and rotated up, and fourth straight back... even if it took me three laps to remember that. The sequence of third-to-fourth is simple, basically a straight pull and push motion. Turner tells me you rarely ever drop below third. Fourth is quite a stretch forward, so many teams opt to lengthen the shift rod by 3-4inches for comfort.

The engine reacts keenly, making a great little noise as it reaches the top end of the rev range before its heady 45bhp runs out of puff at around 80mph. It's mostly a standard 602cc unit from the 1970s, with tweaks to the compression and cylinder heads. There's a spec camshaft and alternative air filters, carburettors, jets and exhausts are permitted.

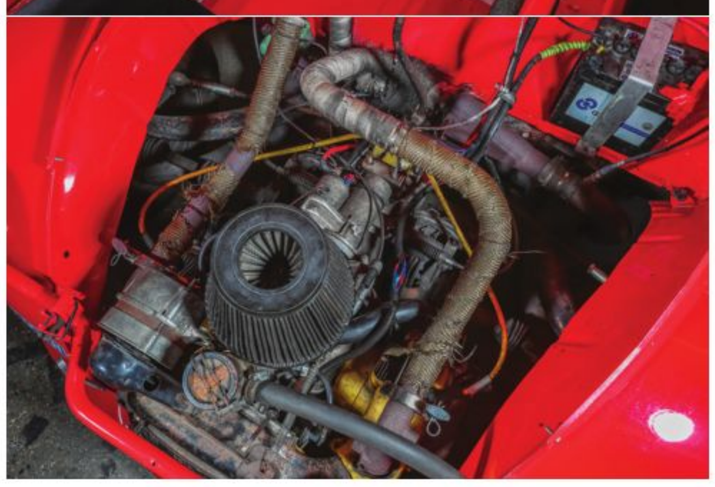
It sounds, and feels, like a proper little race car. With the steering column tilted toward the floor and the wheel close, it resembles a kart. You sit on top of it, staring through the small, oblong windscreen. The engine is mounted as far forward as possible, and with all of the weight on the nose, you sit back by the B pillar - similar to a DTM car - for better balance. You can feel the grip as you stop the car on its nose and flick it left into Graham Hill Bend.

Teams are allowed to stiffen and lower the standard suspension, as well as fit adjustable dampers. The result is a car that handles an awful lot better than you'd think.

Because of the absence of power, momentum is key, and after a quick brake you're on the power as the light rear slides. It's never even remotely scary, even when you do get the back end out of shape, not moving off the throttle pulls it back. Turner confesses that he's had the car "almost impossibly sideways" and still saved the spin. Running in packs also makes a huge difference. The 2CV is about as un-aerodynamic as it gets, so slipstreaming is worth seconds per lap here, rather than tenths.

The British Automobile Racing Club's 2CV Championship offers a mixture of sprint and







FACTFILE

Citroën 2CV

Engine 602cc two-cylinder ***Power*** 45bhp
Transmission Four-speed column shift
Suspension Uprated 4000lb springs, adjustable dampers, 40mm ride height ***Brakes*** Inboard mounted road discs with Citroën GS pads

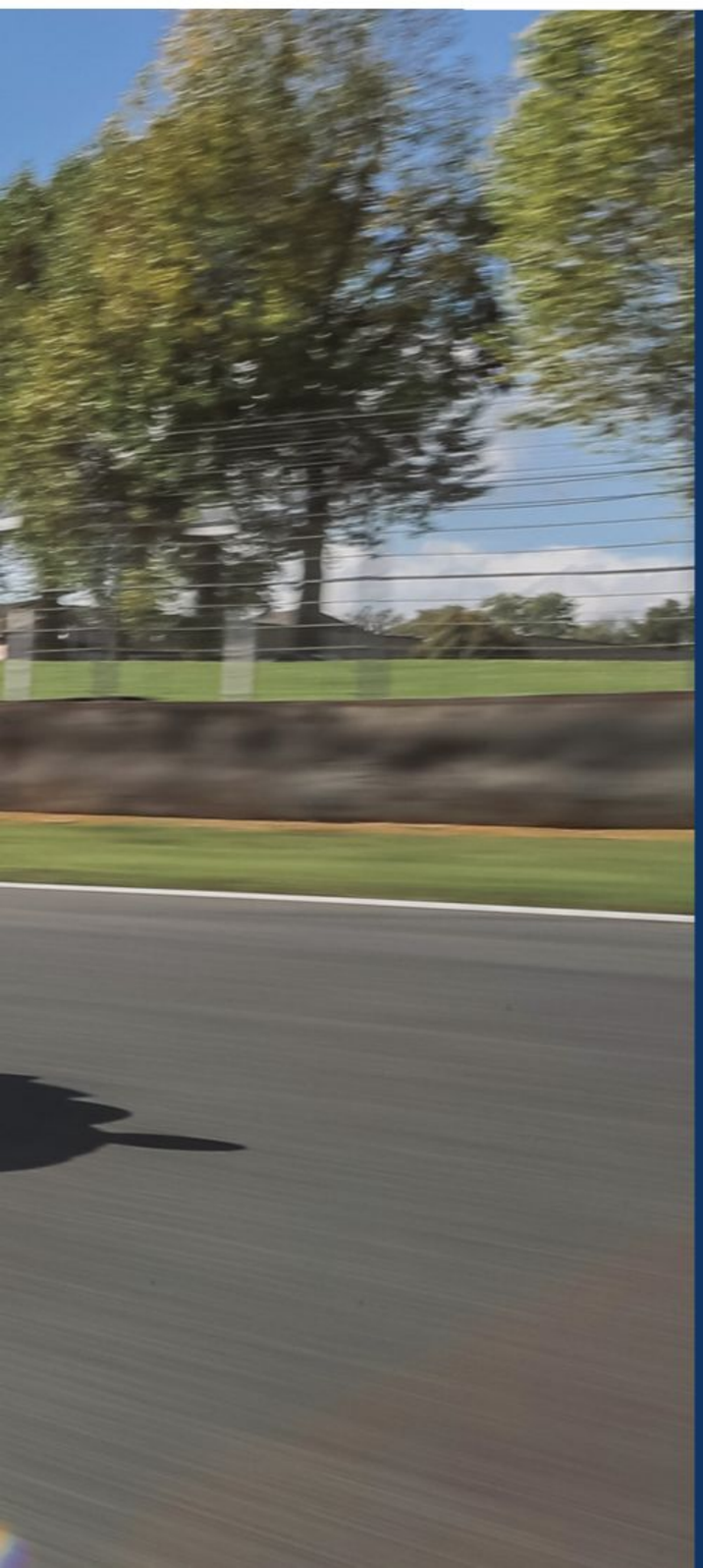
endurance events, but the 24 hours is the star. The first one took place in 1990, and the 2CV has been a pioneer of club team endurance racing ever since. Servicing is simple. One person can lift the 602cc engine and, with five more mucking in, Turner says an engine change can be done in 8-10 minutes. He recalls one example when a race engine developed a fault, so the team stopped to change it. When the car rejoined the replacement was down on power, and the crew worked out it was quicker to fix the original in the garage and re-fit it than continue chugging around off the pace. Technical strategy in the races is just as prominent as it is with a multi-million-pound Le Mans prototype; however tyre strategy isn't. Most teams won't change rubber during a 24h race, unless forced to by rain or damage. And many spare parts are still being reproduced. The series attracts some great drivers, too. Touring car stars, GT racers and more - even new Williams Formula 1 driver George Russell had one of his first car races aboard a 2CV - have turned out to have a go. Turner tells me a 24-hour outing at Spa can cost as little as £1500 per driver, but equally I've also heard of some teams spending five figures.

As far as racing cars go, this is still the unlikeliest of the bunch. But it certainly has an enduring appeal. Plus, you have some spare time on the straights for relax into those fantasies of rural France...



KING OF THE HILL

Citroën C1



"IT'S QUITE AMAZING TO THINK THAT WE only started two years ago, and the next conversion kit will mark our 230th car..." says C1 Racing Club chairman Meyrick Cox.

Let's just think about that for a moment. That's over 100 cars per year... and counting. Not many series can boast numbers like that.





Want further evidence that this diminutive French city car has sparked something of a motor sport phenomenon? This year the club will take over the Silverstone 24 Hours in April and has 110 grid slots available. It expects every single one to be sold out.

"The success has caught us by surprise," continues Cox, who has raced everything from a 2CV to GTs. "Back in 2016 we ran a few cars at the Anglesey Race of Remembrance and with the 2CV 24 Hours at Spa. Then in 2017 we had our first standalone race with 14 cars, but by the end of the year we had over 40. It's been an amazing rate of growth since."

The C1 concept ironically sprang out of another car in this test, the 2CV. Members of the new C1 Racing Club - such as Cox and its director Phil Myatt - were leading lights within the 2CV racing world, until opting to switch to the younger, more available Citroën.

"The C1 mirrors the 2CV, in the way that it is now the small, modern and affordable Citroën," adds Cox. "It's great to see the 2CVs still going strong, but they went through a dip a few years ago where we only had about 16 cars, so we set about finding another car to add to the grid to boost the numbers."

The first C1s came along for that purpose, and have since blossomed into their own niche. The 2CVs hold their own, classically wacky appeal, while the C1s have been

designed with a different goal: to bring endurance racing to the masses for as little cost as possible.

Longer races are the C1's bread and butter, and it's been developed with high mileages in mind. The organisers have chosen to put their trust in Citroën's reliability record and the regulations are accordingly basic. There's honestly not a lot you can do to these cars.

The engine is a 998cc unit built by Toyota (shared with the Yaris and Peugeot 107), and you simply leave it alone. It must run the standard filters, head, airbox and everything else. Same goes with the exhaust, gearbox and entire drivetrain. All cars even have to hold a valid MOT before they can race.

The biggest area of change is the suspension, which allows you to either stick with the standard dampers and just change the springs, or fit Bilstein replacements. You can change the lower front control arm to open up camber and castor, while shims can be used to add that adjustment to the rear too.

The addition of camber adjustment was made to aid braking stability, and also to protect tyre life by increasing the contact patch and making sure drivers don't grind the outside edge off their rubber in a few laps. Not that it would be a bank-breaking exercise if they did: the series runs on budget Nankang tyres which in Cox's words offer "low-grip, big-fun handling" and cost about £50 a corner.

"We did an awful lot of testing with the car," says Cox. "It's very easy to get sucked down the rabbit hole of throwing more parts at a car to make it faster, but that doesn't make the racing better, and you just end up with an expensive car. We wanted to focus on what felt right, and felt fun, rather than lower lap times.

"We weigh each car and seal engines regularly, and they've been bulletproof so far. We had a £250 engine with 4000 miles on it fitted to our development car, and when we took it out it had done four 24-hour and two 1000km races, loads of testing and most of two seasons. We changed the oil and put it back!"

To build a car you order a kit from the organisers, which consists of the roll cage, wishbones, driveshafts, track rod extensions, a few brackets and a brake pipe guard - and that's all you need. "Most people get a car on the grid for about £4000," adds Cox, "but the cheapest we've seen cost £2946... and we saw the receipts! The donor car cost £620."

Inside, our Amigo Motorsport-built C1 looks and feels like a baby touring car, such is the level of preparation. This version hasn't been done to a bare bones budget. There's a flocked dash, ducted cooling, quick release harnesses, welded footplate and a wraparound seat. The radio and all dash electrics must remain working - mostly to ensure nobody has taken them out and repurposed the weight elsewhere. It's a very nice place and feels gigantic compared to the 2CV.

On track the first thing you'll notice is the eagerness of the little Citroën-Toyota engine. It's hard to reference torque levels when the unit only boasts 68bhp, but it certainly pulls well in lower gears and will happily rev all day. Going down the pit straight you're not grabbing fourth until you're nudging 80mph and 7000rpm, making the entire driving sensation feel that bit faster than you expected. It's not light-speed stuff, but you can picture the adrenaline of having four or five other cars around you all screaming in unison.

The C1 handles very progressively. Tip it into a corner and you'll get a fair bit of body roll before it composes itself, grips and carries you predictably through a fast corner. The trick, as with any front-wheel-drive car, is to get the rear moving around and use the brake to help initiate turning before catching it on the throttle to dial out understeer. The brakes themselves are typical modern Citroën. They're super-sensitive, which I know can irk some who criticise them for having a lack of feel, but they're incredibly powerful. The standard discs remain but now feature Mintex pads, giving them even more bite. It's vital to lean on them to transfer the weight to the front before you really pressure the pedal, and when you do the C1 stops on command. The ABS must work, and flickers on a few times when you push hard into some turns. It's never that intrusive, but in a car with little power and weighing almost 1000kg, any interruption in momentum will be punishing. It will certainly teach you smooth driving.

"The Silverstone 24 Hours may feature over 400 drivers and need 1500 tyres... for one weekend"

"We worked a typical budget out to be £12,800 including fuel and tyres, but for that you get 106 hours of racing," says Cox. "You can spend that on a sprint series offering just two hours of racing all season. I think that's why this sort of racing has taken off. Split that headline figure between three or four drivers, and you can do a full season on a few thousand, which is true budget motor racing."

The future is even brighter for the C1 Racing Club as it has just franchised the series out to Scotland and Portugal and is in talks with two other countries. The eventual aim is to be able to race your C1 in a variety of events around Europe, with venues such as Portimão or Estoril in the immediate pipeline, along with target events in France and Germany.

For now, it's already breaking records. The last 24-hour event at Rockingham attracted a sell-out grid, with over 200 drivers. With 110 lined up for Silverstone it will become the UK's biggest race, with over 400 racers expected and up to 1500 tyres for one weekend. Wow.



FACTFILE

Citroën C1

Engine **998cc three-cylinder** ***Power*** **68bhp**
Transmission **Five-speed H-pattern** ***Suspension*** **Standard dampers or Bilstein replacements with replacement springs. Strut braces permitted. Spec lower-front wishbones**
Brakes **Standard road discs with Mintex pads**

THE NEWCOMER

Ford KA

JONATHAN PALMER'S MOTORSPORT VISION organisation has done great things for British motor sport, so whenever its racing arm - MSVR - launches a new series you have to take it seriously... even if the message behind it isn't so serious. That's essentially the new EnduroKA concept in a nutshell. It's a new series due for launch this year. It's run by professional people from a very successful organisation, yet absolutely nothing about the new category even remotely tries to convey an overly clinical approach to racing. That much is clear through everything from the car choice to the branding.

Take its inaugural KA-lendar (see what they did there...). A glance shows varying race lengths, some of which are sold as '*Le Douze Heures du Norfolk*' (complete with Le Mans-inspired logo *avec* tractor) and the brilliantly titled Brands Hatch Indy 500 (minutes). That's a flavour of a category that definitely isn't pitching itself toward the elite.

"Everything about EnduroKA conveys a message of good fun, enjoyable racing," says Stuart Garland, the prime mover behind the new series. "Motor sport is traditionally seen as a closed book, something that you need to have thousands or millions in the bank to be able to do, and that's just not the case. EnduroKA is here to encourage people to come out and give racing a go for not a lot of outlay."

The idea sprang out of coincidental suggestions around the MSV fold. The KA is about the only Ford tin-top without a racing series of its own, yet the car has been built on sporting foundations. It shares a chassis with the MkIV Fiesta, meaning it has the same underpinnings as the widely raced Fiesta and Puma models. Ford even went as far as running its own factory rally series for the KA around the turn of the century. Of the three cars in this test, the KA has arguably the strongest sporting bloodline - although the C1 is descended from the Peugeot 106 Rallye.

Garland had the idea himself that the KA would make a solid race car, as did one of MSV's scrutineers - Chris Mount. And then Ford tuner Burton Power came knocking. By that point there were too many people thinking the same thing to ignore the concept.

MSVR was already running the successful novice-themed Trackday Trophy, but didn't have a true team endurance offering.

"It makes a lot of sense as the KA is readily available, cheap, handles well and it gives MSV the chance to offer a completely different style of racing," says Garland. "We've found that when there's more drivers involved, the spirit moves away from the aggressive cut-and-thrust sprint series that the wider sport is full of and becomes more relaxed and enjoyable racing.

"The chassis is the car's strongest point - it's almost over-engineered because it was used so widely in Ford's other models, so we knew we had a strong starting point."

Four cars were built for initial testing - including the Graves Motorsport example here - with each doing around 10 days of running this year to refine the regulations.







FACTFILE

Ford Ka

Engine **1300cc four-cylinder Duratec** ***Power*** **69bhp** ***Transmission*** **Five-speed H-pattern** ***Suspension*** **Control Bilstein adjustable dampers, Burton Power springs, Powerflex poly bushes** ***Brakes*** **Standard road discs with Mintex pads**

But at time of writing the full regs were still a moving target. The control Mintex brake pads had yet to arrive, and the suspension and ride height settings were also still under discussion.

The parts that are set in stone, though, are the chassis and drivetrain rules. The series will run the 2002-2008 spec KA, meaning a 1.3-litre Duratec engine (as opposed to the original Crossflow unit that harks back to the infamous 1950s Kent design), five-speed manual gearbox and about 69bhp. Much like the C1s, cars are built from a parts kit costing around £1500, which includes mandatory stuff like the roll cage, suspension springs and dampers and a set of polyurethane bushes, which have been mandated to cure a known weakness with the original design.

Aside from that, cars must remain standard, and organisers estimate you can have a car ready to go for around £4000 with a four-day build time for a competent mechanic.

Graves' donor chassis cost just £100, and I put the first miles on it as a race car. Inside it feels very familiar, as production-standard as a race car can get. Heading on to the track the engine pulls nicely from low revs but is conspicuous for its absence of noise. This car is by far the quietest and most civilised of the three, but being so quiet it does rather dull the sensation of being in a race car.

However, the KA comes into its own when you show it a corner. The chassis indeed is brilliant, agile enough to throw the front in without too much understeer, and responsive enough to rotate the rear at will on the throttle around the apex at Druids. It's constantly moving, but always in accordance with what your right foot is asking of it. You get an acute feedback from it that's nicely reassuring and coaxes you on to push harder and harder.

The setup was still very geared toward development. The early cars ride quite high, on stiff springs and tyres with an almost ballooned sidewall. The result is a car that feels very safe, but also wallows about a bit. However, measures are being taken to fix that.

"We're looking at how the impact of ride height affects the camber and we're still testing to get the rebound rate correct," adds Garland. "We need to make sure the car's not too soft, but at the same time not too stiff either. It's got to be a good all-rounder that's quite friendly and doesn't have drivers waiting for it to snap on them. We'll also have more suitable tyres when the control Toyo supply arrives. For this level of club racing you want the car to be forgiving and enjoyable to drive."

Straight-line pace obviously isn't stellar, but the chassis allows impressive cornering speed and grip. It's novice-friendly, but at the same time its low-power nature will be a test for more seasoned drivers too as there's no turbo grunt to help you recover from mistakes.

As for early interest, MSV reports that 30 cars are in build ahead of the inaugural season, and by the time of the first race the KA will have been fully dialled in.

"The great thing about EnduroKA is it has the resources behind it," adds Garland. "We have the support of MSV Trackdays, so we can put the development miles in, we have access to some of the best circuits in the country and a successful club to run it."

But what about early perceptions? "We had one guy comment on our forum that 'those cars are just Dagenham Dustbins' and dismiss ever racing one, but we found that funny because that's exactly what they are," says Garland. "We decided to run with it, so we'll have the 'Dagenham Dustbin' Award at each round for the best presented car. As we said, this series is all about fun, and so much of it is tongue-in-cheek. EnduroKA will hopefully show the sense of humour in the sport."

THE *MOTOR SPORT* APP

AN AWARD-WINNING PRODUCT... WITH A SPECIAL BONUS

The *Motor Sport* app has picked up another accolade – the PPA Independent Publisher Awards 2018's 'Digital Initiative of the Year'.

The app has evolved more and more in recent years, since it was awarded 'Digital Product of the Year' in 2014, and brings all your magazines together in the same place.

Plus, we trawl video archives to bring the features alive, including footage of Ayrton Senna's Williams test (December 2018), and you'll find onboard footage of this month's 'Unraceables' test.

To celebrate the award, we're giving away the 'Porsche: From Race to Road' collectors' special free for a limited time – to get yours, just download the app.



To download the app, visit
www.motorsportmagazine.com/app

"THE TRACK IS MY CANVAS, THE CAR IS MY PEN" GRAHAM HILL



SOMETIMES ALL YOU NEED IS A GOOD QUOTE.

Track Day Cover - Laid-up Cover Including in Transit, Trailer/Transporter
Insurance - In-between Events Road Cover

We're in pole position when it comes to motorsport insurance cover,
call us today for a great personalised rate... **0800 085 6186** or visit **adrianflux.co.uk**

ADRIAN FLUX
MOTORSPORT

Authorised and regulated
by the Financial Conduct Authority





LUNCH WITH

Jonathan Rea

Despite having won four world titles, this Ulster rider remains something of an unknown quantity. His story is unusual for many reasons

WRITER Simon Arron

The portrait adorning the arrival foyer is familiar – George Best's celebrity status endures and Belfast's City Airport is named after him. The Ulsterman last played a competitive match for Manchester United in 1974, yet remains better known globally than the athlete *Motor Sport* has flown in to meet, a man who has obliterated all records within his field and recently secured a fourth-straight world title – yet who remains something of a stranger beyond the discipline he dominates. But things are, gradually, beginning to change for World Superbike champion Jonathan Rea.

WSBK remains big box office in some parts of the world, although interest in the UK has declined since multiple champion Carl Fogarty was in his prime. The series' sporting director Gregorio Lavilla has claimed that part of the reason for WSBK's drop in popularity is that Rea is "not the most charismatic guy", but perhaps he should have joined us for lunch.

Motor Sport finds the 31-year-old cheerful, chatty and engaging. He's also mortified to have turned up slightly late, Storm Ali having flattened several trees and forced Rea to await a council chainsaw before he could leave his own road. Couldn't he have engineered a trick, Steve McQueen-style escape on a trials bike? He smiles and says, "Not really. I don't have a motorcycle road licence – I just never got around to it. I commuted by scooter to my first job, when I was a mechanical engineering apprentice, using L-plates, but that was it. To be honest, though, now I'm a little older I would like to take the test, because away from the circuit I see bikes as a luxury convenience, something I could use to take my wife for a ride, something we could both enjoy, but I spend so much time on bikes, in a high-pressure environment, that I kind of want to detach myself from that feeling."

That Rea should race bikes is no surprise – his grandfather John sponsored Joey Dunlop and his father Johnny was a leading road racer, winner of the 1989 Junior TT – but this is not a conventional tale. To learn more we convene at Harlem, a charming, bohemian restaurant in central Belfast, where he orders a burger – "What else would you want when you're chasing a world title?" – but softens the calories by choosing sweet potato fries and a couple of glasses of sparkling water.

Rea in action earlier this year at Portimão, where he notched up two of his 17 wins during the campaign


Arai
HELMET
www.jonathan-rea.com
PATA
AKRAPOVIC
MONSTER
elf
Kawasaki
#NinjaSpirit
Motocard.com
Motorcycle Gear Store
MONSTER
ENERGY
1

Lunch with Jonathan Rea



"I have clear memories of being in the TT paddock and at local road races around Northern Ireland as a kid," he says. "I was always trying to do jobs for Dad's mechanics, helping to polish the wheels and so on. I enjoyed being involved and basically just wanted to be like my dad because I thought he was cool. He was in the papers and on TV and I wanted a bit of that. At home, I would ride my bike on the paths around our bungalow and Mum would time me. When I was finished, I'd interview myself and answer the questions in an American accent, which I'd learned from watching Kevin Schwantz and [legendary US motocrosser] Jeremy McGrath on TV."

Can he remember his fastest lap? "No idea," he says, "but it was probably about 14 seconds."

He received his first motorbike for Christmas in 1989, shortly before his third birthday. "I started riding straight away," he says, "which I know sounds absolutely crazy to the average Joe in the street, but my boys Tyler and Jake both rode electric motorbikes when they were two. Jake recently had a problem with his 50cc motocross bike and, after school, wanted me to adjust the carburettor to improve the tickover. I couldn't believe it - he's asking for that stuff coming up to his fifth birthday. I was far more trigger-happy, just wanted to squeeze the throttle and go as fast as I could..."

Growing up in rural Northern Ireland provided a natural playground for a boy with a bike and several like-minded mates. "We were friends with a family who had a farm, so we started building motocross tracks there," he says. "The countryside was great for that, because there weren't any neighbours to complain. I also had something of a sheltered upbringing. In the bike world there was no religion, for instance - we were just a band of brothers and your background really didn't matter. Religion just wasn't that important to me and it was cool to have that naivety - it was only when I went to grammar school that I discovered it mattered to some people, that it was a reason to support a particular football team or whatever..."

Rather than commencing his competitive career at grass-roots level, six-year-old Rea took his bow in a full-blown British Motocross Championship event. "Dad didn't do any research to find out how best to get his kid into racing," Rea says. "It was more a case of, 'Well, he has a bike, he can ride and I hear there's an event at Desertmartin next week...' It just happened to be a major meeting close to home and there was a class for 50cc bikes like mine, so...

"Before that I'd just been riding around with friends, but although I felt fast in my own back yard I had my eyes opened by all these really quick English kids. I didn't come out and all of a sudden set the world on fire."

He failed to finish his maiden event because his engine cut after a trip through a puddle, but he subsequently competed with distinction in Irish events and proved competitive in the 60cc class at Desertmartin in

Jonathan Rea

A career in pictures



1989

A very young Rea gets a taste for the saddle with, from left, grandfather John, father Johnny and family friend Joe Millar



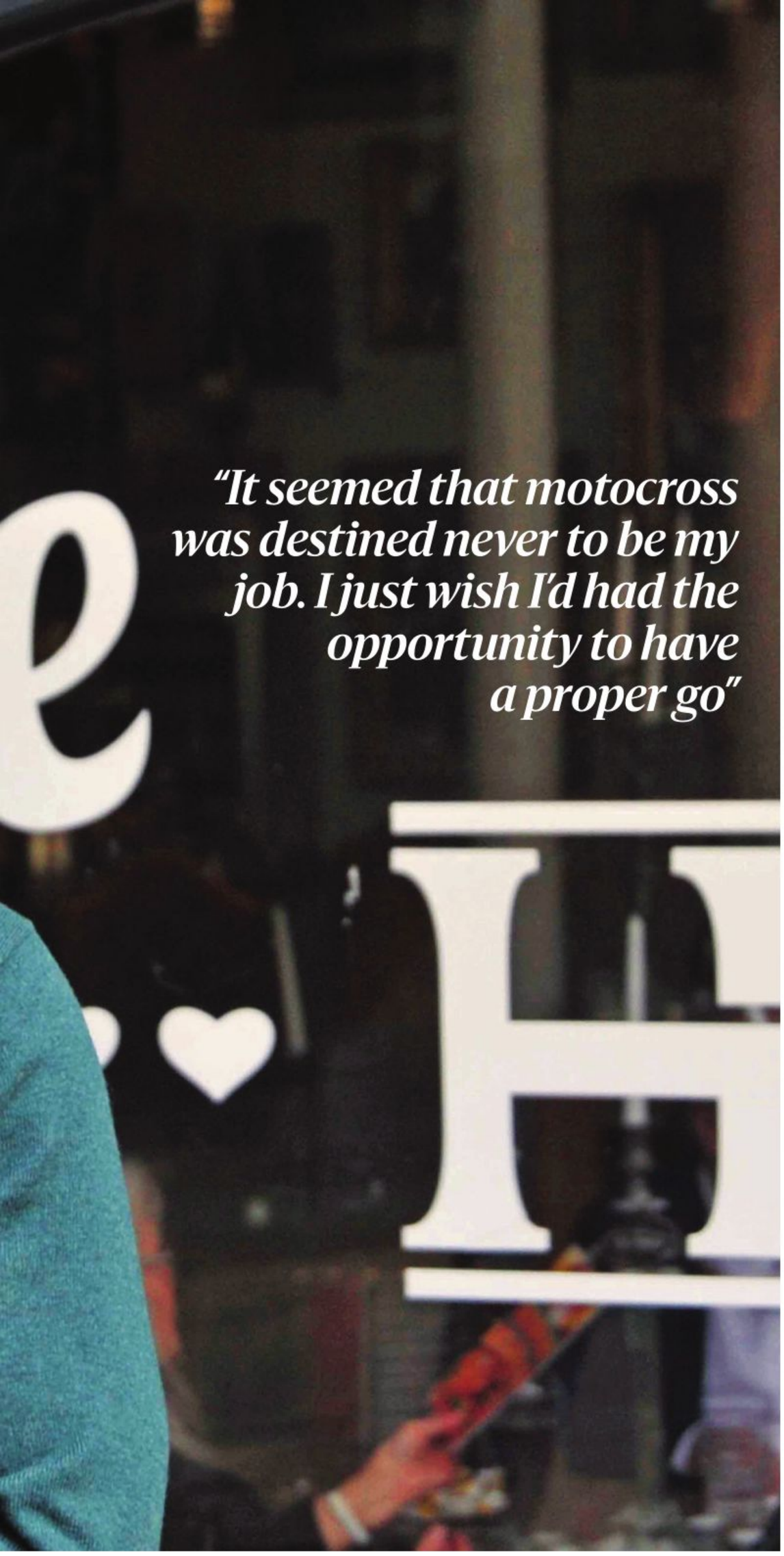
1993

Rea makes his competitive debut in the 50cc motocross class at Desertmartin. He had to retire due to waterlogged electrics



1996

A hint of things to come: motocross victories on one of future employer Kawasaki's KX60s increased Rea's thirst for success



1996, so the natural step was to tackle the following season's British series in full. "When I turned up and won the first round at Cheddelton, Cheshire," he says, "I thought, 'Flip, we could do a good job here.' I went on to win the title and that kind of set the tone, because I learned that I was competitive and knew I hated losing. Dad was 100 per cent behind me, prepping the bikes, and to him it was no bother driving to tracks near Exeter or wherever. We used a Mercedes Sprinter van - Dad worked for a haulage company that shipped textile rolls in cages and we slept on one of those with the bikes beneath. You'd wake up in your sleeping bag with condensation dripping from your nose. I have good memories of those times and marvel that Dad never seemed bothered about the distances we had to cover.

"Crossing that sea every weekend to compete, it isn't always easy. If you'd had a rubbish race, you sometimes had eight or 10 hours to think about it on the way home, to wonder why you're doing it. I think that makes you tougher, and more determined to get things right."

Despite his latent promise, however, there would be no more motocross titles. "If I could swap my WSBK championships for the motocross equivalent," he says, "I'd snap someone's hand off. I wanted to be a motocrosser, but after that 60cc success I fell short a few times in the UK - I was in the top five for a few seasons but never first, which bothered me.

"At 14 or 15 I found myself up against kids whose parents were throwing money at the sport, schooling them at home and so on, and the big fashion was to go to America during the off-season to gain further experience. I never competed outside the UK. I didn't feel hard done by, but Dad had taken me as far as he could.

"It got to the stage where I'd need to take money to teams to get a top ride. I understood that, but just didn't have access to 20 or 30 grand. It seemed that motocross was destined never to be my job. I just wish I'd had the opportunity to have a proper go at British championship level."

So what next?

"I was never really interested in the road racing thing," he says, "and besides my parents wouldn't have supported me - Mum was very strong on that. For Northern Irish kids who want to race, there are a number of businessmen who'll be prepared to buy them a bike - but they'll want them to compete in the North-West 200. There won't be 20 businessmen who'll put their hand in their pocket and say, 'Here, go and do the British championship.'

"But a guy called Gareth Creighton had been helping me in motocross and he mentioned the new Red Bull Rookie programme - they were looking to develop a young circuit racer and you didn't need prior experience, so I sent in my CV without thinking a great deal about it. But I was short-listed and made the final 20 for an X Factor-type selection thing at Rockingham - there were TV cameras everywhere, so for me, aged 15, it was a big deal."



1997

The spoils of victory: Rea took the 60cc motocross title at the age of 10. Despite his promise, this would be his only such success on the dirt



2007

Rea finished second to team-mate Kiyonari in the BSB. Despite doing no grass-roots circuit racing, he reached this level in just three years



2008

Heading for a World Supersport victory at Brands Hatch. In his first season on the global stage, he took second in the final standings



2011

Rea at Donington Park, where he took his Honda CBR to a fifth and a sixth during the early stages of a campaign beset by injury



Rea in 2016, celebrating his second consecutive WSB double at Assen

After a day of learning about racing lines with Ron Haslam's riding school at Donington Park, he went to Rockingham, lapped ever more quickly until he crashed, left thinking he'd blown his chances... and then received a call telling him he'd made the top-five shoot-out at Cartagena, Spain. He won that, too, and - having done absolutely no circuit racing at club level - lined up for the opening round of the 2003 British 125cc Championship at Silverstone, as part of the high-profile British Superbike series' supporting cast.

"Most people thought it was great that I'd qualified 12th on my debut," he says, "but I thought it was terrible. I wanted to be first! That sort of impatience didn't do me any favours. I had a lot to learn - a lot! - about circuits, setting bikes up and all the rest. I got a podium finish at Brands Hatch towards the end of the season, but it was a struggle and my size didn't help - it was a bit like an elephant trying to get tucked in on a tricycle. A lot of kids would just blast past on the straight and I had to try to claw that back through the corners, but I had a really good team manager in Robin Appleyard - another former GP rider. He taught me more in one year than I might have learned in five with Dad. I've always been lucky to have good people around me.

"But by the end of the season I knew that I couldn't have another year in 125s - physically I was only going to grow, so needed to be on a Supersport bike... but that meant paying for a ride and we didn't have the money for that. I spoke to Linda Pelham at Red Bull and she told me not to commit to anything until I'd heard from her."

Their next conversation involved an invitation to test at Cadwell Park, alongside Cal Crutchlow, Kieran Clarke and Daniel Coutts, for a place in a new Red Bull Honda Supersport team. "It was a horrible day," he says. "There were lots of leaves down, so we had to bypass the woodland section and use the short circuit. But I loved the bike, the power and the riding position, step by step I got better and ended up getting the gig, which with Honda involved was a major deal: big trucks, marketing... I could feel the investment."

After a difficult start to the season, results were just beginning to pick up - he'd taken a sixth at Thruxton - when he crashed heavily at Knockhill and broke his femur.

"I'd injured my knees and stuff in motocross," he says, "but this was the first time I'd broken a big bone and it required three operations to get things right. The doctor told me I was never going to race again, but I wasn't about to listen to that because it wasn't an option. At about the time of the second operation, I received a visit from Linda and team manager Neil Tuxworth - and they said that if everything went to plan they'd give me a Superbike ride the following year. From that point on, I worked my ass off.

"I'd gone from being told I might never ride again to learning there was a BSB seat for me - the emotional shift was mad, but it was what I needed. I hadn't been earning any money from racing, so needed to get a Superbike ride and make this my job, or else forget about the whole thing. That Red Bull carrot was just what I needed."

Has he ever tried to rationalise his own vulnerability? "No," he says, "and I don't know why. It must be a personality trait. I do get emotional at times - I shed lots of tears about Craig Jones [killed in a Supersport accident at Brands Hatch in 2008], to whom I was very close, and also Chris Jones, the young team-mate I lost at Cadwell Park. It's not that these things don't affect me, but when I don my helmet I never give a moment's thought to the fact it could happen. I can't explain it."

And so, in his third season of circuit racing, and with not much in the way of significant success under his belt, he was a BSB rider.

"It's certainly not normal and I don't know anybody else that's done it quite like that," he says, "but I'm always so grateful for the opportunities I've had - if it wasn't for Linda believing in me, and who knows how many pounds Red Bull invested, I certainly wouldn't be here, 100 per cent."

He started to become a regular front-runner in 2006 when, he admits, a couple of pennies finally dropped. "That was an incredible year - four wins, lots of podiums and I started learning about consistency. I'd been the motocross kid that would crash twice in a race but still try to win - it took a while to accept that you should just do what you can do on the day, and settle for that. The message probably sank in when Neil Tuxworth dragged me into an office and told me that it wasn't like motocross, when after an accident you'd fit a new set of plastics and a brake lever. I was now crashing bikes and destroying them, eating into the budget."

"The doctor told me I was never going to race again, but I wasn't about to listen to that because it wasn't an option"





2012

Rea presses on at Silverstone. He finished fourth and ninth on this occasion, but scored his first home WSBK victory 12 months later



2013

Just two days after crashing on oil at the Nürburgring and breaking a femur, Rea was out of bed and walking with the aid of crutches



2015

After six full WSBK seasons on a Honda, Rea switched to Kawasaki, accumulated 14 race wins and took the first of his four WSBK titles



2018

Rea clinched his fourth straight WSBK crown at Magny-Cours, during a run of 11 consecutive victories that began at Laguna Seca in June

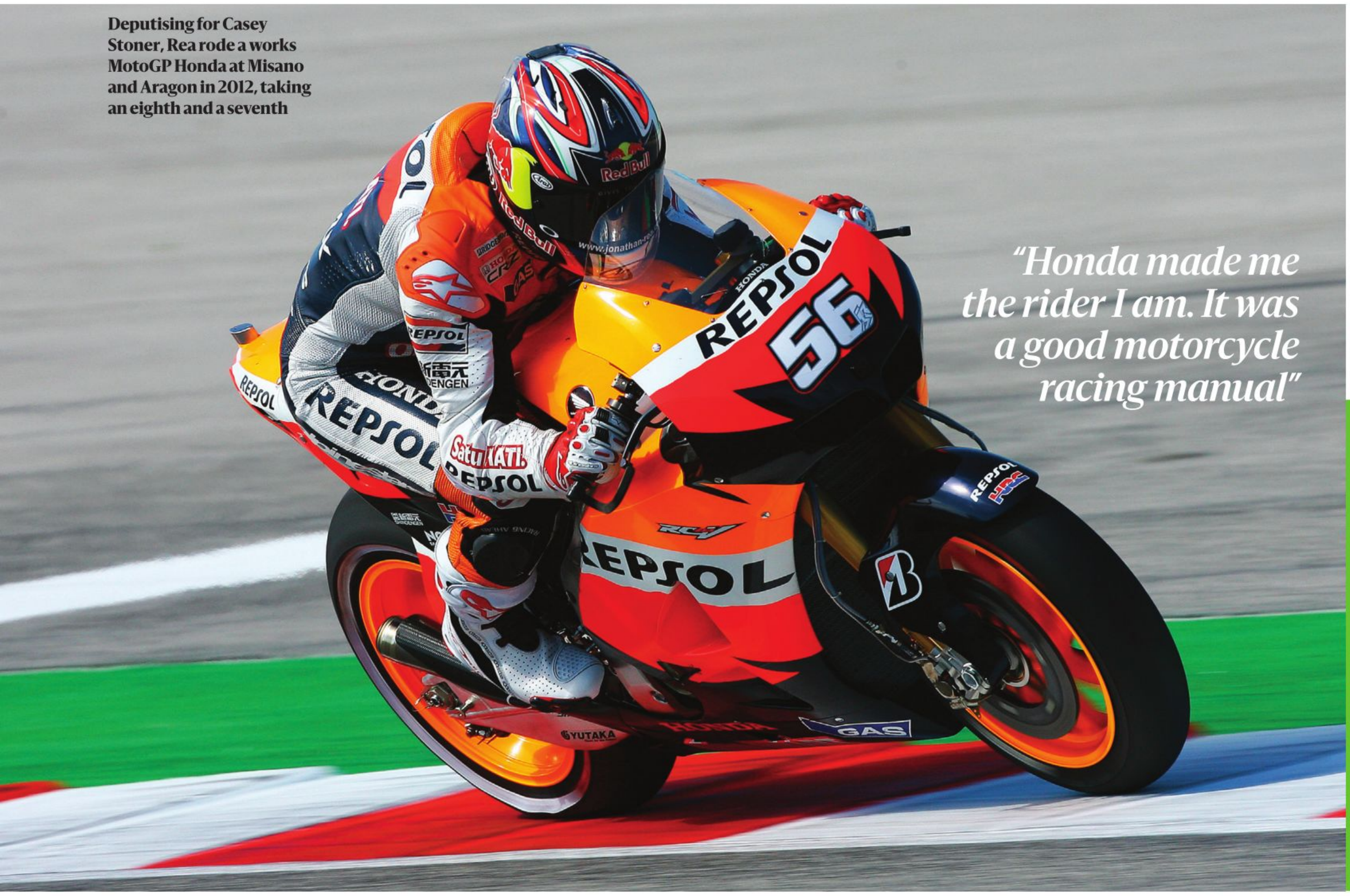
MOTOR SPORT

Looking for the perfect gift?

For a range of hand-picked gifts for the motor racing fan, including models, books, limited-edition prints, stocking fillers and more, visit the *Motor Sport* shop.

Browse online

shop.motorsportmagazine.com/gifts



Deputising for Casey Stoner, Rea rode a works MotoGP Honda at Misano and Aragon in 2012, taking an eighth and a seventh

"Honda made me the rider I am. It was a good motorcycle racing manual"

He was fourth in the standings that year, then second to Ryuichi Kiyonari in 2007. "That summer I began getting calls about the WSBK," he says, "from Xerox Ducati and Ten Kate Honda - but Ten Kate seemed a better deal, a season of World Supersport followed by two in WSBK. I felt as though they really wanted me."

Stepping down a class in order to step up in the longer term, he finished second to WSS team-mate Andrew Pitt in 2008 but then had a troubled start to his maiden WSBK campaign. "I felt as though the team wasn't listening to me," he says, "but then why would they, given where I'd come from? The bike was so difficult to ride at first and then we went to Valencia, which is all second- and third-gear corners - hard acceleration from low speed. The thing was like a light switch and I hated riding it. I was complaining to the team and they replied that they'd start changing things once they thought I was pushing hard enough. I lost my rag about that, went home, got massively drunk... and then got a phone call, while still hungover, asking me to go and test in Holland, at a short oval. I just went around and around, opening the throttle, closing the throttle, then coming in and asking the engine tuner to reduce the power and change the throttle maps. He couldn't believe how much I was telling him to change things - I just needed it to be nice and clean at the bottom end, then went to Assen the following weekend and got a fifth. I subsequently took a fourth and a fifth at Monza, a fourth and a second in South Africa then a win at Misano. That was a hard victory, fighting against the two Ducatis in their own back yard. I'd always had self-belief, but this was the vindication. After that it all just started happening."



He would spend six WSBK seasons with Ten Kate, notching up victories and podium finishes, enduring another broken femur - "The doctor in Germany had me walking again in a couple of days, which was amazing" - and scoring points on two MotoGP starts for Honda, as substitute for the injured Casey Stoner in 2012, but his best championship finish was third, in 2014, his final year with the team. "That was one of my best seasons," he says, "but all that time with Honda made me the rider I am. The occasional struggles gave me the best possible grounding. It was a good motorcycle racing manual. I learned more because my bikes weren't always fully competitive than I would have done by jumping straight onto a bike that was amazing.

"Kawasaki, Aprilia and BMW had bigger budgets and were all at a better level in terms of technology. Honda pulled out of superbike racing as a factory team in 2002, after the championship went to control tyres, so we never had any official support, but I knew all

"The time will come when I'm not the rider to beat – I'm probably fired up by the fear of that happening"



that when I signed. The Ten Kate guys did an awesome job, producing their own electronics package from the ground up and so on, but after I agreed to join Kawasaki my first few laps showed me what we'd been competing against for all those years, so I was super-happy."

In 2015 he won 14 of 26 WSBK races to secure his first title - and despite the best efforts of fellow Brits Chaz Davies and Tom Sykes he hasn't since been dethroned, becoming the first man to secure three (subsequently four) consecutive titles and overhauling Fogarty's previous record of 59 victories. "I put a lot of pressure on myself after winning my first world title," he says, "because I began to panic that I might not win another. I didn't want to be that guy. I felt 2016 was my hardest year, because we had a new bike to develop, I didn't get on with it too well initially, had a big accident at the end of the season and lost a huge advantage - it came down to about 20 points - but then ended up as champion again. Once I'd done that I relaxed."

After his 2017 success, he finished second to Mo Farah in the BBC's Sports Personality of the Year - an award settled by public vote. "It was great just to make the list of nominees," he says. "Motorcycle racing very rarely features on the back pages, so for the sport to be cast into the spotlight for one evening, alongside football, athletics, F1 and so on, was fantastic. And to know I'd had all that public support, I felt very humbled."

Does he find it hard to remain motivated, given that he has nothing left to prove?

"Not really," he says. "Sooner or later the time will come when I'm not the rider to beat - and I'm probably fired up by the fear of that happening. Every year I go away in the off-season and wonder what I can do to improve - and I'll keep doing that. I'm currently having so much fun at the track that I can't contemplate retirement. I've just done another deal that takes me through to the end of 2020 with Kawasaki. I'm sure things will change in my brain, or within the world of superbikes, but whatever happens I want to stop while I'm still at the top - I don't want to be the guy that hits every branch on the way down.

"At some point I also want a normal family life, with holidays and stuff. They talk about WSBK having an eight-week summer break, but in 2018 I went straight from the last pre-summer race to Japan for testing, then I did the Suzuka 8 Hours - a very big event [and one he won with Honda in 2012]. When it's done I look back and think I've enjoyed it, but when it's going on it's the toughest event in the world - the temperature, the humidity, the pressure. All the Japanese factories want to win - and aside from my victory I've had a couple of near misses. In 2013 my team-mate crashed and broke his leg when we were leading by three laps, and in 2014 Kiyo crashed when we were half a lap clear. Leon Haslam and I were looking in good shape this year, but I ran out of fuel as I came into the pits at the end of my second stint. Then I tipped off behind the safety car, on slicks in the rain, but we managed to salvage a podium, despite everything.

"After that I was off to the States for marketing, then back to Japan for more PR work, then off to Germany, more testing in Portugal... There was no time for a break and with two kids I now crave some normality - but at the same time I know what I'm doing is building them a good life."

Given all that he has achieved, does he harbour any regrets? He laughs and says: "Only that I never got to ride professionally in motocross. I've suggested that I'll try to win the veterans' motocross championship when I retire, but I'm not fast enough - no matter what I might think. In 2016 the WSBK season ended in the middle of October and the final round of the Manx motocross series was the following weekend, so I entered and finished second. I tell friends that I ride in the WSBK to fund my motocross career, but nowadays I have to accept that it's just a hobby..." Ⓜ

Jonathan Rea's new autobiography - Dream. Believe. Achieve - *is out now, published by HarperCollins, ISBN 978-0-008305-08-6, £20.00*

Jonathan Rea career in brief

Born: 02/02/87, Ballynure, Northern Ireland **1993 Competitive debut, Desertmartin motocross 1997 British 60cc motocross champion 2003 Switched to circuit racing; British 125cc championship 2004 British Supersport; season ended by accident at Knockhill 2005 British Superbike championship 2006 BSB, 4th 2007 BSB, 2nd 2008 World Supersport, 2nd 2009 WSB debut with Honda, 5th; first win at Misano 2010 WSB, 4th 2011 WSB, 9th 2012 WSB, 5th; winner of Suzuka 8 Hours with Kousuke Akiyoshi and Tadayuki Okada 2013 WSB, 9th 2014 WSB, 3rd 2015-2018 Four straight WSB titles with Kawasaki, to whom he is contracted until the end of 2020**

MOTOR SPORT

LIMITED-EDITION

2019 CALENDAR

The *Motor Sport* calendar, in association with The Cahier Archive

ON SALE NOW









THE 1980s, THE MOST DRAMATIC DECADE IN F1 HISTORY

From aero to turbo the 1980s had it all. Grand Prix racing had never experienced such power, nor indeed such spectacle. Built to perform for a single qualifying session, some engines were rated at 1400bhp though nobody was sure of the precise figures, as dynos were incapable of recording numbers of that magnitude. And it wasn't just the cars, but the charismatic drivers at their helm: Senna, Prost, Mansell, Rosberg, Piquet, Arnoux and Berger, to name but a few.

To celebrate an era that had it all, *Motor Sport* magazine is pleased to present this limited-edition calendar showcasing some of the many highlights in 12 stunning images.

To order your copy of ***2019 Motor Sport calendar*** for just £29.95 visit:

shop.motorsportmagazine.com/CAL19

Or call +44 (0)20 7349 8484. US (Toll Free number): +1 866 808 5828

MASTER CRAFTSMEN

Motor Wheel Services

Wheels - they make our world go around. And Motor Wheel Services near Slough makes wheels that keep many in the classic world rolling - specifically those gleaming wire wheels that flicker in the sunlight and finish off a gleaming restoration

WRITER Gordon Cruickshank **PHOTOGRAPHER** Lyndon McNeil




Wire Wheels
Wire Wheels
www.mwsint.com


72 SPOKE
19" OUTER
EVEN
19" 36 SPOKE
INNER LACE
BALANCE WEIGHTS


BUILD 8



You might think wire wheels form a declining market, yet MWS has more than 15,000 wheels in stock right now ready for delivery worldwide. “We keep a lot of standard designs - E-type, Aston, loads for three-wheeler Morgans, but there are always specials going through.”

That’s Oliver Smith, third-generation chief of MWS: “My granddad became involved in the firm soon after it started in 1927, and took over after the war,” he says. “He was known as George ‘The Wheel’ Smith in the industry. We became exclusive worldwide distributors for Dunlop wheels in 1978 and when Dunlop stopped wire wheel production we effectively took that part over, including the equipment. By the 1980s my dad Colin was in charge, and is still involved, and although I did other things in between I’m now at the helm along with co-director Gary Gardner who worked with my granddad. That’s him!” At this point Gary bustles past, says hello, and shoots off on business. Some of those 15,000 wheels need to be somewhere else.

Going into the main workshop we’re surrounded by wheels - racks of shiny new ones, rows of scruffy old ones for refurbishment. Since the ’70s the business has been purely about wire wheels, and we watch Lewis Doyle wielding a pneumatic chomper to chop spokes out of a rusty rim from a 4½-litre Bentley. After he has used a protractor to measure the angle each spoke makes through rim and hub, he marks a zero point ready for relacing the spokes in their intricate interweaving pattern.

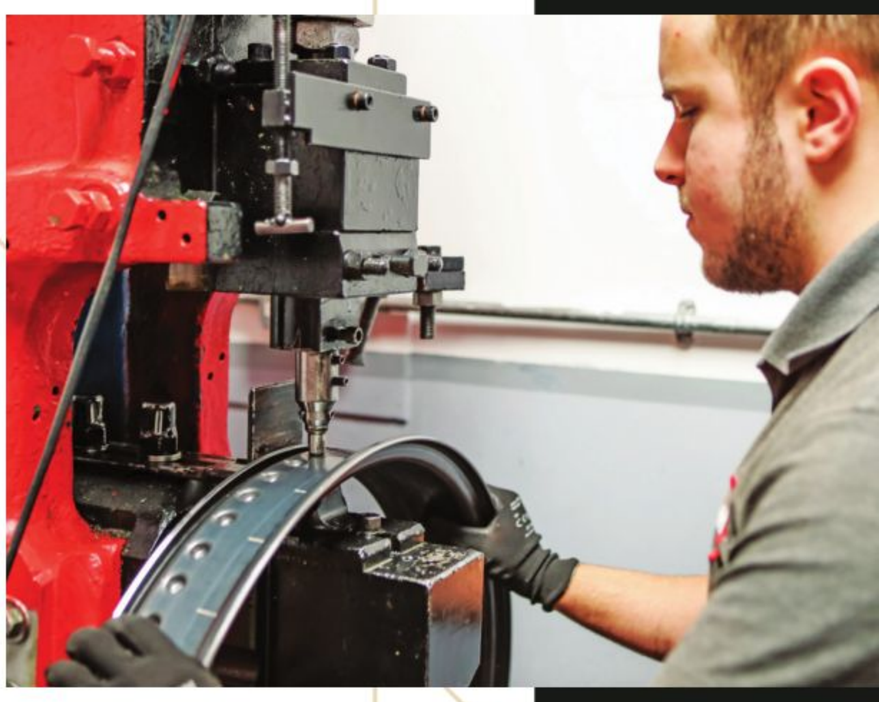
Then the spokes are carefully measured, copied in new stainless steel, or plain if to be painted, chopped to length by Dudley Jooste in a huge ex-Dunlop press that’s older than anyone here, and the inner ends curved round a former using good old-fashioned man-muscle before the end is threaded. And you thought it was just a bit of wire... Mind you, there’s also a new digital spoke cutter, which can churn through the bread and butter items on its electronic own.

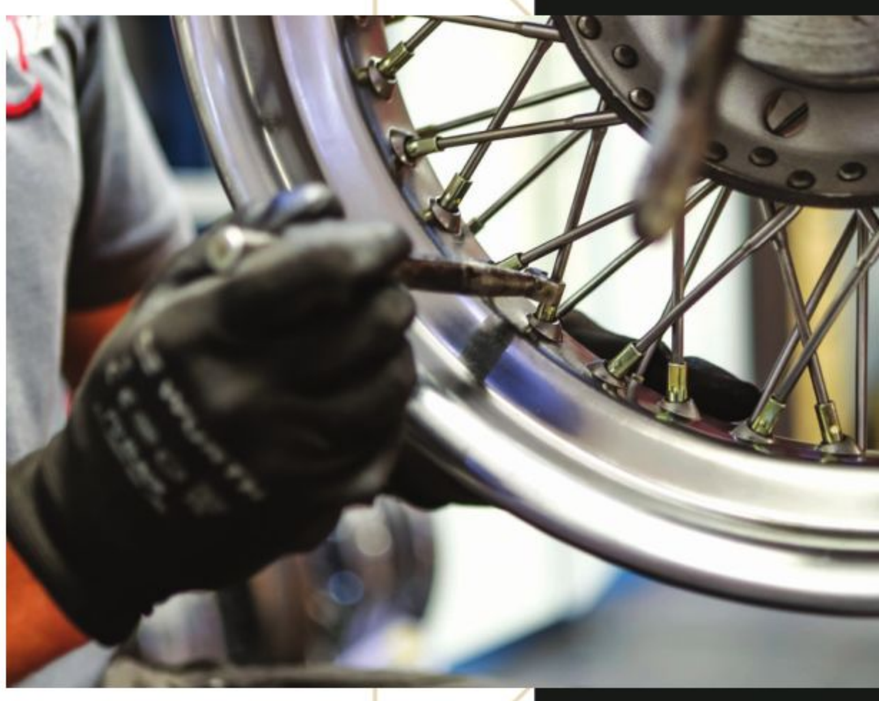
Over the years there have been millions of permutations of angle, width, spoke size, lace pattern and rim profile, so if your Amilcar or Swallow Doretti needs shod you need to find an expert dismantler before you can proceed to rebuilding. Each novel project is a fresh challenge for the MWS crew.

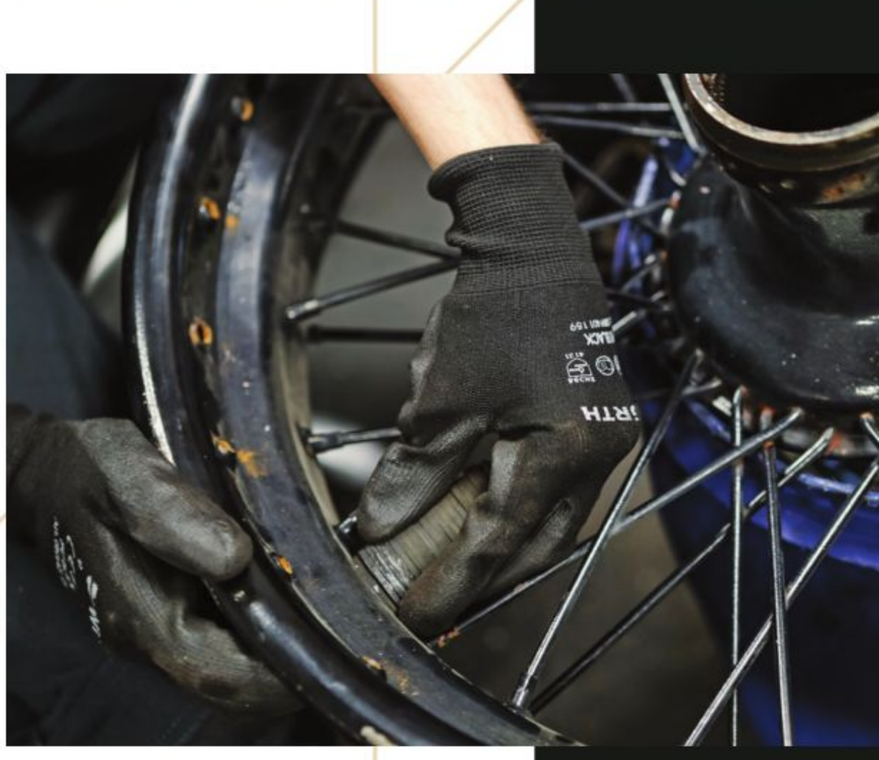
“For a complex job,” says Lewis, “we’ll sometimes make up a trial wheel with just a dozen spokes so we can check the lengths, angles and lacing before we go ahead.”

Alongside us is a finished Bentley wheel with balance weights stacked up like casino chips. “Sometimes people fit fake weights,” grins Lewis. “They like them symmetrical.”

But if that Bentley wheel looks big it’s overshadowed by the new 23inch monster rims for a Rolls-Royce Phantom that Jake Swaby is spinning through a press, punching dimples around the rim according to marks on a tape strapped round it: there’s a rack of these tapes, pre-marked for different wheels. Once drilled at exactly the angle measured from the old wheel, the rim is ready to be laced to the hub, whether refurbished or new. And what a hub on those RR wheels - massive steel barrels like artillery shells. “Although a lot of manufacturers bought in standard components,” Oliver says, “Rolls made their own centres. Luckily they can usually be rebuilt. Sourcing centres is often the hardest thing; Alvis is a good example - they’re unique, but now we keep them in stock.” And whether you want wheels for your Type 44 Bugatti or bolt-on splines for your Spridget (or even, god forbid, your Sierra), the firm can oblige.







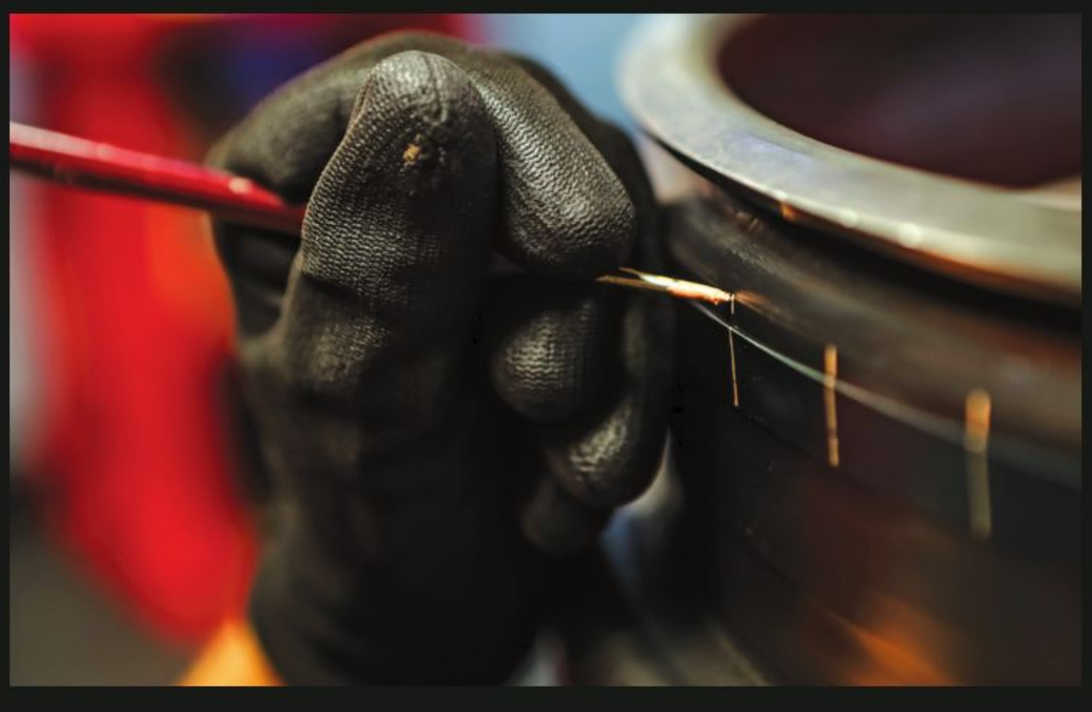
MASTER CRAFTSMEN

The Essentials

Name *Motor Wheel Services*
Specialisation *Wire wheels*
Established *1927*
Proprietor *Oliver Smith*
Number of employees *16*
Premises *Langley, Slough*
www.mwsint.com

Old spokes carefully measured before new ones are trimmed and shaped; rims are then marked and drilled









Huge rims from pre-war Rolls-Royce are dismantled; unique hub centres will be refurbished for re-use



MASTER CRAFTSMEN

Some MWS machinery dates back to Dunlop days though new digital devices now augment the firm's traditional hand skills



After the new spokes appear it's down to a good eye and careful fingers to create the circular cat's cradle that gives a wire wheel its strength. And they are strong; Oliver tells me a really powerful competition car - a sports-racer with a big Chevrolet V8, say - may have an extra row of spokes, but most people race on standard wheels without problems.

With spokes laboriously inserted, the reassembled wheel goes for truing: we watch Lewis clamp it into a jig and then set a pointer on an articulated arm against the rim. A dial gauge registers either sideways or radial deflection, and with careful small twists of the spoke nipples Lewis reduces the deflections until the wheel runs true. Then he confirms the hub/rim offset remains as it should. This is so much more complex than just selecting a forged alloy wheel from a list...

A final 'ting ting ting' around the spokes proves it's sound - and reminds me of the depressing moment when I heard a series of 'plink plink' noises from the front of my old Jaguar just as the steering went all woolly. A dozen broken spokes in 30 seconds. I'm glad there are still people around who can help.

Once trued, a wheel may go for painting - you don't want chrome wires on your pre-war Alfa - or stay in polished stainless splendour. Then it's up to you to keep them clean... though MWS also supplies a handy spoke brush as well as a huge wooden spanner for knock-off hubs

I haven't seen any rims being rolled here, though - and that's because that part is done in India. But it's not a recent shift: from the 1960s Dunlop was having wheels made out there by a firm called Wheels India, and MWS continues the connection for components which are then assembled to order here. "The quality is great and their chroming is incredible," says Oliver, who goes to Chennai a couple of times a year. Other hubs are machined or forged here in the UK. The widest they offer is an 8x18in for a modern XK Jaguar, but, says Oliver, "We'll tackle anything in wires." Like a couple of dozen wheels for Audi's Auto Union copies, or the vast doughnuts that the giant Napier-Railton rolls on - all are MWS work. I can see some tatty steels here too, which the firm is about to refurbish and re-tyre. Other customers come in just for a few spokes to be replaced, or for tubeless tyres to be fitted - yes, you can make wire wheels airtight - and racks of Blockley rubber lie in wait.

"The only thing we don't manufacture is alloy rims, though we can supply them and rebuild them," Oliver says. "Actually they're barely any lighter than stainless, but for some Maseratis and Ferraris it's the only thing that looks right."

For some owners it's the look of a set of wires that's the priority, but many others with older cars rely on the continuing skills of firms like MWS to replace aged and deteriorating wheels. Even if your Austin 7's engine torque isn't exactly going to pull the hubs out, given the state of Britain's roads, it's comforting to know that your rims are tough enough to stay circular despite the potholes.

The 2018 Christmas Gift Guide

A mouth watering selection of ideas for the festive season; a cocktail of collectables that have caught our eye, plus stuff we really, really want

Grand Prix holidays

1

Christmas is about the time of year when all the holiday companies flood TV screens with adverts for their various travel exotica, but what if you want to build a break around a Formula 1 Grand Prix?

There's a full grid of options, especially when it comes to either flyaway races or luxury cruises. Many companies offer bespoke packages, including flights, event tickets and all other transfer costs. For ocean (and scenery) lovers, IGLU Cruise's offer of a New Zealand trip with a sideline of the season-opening Australian GP and extended stay in Melbourne looks tempting (from £2649pp). For non-oceanic breaks, Motor Sports Travel arranges packages for every GP, complete with flights, accommodation and tickets. The bargain of the bunch is Barcelona Winter Testing (two nights from £399pp), working up to a luxury trip to the Abu Dhabi GP with a five-night stay at the extraordinary Yas Viceroy Hotel that overlooks the circuit, complete with post-race concert tickets (from £4999pp).

Prices vary ▶ *www.motorsportstravel.co.uk, www.iglucruise.com*





EDITOR'S PICK

JOE DUNN

Making homeware items hewn from recycled racing cars is bordering on genius. Besides, what's not to like about salt and pepper shakers made from bits of gearbox?

2

Red Bull Arts furniture

The Racing Gold company is arguably the most artistic, and ambitious, automotive recycling firm in the world. Through a partnership with Red Bull Racing, it skilfully repurposes real, raced parts of F1 cars into some stunning examples of home furniture. The company's catalogue is quite amazing to behold, including high-ticket products such as the extremely limited-edition 'Car in a Box' Coffee Table, which features a steel frame mounted on a block of skid pan and filled with myriad components from the cars used between 2006-2010. Incorporating parts such as magnesium wheels, carbon brake discs, bodywork and suspension parts, it costs £6,750.00. There are also less cluttered, pure designs, such as the elegant exhaust side table (above, £4,500), polished exhaust standing lamp (left, £14,400), table lamps made from gear bases (£4,200-2,400), wall clocks cast from front torsion springs (£8,400), salt and pepper shakers made from gearbox filters (£2,154), coasters from gearbox parts and even some napkin rings, too.

Prices vary ▶ *www.racinggold.co.uk*



All we want for Christmas

The* Motor Sport *team selects its festive treats

▶ Porsche steering wheel rattle

JACK PHILLIPS



Due to certain circumstances, the latter part of 2018 has required visiting unfamiliar shops. Luckily, Porsche has made baby shopping a little more interesting and my 2037 Le Mans-winning daughter will no doubt remember her first Christmas present as the thing that set her on her way. A knitted Porsche steering wheel rattle. *£30*

Walter Hayes Trophy entry ◀

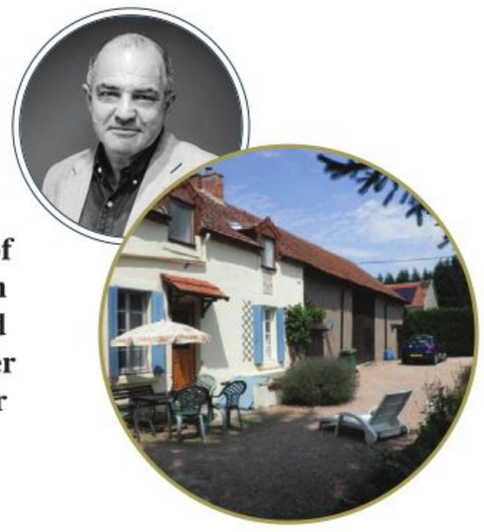
ROBERT LADBROOK



I'd have to wait almost a year to enjoy it, but what a chance. The Walter Hayes attracts 100 of the best Formula Ford drivers, and just to be a part of it would be mega. Yes, it's Silverstone, in November, so it'll be cold and likely wet, but the camaraderie is amazing. My ambition is to make the heats! *£3,000 (with car rental)*

▶ A pad in France

SIMON ARRON



A concrete bargain – a three-bedroomed house in La Celle, little more than an hour from Magny-Cours, about three from Dijon-Prenois, within easy reach of several rounds of the French Hillclimb Championship and you don't have to cross water to get to Pau. Or Le Mans. Or the Nordschleife. The local cheese (and wine) will be magnificent, too. *£85,260*

Lego Bugatti Chiron ◄



DAMON COGMAN

I really love Lego. The only logical explanation is the fact I have old cars that usually need fixing, so the idea of tinkering around in the warm appeals. This 3599-piece Bugatti Chiron kit is complex – it has a fully functioning W16 engine with eight-speed gearbox. I might need to move other Lego off my shelf to accommodate its 22-inch length, though. *£329.99*

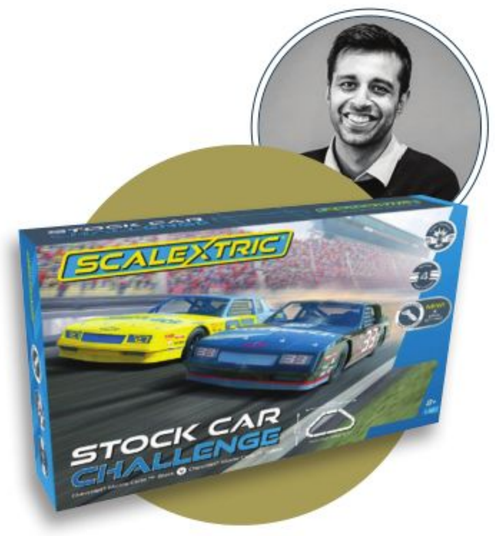
► Eau Rouge art



JOE DUNN

My wife recently decreed that we need to "art up" our house. So my attention is drawn to the fine sculptures of Jonny Ambrose, whose work was on display recently at the Royal Automobile Club in Pall Mall. He works in wood and carbon fibre – and his swooping interpretation of Spa's Eau Rouge is appropriately titled Taming the Beast. *£390*

Scalextric stock car set ◄



SAMARTH KANAL

Daytona International Speedway is more than 4200 miles away from the *Motor Sport* office, so this is the next best thing to attending the 2019 NASCAR season-opener. Scalextric's Stock Car Challenge Set has multiple track layouts and two Chevrolet Monte Carlo stock cars. The liveries pay homage to Dale Earnhardt Sr, which seals the deal for me. *£129.99*

► Stilo composite helmet



JOEL FOTHERGILL

When in need of a new helmet, one often turns to familiar brands Arai or Bell. The only issue with this? Every punter owns one. How can you look the part if you are the same as everyone else? A paint job would help, but for those without a spare £1200 (for helmet and painting), the Stilo ST5F is my choice – speed with style. *£534*



3

Playforever toys

There's something beautifully simplistic and retro about the whole range of Playforever toys. It's the clean, simple, chunky design that's so reminiscent of the Dinky Toys many of us grew up with. The range takes inspiration largely from Formula 1 and sports cars, and there are even the gorgeous (but rather pricey) limited-edition CNC Modena and Roadster models. The more affordable ones are ideal for kids, and are just at home looking cool on the desk of bigger kids. Like us...

From £20 to £6,500 ► *www.playforever.co.uk*



Paul Parker *In Camera*



AVAILABLE NOW!

ALL TITLES AVAILABLE FROM
THE **MOTORSPORT SHOP**

www.behemothpublishing.co.uk

BEHEMOTH PUBLISHING

A CHILD'S CHRISTMAS DREAM COME TRUE

The fabulous Sonic Seven is a fully functioning, petrol-engine sports car designed for children up to twelve years old - a real sports car for kids!

Inspired by the style of a classic open wheeler, it's powered by a superb 160cc* power unit and built with an emphasis on total safety. It's also designed and built here in the UK.

For more information and to get your Sonic 7 in time for Christmas contact us now.



*can be speed restricted to 4mph

SONIC7CARS

REAL SPORTS CARS FOR KIDS

Tel: 01455 822 686
Email: info@soniccars.co.uk
www.soniccars.co.uk

@cars_sonic soniccarsuk @SonicCarsUK

THE ULTIMATE EXPERIENCE

FLY A SPITFIRE

FLY A SPITFIRE BIGGIN HILL

QUOTE MS150
FOR £150 OFF
Any
SPITFIRE FLIGHT

CAA-approved two-seat Spitfire flights from **£2750** at the historic RAF Biggin Hill Airfield.

★ FREE VIDEO OF YOUR FLIGHT
TRIP ADVISOR CERTIFICATE OF EXCELLENCE ★

THE UK'S LARGEST SPITFIRE FLIGHT OPERATOR

TAKE THE CONTROLS OF OUR COMBAT VETERAN SPITFIRE

FLY ALONGSIDE UPGRADE OPTIONS FOR GUESTS

www.flyaspitfire.com | 01959 576 767

4

Speed Birds

This charming tale of a crew of crows attempting to go faster than any bird has ever gone before by building a racing car is a truly lovely children's book. Written and illustrated by author Alan Snow, the print quality is fantastic, with metallic textures and imaginative illustrations about how cars come together and operate – so there's added educational value, too.

£14.99 ▶ *www.shop.motorsportmagazine.com*



5



Super Veloce Flat Six coffee machine

Porsche super-fan and your current, standard coffee maker simply not cutting it? Well, South African company Super Veloce has a flat-out solution to bring a mighty dose of the Stuttgart marque to your morning espresso.

The firm's new Flat Six model is designed to emulate the engine used in the 993 GT2 Cup car from the mid-1990s, the last to feature the legendary air-cooled unit. However, instead of a 3.6-litre displacement and emissions of both glorious noise and about 500bhp, this scaled-down unit emits high quality hot beverages from capsules.

It's crafted from a mixture of stainless steel and carbon fibre, and customers can even choose their own colours for cam covers, assembly struts and throttle bodies to add that extra personal touch.

Super Veloce was formed to market a whole range of engine-inspired art and coffee machines, and its other models range from retro Formula 1 V8s, V10s and V12s to miniaturised jet engines.

Fittingly, only 993 examples of the Flat Six machine will be made and pricing is by enquiry only. However, with some of the company's other machines retailing around the £10,000 mark, it's certainly aimed towards the top end of the market and unlikely to come cheap.

£POA ▶ *www.superveloce.co*

THE DRIVERS SOCIETY
TDS
TM

Les Leston Steering Wheel Cufflinks



Reproduced based on 1950's design.
Meticulously hand-crafted in antiqued brass.

■

Give A Unique Gift This Christmas

Visit
www.TheDriversSociety.com

For more information contact us at
info@thedriverssociety.com

A CHILD'S CHRISTMAS DREAM COME TRUE

Safety comes first; so all Sonic Seven cars have 4-point safety harnesses rather than standard seat belts.

All engine and moving parts are fully enclosed making them safely stowed away and safe whilst in operation



*can be speed restricted to 4mph

SONIC7CARS

REAL SPORTS CARS FOR KIDS

Tel: 01455 822 686
Email: info@soniccars.co.uk
www.soniccars.co.uk

@cars_sonic soniccarsuk @SonicCarsUK

REARGUARDS
BUMPER TOP PAINT PROTECTORS

Possibly the most practical accessory you can fit to your vehicle

A practical, simple and stylish solution that hides old paint scratches and prevents new ones

- Over **750** applications
- Vehicle specific design
- Easy DIY fit in 10 minutes with simple step by step fitting instructions included
- **Choice of 4 colour options:**
  - **Black** • **Brushed Alloy Look**
  - **Carbon Look** • **Silver**

To order, enquire or request a brochure please call, email or visit our website:

01525 853888
sales@rgmouldings.com
www.rearguards.co.uk

Designed and manufactured in the UK

RGM
Richard Grant Mouldings Limited
Units K4/K5, Cherrycourt Way, Stanbridge Road, Leighton Buzzard, Beds, LU7 4UH, England

Trade and export enquiries welcome

all I want for Christmas ...

meandmycar
inspired gifts

www.meandmycar.co.uk
order line 01865 883061
or find us in the MotorSport Shop

Be part of the World's most exclusive race meeting



JOIN THE GRRC FELLOWSHIP

Being able to buy tickets to the GRRC-only Members' Meeting is just one of the many benefits available to the Fellowship.

6-7 APRIL 2019

For more information visit **goodwood.com/77MM**

77TH GOODWOOD MEMBERS' MEETING

ANDREW FRANKEL GETS BEHIND THE WHEEL OF THIS MONTH'S BEST NEW CARS

ROAD TESTS

THIS MONTH *LAMBORGHINI URUS • BMW M2 COMPETITION • SUZUKI JIMNY*

Incredible hulk

There are many proven VW bits underpinning the new Urus SUV, but the badge says 'Lamborghini' and its performance reflects that heritage

There was a time when kipper ties and flares were all the rage. I know, because I'm related to people who used to wear them. Looking back now at what then seemed entirely normal and you have to stifle the laughs. But that's what the best-dressed, coolest of cats used to wear.

Today, in the automotive sphere, there's a new fashion and it's the hottest ticket in town. It's the super SUV, where everything is enormous, weighs comfortably more than two tonnes, produces unspeakable amounts of horsepower and does speeds you'd have needed a supercar to reach only a few years ago. Bentley and Rolls-Royce have theirs, Ferrari's and Aston Martin's are in the pipeline. But now we have Lamborghini's offering, the Urus. I sense these manufacturers already suspect such cars may have a limited time on earth – hence the rush to market – but for now and for them the temptation is simply too high.



Lamborghini's new Urus super SUV is both striking and incredibly powerful, but is it fun to drive? Not really...

For a car manufacturer, the super SUV offers a kind of automotive nirvana: big volumes by their standards (the Urus is set to sell at least as well as all other Lamborghinis put together), combined with the massive margins derived from using extant architectures, in this case that of the VW Touareg, Audi's Q7 & 8 and the Bentley Bentayga.

And with 641bhp, a 0-62mph time of 3.5sec and a 190mph top speed, it is the most powerful, fastest accelerating and quickest seen to date. After all, this is a Lamborghini we're talking about. At 2197kg it is of course stupendously heavy by normal standards, but in a category that seems out of step with the direction in which the rest of the developed world is going, it's genuinely light: lighter than the Bentley, way lighter than the Roller, lighter even than a Porsche Cayenne Turbo.

Lamborghini has also done a far better job with the Urus's appearance than its blue-blooded British rivals. The best you can say about the Bentayga is that at least it looks fairly anonymous, which is the last thing you'd say about the Cullinan. How the team that did the gorgeous Ghost and Wraith could have got it so spectacularly wrong eludes me, but Lamborghini has shown that a supercar manufacturer can do an SUV that's visually true to the brand without descending into self-parody. Of course the Urus is wildly ostentatious, but which Lamborghini was ever anything else?

And you can see how hard the engineers have tried to make it drive like a Lamborghini. But its mass, height and turbocharged engine take it so far away from the marque's traditional territory that they've only made it part of the way back. Raw pace they can do: by winding up the VW Group's twin turbo V8 motor further than it's gone before without a hybrid attached, the Urus flings itself down the road like no other SUV in history. Some have sought to draw comparisons to that other Lamborghini SUV, the LM002, but I suspect none of them has driven both. After its size and ugliness, my abiding memory of the LM002 was how slow it was. No one is ever going to say that about the Urus.

It has so much torque it can easily spin all four wheels on dry Tarmac. When it grips it can make grown men in the passenger seat yelp. The noise is entirely manufactured and not in the least Lamborghini-like, but it is thunderous and stirring, appropriate to the surroundings. All I didn't like was the gearbox's extreme eagerness always to be looking for a lower ratio when the engine's performance is called upon: this is a car with 626lb ft of torque after all, so why not use it?

The Urus is pretty remarkable through corners too, given the physics of the thing. As you can imagine, all the electronic aids have been thrown at it, from active roll bars and differentials to adaptive damping and electronic torque vectoring, but its feel is commendably analogue. Lamborghini makes much of its rear bias torque split, but I dread to think what you'd need to do to it to persuade it to oversteer on the public road. Content yourself with the fact that it can

FACTFILE

Lamborghini Urus

Price **£159,925** ***Engine*** **4.0 litres, 8 cylinders, turbocharged** ***Power*** **641bhp@6000rpm** ***Torque*** **626lb ft@2250rpm** ***Weight*** **2197kg** ***Power to weight*** **292bhp per tonne** ***Transmission*** **eight-speed automatic, four-wheel drive** ***0-60mph*** **3.5sec** ***Top speed*** **190mph** ***Economy*** **23mpg** ***CO_2*** **290g/km**

progress accurately and fluently from place to place absolutely as fast as is sensible to drive a car capable of such momentum, and probably quite a lot faster still.

But is it actually fun to drive? Of course not, or at least not in any conventional sense. None of these cars is (though I've not driven the Cullinan). Anyone anticipating actual steering feel in a car with electrical assistance, well over a tonne sitting on the front axle and a 285-section tyre doing the steering is hoping too much. Communications are uni-directional: you tell it what to do and it does it without the need to refer back. I guess there's a certain entertainment value in seeing how precisely you can guide it and how well you can manage its mass, but the car does so much of that for you, the best you can hope for is a sense of being some kind of ringleader: you're never part of the act itself.

And I don't think Lamborghini has tried hard enough with the interior. Now I'm sure if you spent many additional tens of thousands on extras you could create a more bespoke feel to the cabin, but while the Urus was here, so too was an Audi Q8 costing the thick end of £100,000 less, and there were far too many similarities in their screens and switchgear for the Lambo to feel in any way tailor-made. And is it too much to ask when you lift the bonnet for there not to be VW and Audi logos clearly visible on ancillary components? The illusion that this is a unique product in its own right is fragile enough without you being reminded where it really came from every time you check the oil.

The Urus is a curious car, one that's overwhelmingly more likely to appeal to someone looking to make a statement than enjoy driving the car. Truth is, a Cayenne Turbo is nearly as quick, nearly as good to drive and will leave you with enough change to park a Cayman GTS outside your house too.

But it would be a mistake to dismiss it as just another vulgar, ostentatious wealth statement. In every area from the way it looks to how it goes it's clear that Lamborghini has worked hard to make the most within the architectural limits to which it is confined. I'd far rather drive a Urus down a decent road than any similar car, just as I'd choose to take the Bentley on a long journey.

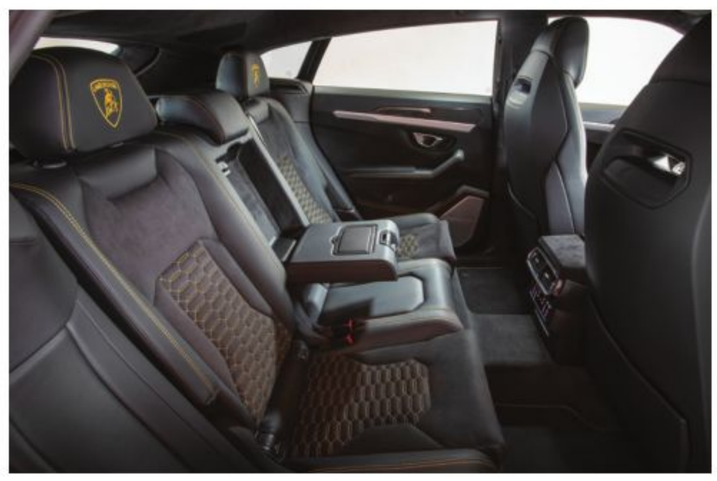
I do think the lifespan for such cars is likely to be limited and there's a large part of me that's not in the least sad about that. But while they are here, and of those I've driven so far, the Urus absolutely has its place and it would be both unfair and foolish to ignore the depth of the engineering it contains.

Then again, just think what would have happened had Lamborghini applied all that thought and talent not to an SUV but a low-slung four-seater sports car. Taking the Panamera as its base, it could have come in under two tonnes, looked more spectacular and been wildly better to drive. A new Espada, no less. Perhaps when the monster SUVs have fallen from grace as they surely will. M









"It would be both unfair and foolish to ignore the depth of the engineering the Urus contains"

Off-road racer

Think the standard Urus is over the top? Meet the ST-X Concept: the world's most powerful racing SUV.

Purists will scoff, but Lamborghini is planning a one-make series for its two-ton leviathan, which will complement its existing Huracán Super Trofeo events. The new series will combine both track and off-road events in Europe and the Middle East, with the first race taking place in 2019.

The race version of the Urus complies with FIA safety regulations – it features a roll cage, racing fuel tank and fire extinguishers. It also boasts larger air intakes to help cool the twin-turbo V8, plus it's sprouted a rear wing and carbon bonnet. Perhaps most significantly it will be 25 per cent lighter than the road car.

Lamborghini has yet to announce the cost of entering the championship, but it will be an arrive-and-drive affair with the cost of travel and team support included in the price of the vehicle. Not cheap, in other words.





Manners from heaven

The M2 Competition maintains BMW's recent run of exquisite sports saloons







Subtly, perhaps slowly but absolutely surely, BMW's M-division is emerging from the lowest period in is history, at least so far as the excellence or otherwise of its product is concerned. We saw it with the M2 then, at the other end of the scale, again with the still-new M5. And now, before it gets around to addressing the ones that really matter - the M3 and M4 - it's had another crack at the M2.

This one is called the M2 Competition but, confusingly, it comes instead of rather than being additional to the standard M2. It has a very slightly detuned version of the M3's twin-turbo six in place of the old M2's single turbo. There's an electronically controlled limited-slip differential and changes to the steering, suspension and brakes. A fairly straightforward upgrade then? Yes, and no.

Yes, insofar as there are no trick materials here, no rabbits to pull from hats. It has more power, more grip and looks varied only to allow more air into the engine bay to help cool the harder-working motor. The choice of two or three pedals remains. And yet...

The results are outstanding, far better than the sum of these modifications might suggest. The engine, exhaling through new exhausts, sounds magnificent and is almost entirely lag-free. It positively lobs the M2 Competition down the road, at least until you get to a corner. Where it is even better. The only cars you can buy for this kind of money that handle this well are the Porsche 718 Cayman and Alpine A110, and if you need to carry more than two people in either of those, you're stuffed.

No, this new M2 doesn't feel like a mid-engined car to drive, but what it lacks in terms of outright agility it more than makes up for with its ability to indulge the driver's every whim. On the road it is beautifully precise and expertly damped, while on the track - and if you are so minded - it will drift like a MkII Escort, with that level of controllability. If this is how you enjoy your motoring, it is absolutely the best thing out there.

And if it's not there's still nothing I'd rather have for this money, if practicality is any consideration at all. For all its modifications and ambitious naming, the M2 Competition would be lovely every day - quiet, comfortable and fully connected to the outside world. The boot is big, the rear cabin big enough for more than occasional use.

Every time I write about a new M car at the moment I seem to say it's my favourite of the current generation, which says much about the way BMW is at last focusing more on how the car drives in reality than how it appears on paper. What's more there's an all-new 3-series about to go on sale, providing the opportunity for BMW's M-division to apply its rediscovered talents to a car starting from scratch. We'll probably not see a new M3 until 2020, but if all it does is maintain the current rate of improvement, it will be worth the wait.

FACTFILE

BMW M2 Competition

Price **£49,285** ***Engine*** **3.0 litres, 6 cylinders, turbocharged** ***Power*** **404bhp@5250rpm** ***Torque*** **405lb ft@2350rpm** ***Weight*** **1625kg** ***Power to weight*** **249bhp per tonne** ***Transmission*** **six-speed manual, rear-wheel drive** ***0-62mph*** **4.4sec** ***Top speed*** **137mph** ***Economy*** **30.7mpg** ***CO_2*** **227g/km**



race retro

INTERNATIONAL HISTORIC MOTORSPORT SHOW

22–24 FEB 2019
STONELEIGH PARK

POWERED BY MotorSport

EUROPE'S #1 HISTORIC MOTORSPORT SHOW

ICONIC RACING CARS | LIVE RALLY ACTION | SPECIALIST EXHIBITORS | MOTORSPORT LEGENDS

Over 350 stunning racing & rally cars on display | 250 specialist exhibitors, race series, clubs & autojumble
Motor Sport Live Stage with racing legends | Silverstone Auctions competition & classic car sale
Motor Sport Hall of Fame Live! | Live Rally Stage with Group B cars | Race Retro Tour
Race License Medicals | Driver & Navigator introduction training
Arrive & Drive a Classic Car Experience operated by HERO Events | Historic Karting

BOOK TICKETS TODAY AND SAVE UP TO 20%*

RACERETRO.COM QUOTE: RR19MS1

*Discount is based off on the door ticket prices. The discount is pre-applied to the ticket prices on the website. The code above is for marketing purposes only. To book by phone please call 0871 297 0743. Calls cost 13ppm plus standard network charges. All bookings are subject to a single transaction fee of £1.95. Entry to the auction requires purchase of a catalogue. See website for all information. All information correct at time of publishing.

Official Show Partners

HERO | SILVERSTONE AUCTIONS | HISTORIC RACING Technology | STRAIGHT EIGHT LOGISTICS | CLARION EVENTS

Limited addition

Suzuki has finally pensioned off the old Jimny, but its replacement falls short







Suzuki might be pleased to know I have already sold a new Jimny for them. I have an old friend who's lived with a Land Rover Defender in central London for many years, but now her kids are grown and its diesel engine makes it increasingly expensive to run, so she wants something smaller yet no less distinctive. For her there is nothing on earth that will suit her purpose better than a Jimny.

Likewise, were a local farmer to ask what new car he or she should buy for running around the fields with occasional trips to the local town, something that will last for a dozen years and likely never go wrong, once more the Jimny makes an unanswerable case for itself. Off-road it should be incredible, too.

But these are the poles and my problem with the car is that it needlessly ignores the rest of us in between, making it an almost wilfully niche product when its appeal could have been so much broader, without harming its charm to the smallest degree.

I'll explain. As you can see, the Jimny looks great - a cute and characterful face in an age of soap-dish design. It's shamelessly retro but doesn't try to bathe in some long-forgotten glory, instead simply following the lead of the car it directly replaces, which has been on the market for 20 years. I have no problem with that, nor that it still sits on a ladder chassis with a live rear axle, at least in theory. I don't mind that there's precious little room in the back in the boot. Actually, unless you fold the rear seats, it barely has a boot. I could even construct a case defending the cheap scratchy plastics and exposed screw heads that make up much of the interior.

But there is no case I can see for its crude, noisy, thirsty and gutless 1.5-litre petrol engine or, indeed, its obstructive gearbox and pointlessly short fifth gear. Together this powertrain ensures you're never going to want to go far in it, relegating the car's role to that of town hack, farm workhorse or short-distance recreation. The ride is pretty terrible, too, even given its primitive suspension.

What irks is that Suzuki already has the perfect engine for the car, a 1-litre turbo triple with not only far more power, but much more torque at half the revs. I am sure it would be wildly more refined, use far less fuel and offer better performance both on and off the road. With a lengthened fifth gear and a bit more attention paid to the damping, the Jimny could become a deliciously unconventional but entirely viable everyday alternative.

Do not mistake me: I love simple, honest, iconoclastic cars like this and wish there were more of them, but if you're going to do retro, the trick is to use the progress made over time to retain all the charm and ability of the old car within a package that means it can be enjoyed by more people for more reasons, and for more of the time. It is a point Mercedes-Benz got completely when building its new G-wagon and one the Jimny misses. Which way will the new Land Rover Defender go?

FACTFILE

Suzuki Jimny

Price **£17,000 (est)** ***Engine*** **1.5 litres, 4 cylinders** ***Power*** **101bhp@6000rpm** ***Torque*** **95lb ft@4000rpm** ***Weight*** **1090kg** ***Power to weight*** **93bhp per tonne** ***Transmission*** **five-speed manual, four-wheel drive** ***0-62mph*** **12sec** ***Top speed*** **90mph (est)** ***Economy*** **35.8mpg** ***CO_2*** **178g/km**

AUTOSPORT
INTERNATIONAL



THE RACING CAR SHOW

NEC, BIRMINGHAM, UK

10-13 JANUARY 2019

10-11 STRICTLY TRADE-ONLY DAYS

BUY TICKETS NOW

AUTOSPORTINTERNATIONAL.COM

AUTOSPORT INTERNATIONAL IS PART OF: motorsport NETWORK

INCORPORATING PERFORMANCE & TUNING CAR SHOW

williamloughranLtd.



2018 Ferrari 812 Superfast (LHD)



1970 Mercedes 280 SL ‘Pagoda’



1983 Ferrari 512 BBi



2017 Bentley Bentayga W12



2015 Porsche 991 GT3 PDK (LHD)

THE LEADING SPECIALSITS IN SOURCING THE RARE AND UNOBTAINABLE

+44 (0) 1772 613 114 | sales@williamloughran.co.uk | www.williamloughran.co.uk

OVER 50 YEARS EXPERIENCE

BUYING • SELLING • AUCTIONS • RACE & ROAD CAR PROFILES

SPEEDSHOP

THIS MONTH *The viral Discovery powered by an M3 • Porsche's anniversary sale stars • Hofmann's answer to an affordable C-type • A glorious Cooper Monaco*



TOP STORY

Ultimate start-up project

Newton appeared to have bright prospects, but only built three cars... and just one survives

There must be plenty of young chaps around today who would relish the opportunity to be given £12,000 in cash and carte blanche to build a competitive racing car - so imagine how Noel Newton felt back in 1922 when his father, Manchester businessman John Newton of Newton-Bennett shock absorbers, presented him with exactly that proposition.

Not only did Newton Jr have the equivalent of £500,000 in today's money at his disposal, he was also sent on an adventure to Milan to spend it with competition car designer Olivio Pellegatti, the goal being to create a car that would compete in the Brooklands 200-mile races during the following two seasons.

The thinking behind the project was to beat the small-capacity racers then being fielded by marques such as Austin, Alvis and Wolseley, in order to create sufficient attention to make it viable to produce a road-going Newton that could be sold to the general public.

Young Newton duly set about his task, working with Pellegatti to design and build the gorgeous-looking voiturette seen here. Featuring a complex twin-cam, four-cylinder 1100cc engine punching out about 70bhp, a mid-mounted gearbox, a light-gauge chassis and streamlined body, the car had an all-up weight of little more than 450 kilos and bags of potential to show a clean pair of heels to the competition.

Three Newtons are believed to have been completed - two racers and a road-going saloon - but neither of the former ever raced in period and the latter never made it into

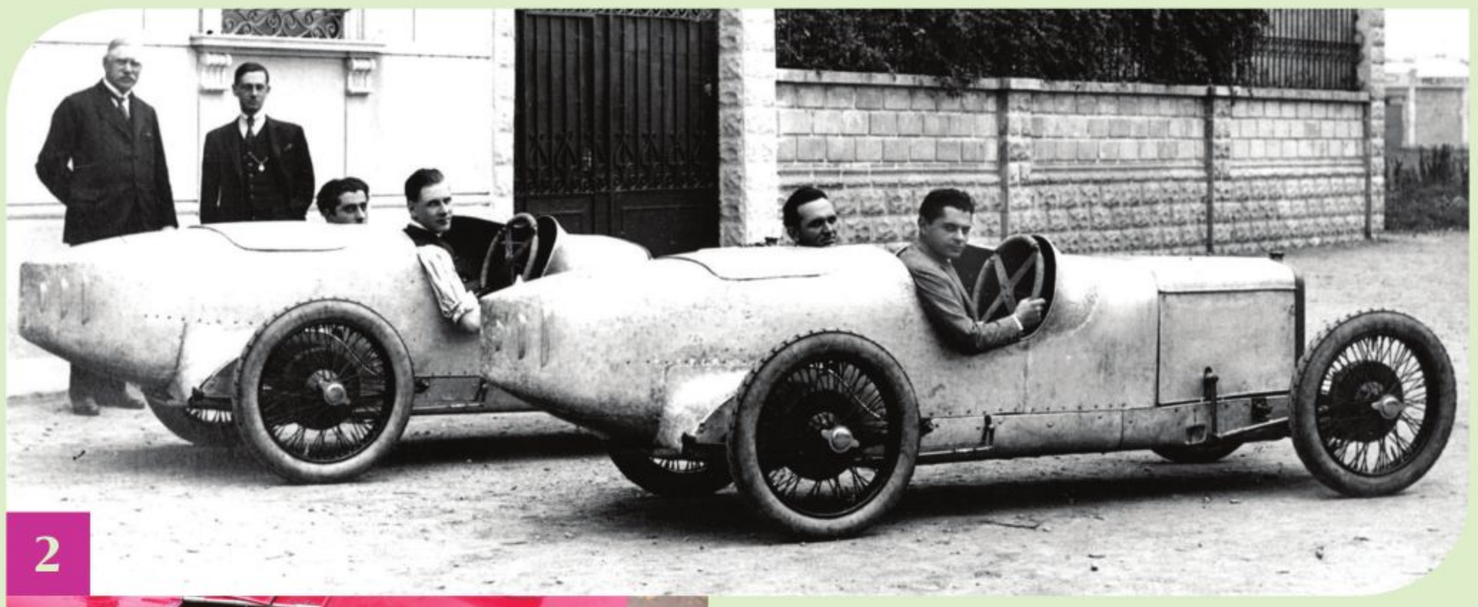
production because, in all likelihood, Newton senior pulled the financial plug on the project.

The car now being offered by Robert Glover is the sole survivor, and comes with an ownership history that begins circa 1925 when it was sold to Sydney Cummings, whose daughter Ivy became famous for being the youngest person ever to lap the Brooklands circuit (aged just 12) before going on to become a successful racing driver.

By 1927, the Newton had changed hands a further three times and took part in the Southport beach races in the hands of then-owner Henry Longden-Ollier, who later



1



2



3

(1) This Newton is the sole surviving example from the marque (2) A family project with big financial backing, Newton never really got off the ground (3) An original Newton engine was sourced and fitted to the car

gifted it to his workshop manager. Subsequently it ended up in a Manchester warehouse, where it remained until the early 1960s before being bought in a complete, albeit sorry, state by Nick Sloan, a fan of the Ceirano marque for which John Newton had been the UK importer.

Sloan returned the Newton to running order, later selling it to VSCC stalwart Geoff Hare, who treated it to a thorough restoration having, remarkably, discovered a spare Newton engine that was rebuilt and is still fitted to the car.

Since the project's completion almost 25 years ago, the Newton has taken part in a wealth of competitive events and has been owned and raced for the past decade by the enthusiastic VSCC member, who has now consigned it for sale with Robert Glover.

So, if rare racing cars are your thing and you have £325,000 to spare, the Newton is surely worth a look - even if the resulting owners' club meetings will inevitably be rather lonely affairs.

www.robertglover-ltd.com

In the market for an automotive rarity?

There are very few sole survivors like the Newton, but scarcity is worth looking for



1951 Aston Martin DB2 DHC

£POA

The DB2 is a rarity in itself – just the first 49 featured the three-piece grille. This is one of just 10 DHC cars.

www.nicholasmee.co.uk



1933 Bentley 3½ Sports Saloon

£POA

The first Derby Bentley registered – and one of two factory-owned examples used as press demonstrators

www.graemehunt.com



1961 Lagonda Rapide

£225,000

One of 55 such cars – and set apart because Aston Martin boss Sir David Brown used it as personal transport

www.dylan-miles.com



2001 BMW Z3M Coupé

£49,985

BMW's answer to criticism of the base Z3's subdued performance. One of 168 rhd examples with a 325bhp engine

www.dhrofgo.com

Anyone who appreciates a good Q car is unlikely to be able to resist this jaw-dropping 1999 Land Rover Discovery that, from the outside (save for the gaudy red mudflaps and a hint of crimson roll cage) looks like a perfectly ordinary example of the breed.

Take a closer look, however, and it soon becomes apparent that it is anything but – because it's powered by a front mid-mounted engine from a BMW E36 M3 that's tuned to produce about 350bhp. It drives via a modified TD5 five-speed gearbox and the front viscous coupling of a Porsche 911 C4S – meaning the Disco's standard four-wheel-drive set-up is maintained, but never less than 60 per cent of the available power is used to drive the rear wheels. The powertrain, however, represents only the start of the remarkable range of modifications that were part of the five-year build.



Remarkable Discovery

Land Rover on the outside, BMW M3 within

The chassis and bodywork has been extensively lightened to reduce the weight by almost a ton, the front calipers have been upgraded to Brembo units from a BMW 750iL, there's a race-spec twin-plate paddle clutch, limited-slip differentials front and rear and a bespoke aluminium fuel tank.

This car was put together by Ollie Maxwell, who developed it in response to a bet from a friend who said it wouldn't be possible to turn such a car into a viable racing machine – but Maxwell very decisively proved him wrong.

Although built to meet the requirements of both Comp Safari and rallying (it has a full MSA logbook), Maxwell insists that the Discovery has impeccable road manners and can be driven on long or short journeys – although it's geared for maximum acceleration, so top speed is 'only' about 105mph. It's up for an absurdly reasonable £16,000.

DEALING



HOFMANN'S

Oxfordshire supercar dealer, home of the Proteus C-type

Is there anyone out there who loves historic racing and would not love to own a Jaguar C-type? I doubt it – but the staggering value of an original is almost invariably the preventative factor, not least since Bonhams sold one for £5.7m at its Monaco sale in 2016.

If you're not too hung up on having an original C-type there are plenty of recreations to choose from on the market. But it's probably fair to say that there are few, if any, to better the reimagined C-types that emerge from the workshops of Proteus, which is based in Henley-on-Thames, Oxfordshire.

Originally founded in 1983 by architect Jim Marland, Proteus was initially located in Bolton before being bought a decade ago by engineer and Jaguar enthusiast Nigel Forsyth. Following his death last year, the company now belongs to new owners who really want to push this 'classic meets clever' car to a bigger market. The Proteus C-type uses the latest in Superform technology to create its aluminium body, coupled with late-model, fuel-injected XK engines that are rebuilt from the bottom up using brand new components, the cars get bespoke ECUs, fly-by-wire throttles and silky five-speed gearboxes that make them entirely practical for modern roads in a way that an original C-type certainly is not.

Add to that the availability of bespoke finishes for trim and paint colour, plus the potential for a wealth of performance upgrades, and the appeal of paying a fortune for originality suddenly starts to dwindle. Even more so when you realise that a new Proteus can be had for around £200,000 and comes with a full year's warranty.

www.proteuscars.co.uk



2016 Proteus C-type
£150,000
Served as the Hofmann's demonstrator. It's fully loaded with Brooklands screens, leather bonnet straps, an aero filler and Moto-Lita steering wheel. It's as good as new, too, having clocked just 750 miles.



1996 GTD GT40 Replica
£82,500
Having started out as UK agent for the KVA GT40 replica, GTD developed its own version in the 1990s. Just 15,500 miles from new in the hands of two owners. With a small-block Ford V8.



1996 Bentley Arnage T500
£38,250
This rare version of the Arnage was souped-up by Mulliner to so-called 'sports combination level two', which endows it with 493bhp and 738lb ft of torque. It has covered fewer than 40,000 miles.

Porsche parade

Porsche's 70th year capped by one-make sale while buyers are drawn to brawn in Chicago

RM Sotheby's one-make Porsche sale celebrated the marque's 70th anniversary with a number of unique lots. Project Gold's proceeds went to charity, but it was a rare Paris-Dakar 959 that took the headlines, while a number of covetable 356s attracted a lot of attention at the Porsche Experience Centre in Atlanta, Georgia.

Mecum focused on an eclectic mix of muscle and European exotics at its Chicago sale, and it was all big and brash; none of the subtlety and finery of Artcurial's final automobile sale of the year in Paris.

The pioneering spirit of early European motoring was paid apt homage at Bonhams' London to Brighton Sale in London, with one Paris-Madrid runner taking the spoils.



This Porsche 959 Paris-Dakar was part of RM Sotheby's one-make auction that took $25.8 million in sales on October 27. This model was driven by three-time Paris-Dakar winner René Metge in 1985 and is one of seven built – four residing with Porsche. It made $5,945,000, almost doubling its estimate.



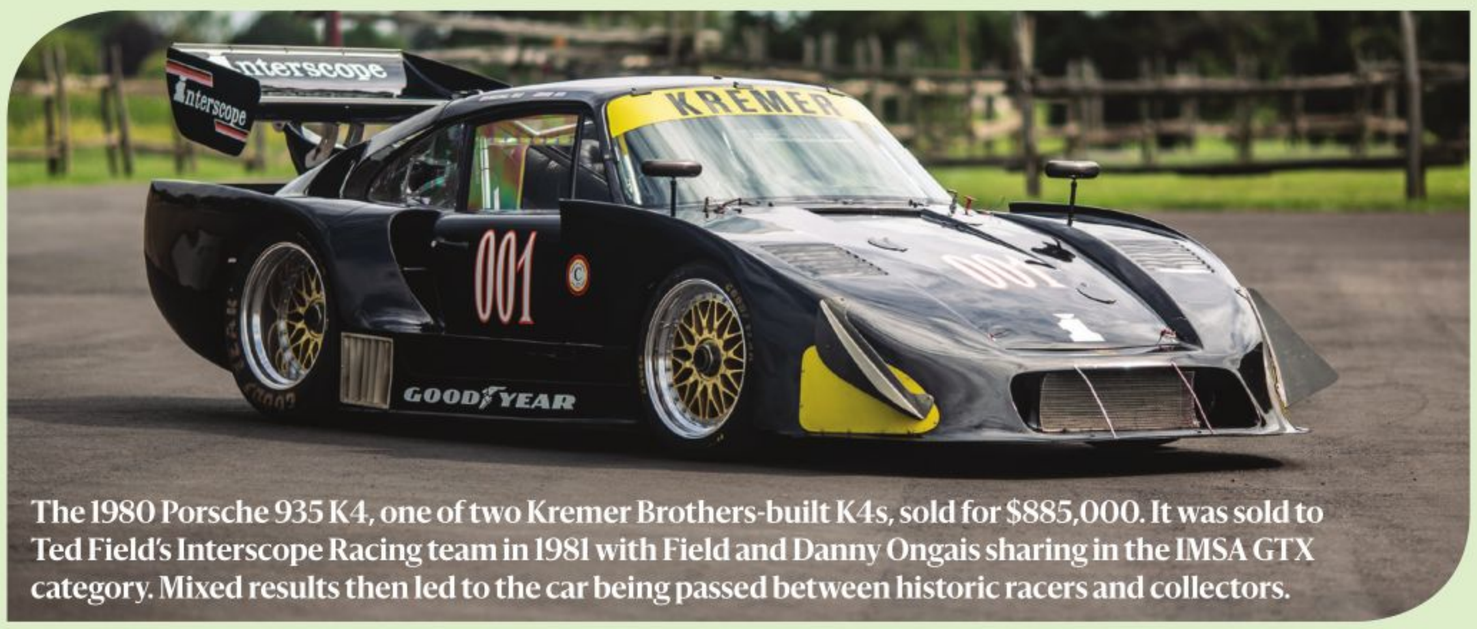
Project Gold is a continuation of the air-cooled Porsche 993, the last rolling off the production line 20 years ago. This one was built in Stuttgart in 2017 and nine bidders did battle in Atlanta. The car eventually sold for $3,415,000, the proceeds going to the Ferry Porsche Foundation.



There were a few Porsche 356s at RM Sotheby's Porsche auction, but one of the most interesting lots was a 356 B engine. Built as a spare and fitted to an Abarth 356 Carrera in the early 1960s, it produced 140bhp. It sold for a staggering $300,000 – more than some 356s themselves fetched in Atlanta.



One of only two of these particular voiturettes known to exist, this 1903 Darracq 24hp Model JJ headlined Bonhams' London to Brighton Run, fetching £599,640 at New Bond Street. A Paris-Madrid veteran, it is hoped that the Darracq will be campaigned on next year's London to Brighton.



The 1980 Porsche 935 K4, one of two Kremer Brothers-built K4s, sold for $885,000. It was sold to Ted Field's Interscope Racing team in 1981 with Field and Danny Ongais sharing in the IMSA GTX category. Mixed results then led to the car being passed between historic racers and collectors.



At Artcurial's Automobiles sur les Champs 14 sale on November 4, this 1957 Mercedes-Benz 300 SL sold for just shy of €1 million. That price tag is owing to its rarity, as one of the first 30 roadsters. It was once owned by the Crown Prince of Morocco, changing hands to a careful owner who kept it since 1973.





A host of American muscle was consigned to Mecum's October sale in Chicago. This 1970 Plymouth Hemi Superbird is a muscle icon with a 425hp Hemi V8 engine and impeccable bodywork. It includes power steering and comforts such as an AM radio. One of just 135, it sold for $280,500.



Mecum's Chicago sale also featured this 2017 Ford Mustang 'Petty's Garage' in a... divisive livery. The 43rd and final model built for Richard Petty's 80th birthday, it has an obscene 825hp and many modifications. It also includes plaques signed by Petty himself on the dashboard and radiator.



AUCTION EXPERT

ALTHOUGH KNOWN FOR the wild and wonderful, the Auto e Moto d'Epoca in Padua left something to be desired this year. And as the official auction of the event, so did Bonhams' Padua sale, especially since my top pick, the 1993 Alfa Romeo 155 GTA Stradale, was pulled from the sale. On the same day as the Padua sale, RM Sotheby's held its Porsche 70th Anniversary in Atlanta. I've always favoured 'one-off' auctions, although they can be a tricky feat to pull off. But RM Sotheby's met the challenge and achieved $25.8m in total sales. The headliner was the 1985 Porsche 959 Paris-Dakar, which sold for a huge $5.945m (see review, left). As one of only two 959 rally cars in private ownership, this was truly a once-in-a-lifetime acquisition. An unexpected result was the 2018 Porsche 911 Turbo Classic Series 'Project Gold', a brand new 1990s 993 Turbo S built by hand at Porsche using new old-stock shell and parts from the Porsche Classic Department, which sold for an eye-watering $3.415m. The proceeds did go to the Ferry Porsche Foundation. It's interesting to note that none of the 911 race cars sold – maybe there was just too much choice?

The main thrust of the sales season might be over, but plenty of things have still caught Max Girardo's eye

Looking to fill the Autumn lull in the calendar, two auction houses made announcements this month. The first was by Artcurial, which revealed during the Auto e Moto d'Epoca that it recently acquired an Alfa Romeo 8C 2900B Touring Berlinetta for its Rétromobile auction. Estimated a €16–22m, this Alfa has been in single-family ownership for the last 42 years and is one of just five bodied by Touring. This will definitely be one to keep your eyes on in the new year. The other was by RM Sotheby's, which made the decision to change the date of its annual London sale from the first week of September to 5 November. No longer competing with Hampton Court, Goodwood Revival and Salon Privé, this could prove to be a strategic move for their sell rate.

On 1 and 3 December, Bonhams will hold two of its annual sales: the Bond Street sale and the Olympia sale. The Bond Street sale is known for it high-worth cars, and its highlights are a couple of impressive Big Cats: a 1993 Jaguar XJ220C (a Le Mans class winner for a short time) and a 1958 Lister Jaguar 'Knobbly', estimated at £2.2–2.8m each. Not to be outdone, RM Sotheby's will claim the last sale of the year with its Petersen Automotive Museum Auction, its headliner car being a 1956 Ferrari 290 MM by Scaglietti, chassis 0628. I was at RM Sotheby's when the last Ferrari 290 MM was sold publicly, chassis 0626, and it was a tremendous experience. The car was an imitable piece of automotive history and sold for $28.05m – a great result! Estimated at $22-26m, chassis 0628 isn't expected to achieve as great a result as its sister car – is this a result of different market conditions or the car's history?

Max Girardo is the founder of classic car specialist Girardo & Co. Before that he spent 20 years in the classic car auction world, where he was the managing director and head auctioneer at RM Sotheby's

Max's top three auction picks



Jaguar XJ220C

I love the story behind this car's 1993 Le Mans 24H debut and win. It'll be interesting to see if anyone's wallet will stretch for this piece of racing history at Bonhams' Bond Street sale.



Lagonda Rapide

Also at Bonhams' Bond Street sale this is a car that I simply love. One of only 25 made and capable of 100 mph, if you're brave, this is a great alternative to a vintage Bentley.



Chevrolet Monte Carlo

When speaking to the Americans in the Drivers' Club at Goodwood, their enthusiasm and passion for these cars and the sport is intoxicating. This will be at RM Sotheby's Petersen.

An August Collection

Artcurial comes up trumps with another remarkable barn find



Calendar

DECEMBER

3 ***Bonhams***
Olympia, London

4 ***COYS***
True Greats, London

6 ***Mecum***
Kansas City, USA

8 ***RM Sotheby's***
Petersen Automotive Museum, USA

Artcurial has developed quite a reputation for unearthing single-owner collections of magnificent vehicles that no one previously knew existed, its finest hour coming in 2014 with the discovery in France of the £20 million 59-car Baillon treasure trove.

Now the firm's specialist Pierre Novikoff has turned up a remarkable motorcycle hoard that for decades has been stored in a disused factory in a secret location 'somewhere near Monaco'. And they're not any old motorcycles either, but MV Agustas. And there are more than 100 of them, making this possibly the biggest private collection of the marque.

Full details were yet to emerge as *Motor Sport* went to press, but Artcurial has revealed that the bikes – ranging from scooters and small-capacity road bikes to exotic multi-cylinder racers – were amassed by a single family over more than 50 years.

Models date back to the founding of MV in 1945, shortly after which the vendor's uncle established an MV garage in Italy and raced MVs in high-profile events including the Motogiro d'Italia (motorcycling's equivalent of the Mille Miglia) and the Milano-Taranto.

The owner began buying long before the rarest reached the six-figure sums of today, acquiring at least one example of almost every production bike, as well as several unique models and a handful of factory prototypes.

Among the highlights and a 750S road bike originally belonging to 1970s F1 driver Arturo Merzario, and one of the ultra-rare prototype 750s used to develop a fuel-injection system.

Most bikes have benefited from restorations by MV engineers and are offered in on-the-button, running condition with authentication certificates from the MV museum.

Estimates range from €3000 for the CSL scooters and 175CS singles to €250,000 for the four-cylinder ex-Merzario 750S. And, to properly book-end the collection, the factory will supply the very last MV Agusta F4 built as an additional lot.

Diamonds are for... charity

The Ford Escort Mk2 has long been a sporting jewel. It made its rally debut in 1975 and remains a familiar sight today at national level, though this one is particularly distinctive. Rally aficionado Russell Lord – a diamond mounter by trade – began building a diamond-encrusted Escort RS1800 25 years ago, though the project was never completed. It was rediscovered three years ago, by his son Rob, and Russell has spent the intervening period completing the car. Weighing just under 1kg, the car is built of gold, silver and platinum and studded with diamonds, sapphires and rubies.

On December 7, bidding for the finished article will start in an on-line auction, via The Market, and proceeds will go directly to a selection of its creator's favourite charities. Estimated price? The Market wonders whether it will beat £203,100 – the current record for any Ford Escort sold at auction.
www.themarket.co.uk



Three auction lots worth watching



BONHAMS ***December 3 London, UK***

One of 11 pre-production homologation Lotus Cortinas, it was delivered new to Alan Mann Racing in 1965 and driven in period by stars like Jackie Stewart, Jacky Ickx and Frank Gardner – but a subsequent registration mix-up rendered it 'missing' for decades. Now verified by Henry Mann, it is offered 90 per cent restored. £80,000-120,000



RM SOTHEBY'S ***December 8 Petersen Museum, Los Angeles***

The term hairdresser's car is usually derogatory – but not in the case of this brutally powerful Porsche 935K that really was bought new by a Heidelberg hairdresser and then sent to the legendary Kremer for a suite of power upgrades, custom body modifications and interior changes. The car is said to have covered just 41,000 miles from new.



GOODING & CO. ***January 18 Scottsdale, USA***

Nostalgic for the days when drag racers competed in road cars? Then you'll appreciate this 1967 Chevrolet Camaro SS. Dave Conner – from the Ohio-based Rod Shop team – raced it with huge success. Known as the 'Batcar', it won many events, including the 1968 NHRA Winternationals, setting a handful of records in the process. Estimate: $250,000-325,000.

TALACREST

THE WORLD'S NUMBER ONE CLASSIC FERRARI DEALER

1984 FERRARI 512 BBi

This stunning Boxer, originally bought and owned by John Collins in 1984 has only covered a little over 21,000 miles since new. It has always been correctly looked after and therefore is in superb condition. Visit our website for more details and history about this fantastic car.



OTHER CLASSIC FERRARI AVAILABLE



1964 Ferrari 250 Lusso



1949 Ferrari 166 Inter Coupe

WWW.TALACREST.COM

+44 (0)1344 308178 | +44 (0)7860 589855 | john@talacrest.com

TALACREST

Ferrari Daytona

A new direction for styling but the same impressive muscle

Price new: *£7000* ***Price now:*** *£575,000*
Rivals: *Lamborghini Miura, Maserati Ghibli, Aston Martin DB6*
Heritage: *Unrivalled racing glory to back pedigree V12 power in stunning Pininfarina clothing*





Don't call it a Daytona. That's what some Ferrari purists will tell you of the Pininfarina-shaped coupé first shown in 1967. It was only ever listed by Maranello as the 365 GTB4, but faced with the firm's confusing capacity-based naming system it's no surprise that the outside world seized on the marque's 1-2-3 victory in a certain American 24-hour race to label the new car 'Daytona'. Not that it was this model that dominated that race - that fell to a trio of prototypes, their mid-engined layout a million miles from this, a svelte, comfortable, long-legged grand tourer.

Visually, Leonardo Fioravanti's crisp design was a new direction for Ferrari coachwork, particularly that chisel nose. Gone were the free-standing or cowled headlamps and prominent radiator grilles of the past, replaced by an angled facet that swept around the corners into long amber indicator panels, with the twinned lamps lurking behind plexiglass covers. Following the fashion of the time there was no visible grille, the cooling stream simply vanishing below the knife-edge prow, while the exterior door handles similarly disappeared into the window surround. It was a triumph, and remains one of the most beautiful cars ever made.

Underneath was less ground-breaking though no less thrilling: a tubular chassis with 60-degree quad-cam V12 in the front, breathing through half a dozen twin Weber carbs and sending its 340bhp to a five-speed transaxle between the rear five-spoke alloy wheels. As a cross-country express it was an instant hit with the beautiful people who could afford it. Records show that production ran only to around 1400 cars, but in Ferrari's business model that was no disaster: no matter the shape or model name, V12 engines and tube chassis continued to be hand-built at Maranello and coachwork at Scaglietti in ever varying combinations. Economies of scale hardly came into it.

Which means that to beauty, performance and pedigree, you can add rarity - particularly for cars with the original covered headlamps rather than the pop-up version forced on the firm in 1971 by American laws.

While no-one at the time wanted to criticise the road manners of a V12 Ferrari which was not intended for racing, revisionists have since hinted at heavy steering and less than sharp responses. It didn't stop customers wanting to enter GT races, and the factory obliged with some 15 lightweight competition cars which scored class wins at Le Mans and even, in 1971, a fifth overall. Eight whole years later a Daytona placed a remarkable second in the 24 Hours of its namesake, confirming race laurels on what some had labelled a mere *boulevardier*.

No such demanding history on the files of the car shown here, though, currently with Mark Donaldson. Delivered new to Australia and thus RHD, the car has been sparingly used and remarkably retains the paperwork that came with it, even to the radio guarantee card. If as some say cars qualify as works of art, this is an example you could gaze at forever.



SPEAKING TO MARK DONALDSON

Classic racer and MD of Mark Donaldson Sports & Competition Cars

This really is one of the best. It has 26,000 miles showing which we believe to be original, and it's a right-hand-drive plexiglass car – highly desirable. We reckon only around 50 RHD plexiglass cars were produced. Some were converted to pop-up lights because that was the new thing then, but this is as Pininfarina intended. It was Classiche-certified at DK Engineering, had a fantastic paint job in 2017 and Rob O'Rourke gave it a new interior in the correct leather. The attention to detail is exceptional, and it drives really well, though you'll hear different opinions of Daytonas depending on who you speak to but they sound glorious. The service books are still with it, too, and the toolkit. That's rare.

THE MARKET

Online Classic Car Auctions

NO BUYERS FEES

SELLERS RECEIVE 95%

The most comprehensive and transparent listings

Reaching thousands of potential buyers

Returning the most money to sellers

Find out more at themarket.co.uk







- Buyers pay what they bid, sellers pay only 5% (incl. VAT)
- All cars are advertised on carandclassic, eBay, Pistonheads & more...
- ...plus sent to tens of thousands on our weekly email and social media
- No sniping, auctions extend if bids are made in the final stages
- Continuous online auction with new listings every week, all with unlimited text, photos and videos
- Optional Concierge service where we store and photograph your vehicle for auction

Brought to you by Patina, the vehicle history platform trusted by tens of thousands of classic car owners

To buy or sell your next classic car or motorcycle visit **themarket.co.uk**

6 Station Yard, Abingdon, Oxfordshire, United Kingdon, OX13 6RX • +44 (0) 1865 521 088

CLASSIC & SPORTS FINANCE
– EST 1999 –

Footman James
We share your passion

TRUSTPILOT
★★★★★

Cooper Monaco

A Can-Am original inspired by 'back to front' Grand Prix success

Price new: *$12,000* ***Price now:*** *$375,000* ***Rivals:*** *Lotus 19 & 30, Chaparral 2, McLaren M1A* ***Heritage:*** *part of the mid-engined revolution and a trigger for 'anything goes' sports car racing*





When in 1958 John and Charles Cooper sat down with chassis man Owen Maddock to design a new sports car to succeed the Bobtail they envisaged most customers using the ubiquitous Climax engine either side of the 2-litre mark. A massive V8 was not in their collective minds. After all, their motor-behind-driver layout grew from utilising chain-drive from a 500cc bike engine back there. Neither they nor the wider racing world foresaw that American power on British bones would soon produce a new class of racing.

No-one had expected the back-to-front principle to begin winning Grands Prix, yet the small British marque had set the racing world on its head - or rather its tail - with the first mid-engined victories in 1958 so it was the obvious way to develop a sports car.

Cannily utilising as many components from the formula cars as practical and named for Maurice Trintignant's GP victory at the Principality, the Monaco appeared in November 1958. Its tubular frame was able to accept a range of engines and its suspension was broadly borrowed from the Cooper parts shelf, complete with transverse rear leaf spring. Even the single-seater's central rack went in to the nominally two-seat device, and it proved highly successful around Europe in customer hands, a healthy rival to Colin Chapman's and Eric Broadley's offerings.

The Mk2 T57 of 1960 had minor improvements but it was the following year's T61, the third Monaco iteration, that released the metaphorical brakes. With a sturdier frame and the double-wishbone coil-sprung rear suspension of the Lowline F1 cars it was a prime candidate for something many minds were considering on both sides of the Atlantic - inserting eight cylinders of Detroit muscle into a light, lithe chassis. At home Ecurie Ecosse and Eric Broadley were developing V8 coupés, while across the sea Carroll Shelby was looking a more sophisticated home than the Cobra for Ford's V8. Forces were gathering that would lead to the no-holds-barred Group 7 playground of Can-Am.

In 1963 Shelby took a pair of T61 Monacos and installed Ford 289s, the result becoming known as King Cobras. He took a further four in '64 but three others went to the US to receive Chevrolet engines. One of these has happily escaped the common fate of ageing racers, which is to be cruelly updated. It's chassis CM/3/64, currently at Motor Classic & Competition in Bedford Hill, New York. Originally supplied new without engine or transaxle to Jack Brewer of upstate New York, it was fitted with a 327 fuel-injected Chevy and Huffaker transmission and raced with success for many years. All owners are recorded, and there's plenty of period documentation from its career. Fitted with period-correct block and original Hilborn mechanical injection, it also comes with a second 327 with more recent injection system and some spare bodywork should anything awful happen to the body it has carried from new. With a recent race prep under its belt, it's ready to take its place on a range of grids right up to the series that cars like this begat - thunderous, unforgettable Can-Am.



SPEAKING TO NICK SOPRANO

Racer, collector and CEO of Classic Motor & Competition Corp

Jack Brewer raced this car in all the east-coast SCCA and USRRC races - we have pictures, timesheets, lots of documentation. It raced into the mid-80s in vintage events, then was restored in 2007. It's one of the few with all its owners known. I haven't raced it, but I've driven it on the road in vintage rallies - it has lights and a horn - and people flock to it. It's that sort of car. It's early, but can be honed to make it highly competitive. Chevy engines are effective and durable, and Coopers are simple but sturdy. The beauty of this one is it came through unscathed - it has fresh wheels and a few new parts for safety but the majority is original. The brake calipers are dated 1964. It's a piece of history.

WWW.HISTORIKA.COM
INSTAGRAM.COM/HISTORIKA911
FACEBOOK.COM/HISTORIKA911
TWITTER.COM/HISTORIKA911
YOUTUBE.COM/HISTORIKA911
CALL 07836 384 999 OR 07717 212 911



PHOTOGRAPHY: ROBERT COOPER, RÉMI DARGEGEN

1966 RHD FIA Porsche 911:

A rare early Right Hand Drive Short Wheel Base 911 built at the factory in February 1966 and delivered to AFN Isleworth, London.

One of only two RHD cars to be delivered in Slate Grey that year and 1 of 12 in total.

Undergoing full restoration and FIA race build in house.

Price on Application.

HISTORIKA

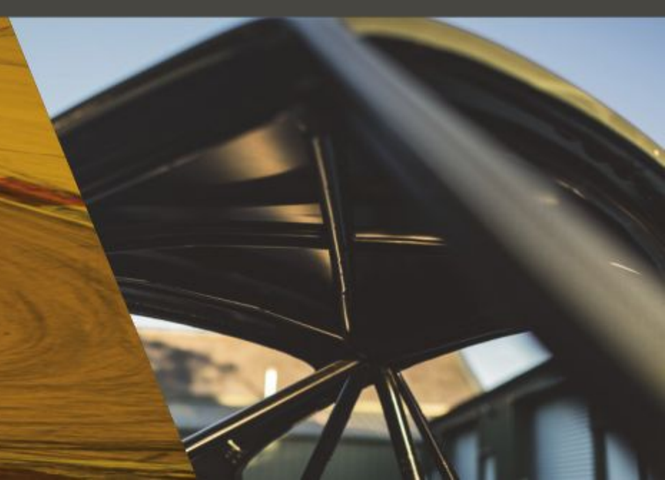
KLASSIK PORSCHE

YESTERDAY'S PORSCHES. PRESERVED FOR TOMORROW. ENJOYED TODAY.

FINE CARS // RESTORATION // RACE PREPARATION // RARE PARTS







Dealer Gallery

To advertise, please call Laura Holloway 020 7349 8479
or email laura.holloway@motorsportmagazine.com

GraemeHunt Ltd

The largest classic car showrooms in central London



1994 Range Rover Classic LSE
1 owner since new & FLRSH



1966 Jaguar E Type
Fully restored by Lynx Engineering



1979 Maserati Khamsin
1 of 2 available



1998 Bentley Brooklands 'R' Mulliner
Number 1 of 100 - 42.000 miles



1962 Jaguar E Type 3.8 Roadster
Fully restored + fuel injection



1961 Aston Martin DB4
GT Zagato spec



1900 De Dion Bouton Vis-a-Vis



1989 Ferrari 412
29.000 miles only



1964 Mercedes Benz 230SL
Fully Restored with 5 speed gearbox etc



1961 Renault 4CV
Original RHD



1965 Mercedes Benz 220SEb Coupe
3 owners only



1933 Derby Bentley
Press Launch Vehicle

www.graemehunt.com

Kensington

+44 (0)20 7937 8487 • mail@graemehunt.com

Battersea

DUNCAN HAMILTON

ROFGO







1967 CHEVROLET CAMARO GROUP 2

Ex-Frank Gardner, SCA Freight, 1971 & 1972 British Saloon Car Championship class winner, with ETCC, USA Trans-Am and Australian Touring Car history. Undoubtedly the fastest car in Peter Auto's HTC or MRL's HTCC, complete with all the period-correct Group 2 engine and suspension modifications, and newly restored. With race-winning International history stretching back to 1967, this is without doubt one of the most significant and eligible racing saloons that will ever be available.

+44 (0) 1256 765000 | dhrofgo.com | sales@dhrofgo.com

OVER 70 YEARS OF SERVICE
DRIVING HERITAGE

TOM HARTLEY JNR

EXQUISITE CLASSIC & PERFORMANCE CARS

A HANDPICKED SELECTION OF OUR CURRENT STOCK



2014 FERRARI LAFERRARI
A total spec example, delivered new to Italy & now UK registered, only 789m from new, recently serviced & complete with all its factory accessories, indistinguishable from new
..... **£POA**



2010 BUGATTI VEYRON
Only 2,000m from new, a UK supplied example that's in totally 'as new' condition throughout, complete with all its factory accessories including its original handbooks, spare key, speed key & car cover, fantastic future potential! ..... **£POA**



2011 FERRARI 599 SA APERTA
Car no. 04 of only 80 examples ever produced, a huge spec car with options that include; water resistant leather, full electric seats, carbon zone with LEDs, many special features, only 625m from new..... **£POA**



2015 PORSCHE 918 SPYDER
1 of only 918 examples ever produced, Liquid Metal Chrome blue, carbon rear wing, mirrors & roof panels, carbon interior pack, Weissach magnesium wheels, 5,000m, huge spec, UK car, as new throughout..... **£POA**



2004 PORSCHE CARRERA GT
Only 2,663m & 1 owner from new, a UK supplied example that's complete with all its factory accessories including dedicated luggage plus its original handbooks, indistinguishable from new, a very special car..... **£POA**



2015 PORSCHE 918 SPYDER
Delivery miles from new, optional extras include stone guard film, fire extinguisher & electric seat height adjustment, complete with all its factory accessories, 1 of only 918 examples ever produced
..... **£POA**



2004 FERRARI 360 SPIDER F1
1 owner car from new until 2017, complete with its original handbooks, only 2,800m from new & fresh from a major service by Graypaul Ferrari, must be the best example available anywhere
..... **£POA**



1994 FERRARI 355 GTS
A very early production example, 1 of only 2 RHDs finished in Blu Swaters, 29,487m with phenomenal service history, complete with its original handbooks & history file, a car that offers great future potential
.....**£POA**



2015 LAND ROVER DEFENDER 90 PICK UP Special order Havana paint, heated Recaro black leather seats, one of the highest spec & most stunning examples you will ever see, only 1,676m & one owner from new
..... **£POA**

Telephone: **+44 (0)1283 761119**

TOM HARTLEY JNR

EXQUISITE CLASSIC & PERFORMANCE CARS

WE ARE ALWAYS LOOKING TO BUY SIMILAR VEHICLES



1973 PORSCHE 911 2.7 RS TOURING

- One of only four finished in Olive
- A matching numbers example
- Totally restored in 2015 by marque experts
- A very early second series car that was ordered new with the optional extras of limited slip differential & electric windows
- A great example finished in one of the most fantastic colours

£POA



1973 PORSCHE 911 2.7 RS TOURING
Supplied to its first owner in Verona, Italy in the April of 1973, 1 of only 160 examples ever produced in Light Ivory, total matching numbers, maintained without regard to cost but always carefully preserving its originality, considered to be one of the very best examples..... **£POA**



1938 DERBY BENTLEY 4 ¼ LITRE FOUR DOOR CABRIOLET
One-off body by Worblaufen, beautifully restored in recent years and previously shown at Pebble Beach and Villa d'Este prior to restoration. One of the finest looking examples and very eligible for all the best events ..... **£POA**



1955 JAGUAR D-TYPE
One of the best production D-types in existence, ex-Richard 'Dickie' Attwood & Frank Gardner, accompanied by an impressive & well documented history file including invoices & correspondence dating back to 1955 .....**£POA**



1970 ASTON MARTIN DB6 MK2 VOLANTE
1 of only 38 examples ever produced, original colours, engine uprated to R.S.W. revered 4.7-litre specification, only 3 owners & 24,000m from new, beautifully presented throughout, exceptional car .....**£POA**

www.tomhartleyjnr.com

william i'anson ltd



THE EX – JIM CLARK, BORDER REIVERS, LE MANS
1955 LISTER-JAGUAR 'FLAT IRON'

"An extremely important, truly historic sports-racing car, and its Clark connection gives it almost iconic status" – Doug Nye. Raced by aces including Roy Salvadori, Archie Scott-Brown and Bruce Halford for Dick Walsh. BHL 5 became the only Lister-Jaguar to ever finish the Le Mans 24 Hours with Halford and Brian Naylor. Then bought by Border Reivers for Jim Clark to campaign in 1959. Multiple winner in the hands of Clark, subject of many a personal account by the World's greatest racing driver, and the car in which he honed so much of his skill.



THE EX – LORD CROSS, MUGELLO WORLD SPORTS CAR CHAMPIONSHIP, FIRST UK & RHD 'COB' COBRA, TWO FAMILY OWNERS
1963 AC COBRA 289

Despatched in 1963 and finished in Vineyard Green, COB 6004 was the first 'COB' UK market, right hand drive AC Cobra 289 produced. Bought by Lord Cross just three months later having had minimal use. Described by the ACOC as one of only six period 'Independently Competition Prepared' AC Cobras. Raced from mid 1964, including at Mugello for the World Sports Car Championship in 1966. Retained for the rest of Lord Cross' life, and then bought back by the son of the first owner. Remaining exquisitely original with complete history file featuring the original buff log book, bills of sale, invoices and competition programmes back to new.

T.+44 (0)1285 831 488 / E. cars@williamianson.com / www.williamianson.com

william i'anson ltd

Collectors' Car Sales • Acquisition Consultancy • Collection Management



THE SEBRING 12 HOURS WINNING
1973 PORSCHE 911 2.8 RSR

Without a doubt one of the most significant Porsche 911 of all time. Run by the legendary Brumos Team and driven to outright victory in the 1973 Sebring 12 Hours by Peter Gregg, Hurley Haywood and David Helmick. Bought following Sebring by Roberto Quintinella to be raced in South America, where it then shared a garage for many years with the equally iconic Martini liveried Targa Florio winner. Highly original with excellent provenance and sympathetically restored by the best names in the business. A once in a lifetime opportunity to own the car that claimed one of the three most important 911 outright wins.



THE EX – JACK SEARS, WILLMENT RACING TEAM,
WINNER OF THE 1963 BRITISH SALOON CAR CHAMPIONSHIP
1963 FORD GALAXIE 500 'R-CODE' LIGHTWEIGHT

The British Saloon Car Championship game changer. Built by Holman & Moody for the Willment Racing Team in the UK to contest the 1963 season. Driven primarily by Jack Sears, who won every race that he finished in the Galaxie on his way to the 1963 title. Also driven for Willment by Sir John Whitmore, Graham Hill, Frank Gardner, Paul Hawkins and Bob Olthoff. Bought by Olthoff in 1965 and used by him to win the South African Saloon Car title. Retained by Olthoff until sold to Jack Sears in 1988 and part of Sears' personal collection for the rest of his life. A time warp and hugely significant landmark of racing history, with history file including the original Holman & Moody invoice to Willment.

GUY NEWTON HISTORIC CARS

Please call or email for further details. Part-exchanges welcomed and courteously considered.

CONTACT
GUY NEWTON +44(0) 777 611 8689
JULIUS THURGOOD +44(0) 785 036 1159

Email: sales@guynewtoncars.com • www.guynewtoncars.com



1969 Porsche 914-6 GT

A four-owner car delivered new to the USA. Factory supplied steel wheel arches fitted from 1970. Restored by Roger Bray in 2004 with bills over £100,000. Fitted with a 2.7RS engine (original engine supplied with the car). Concours winner maintained regardless of cost.

1964 Jaguar E-type Series 1 3.8 Fixed Head Coupe

This wonderful matching number car was first road registered in the UK as 7582WK. Supplied new in LHD it was then exported with this first owner to Hollywood, California. Restored in 2016 to the highest standard. Fast road specification with many sensible drivers upgrades.





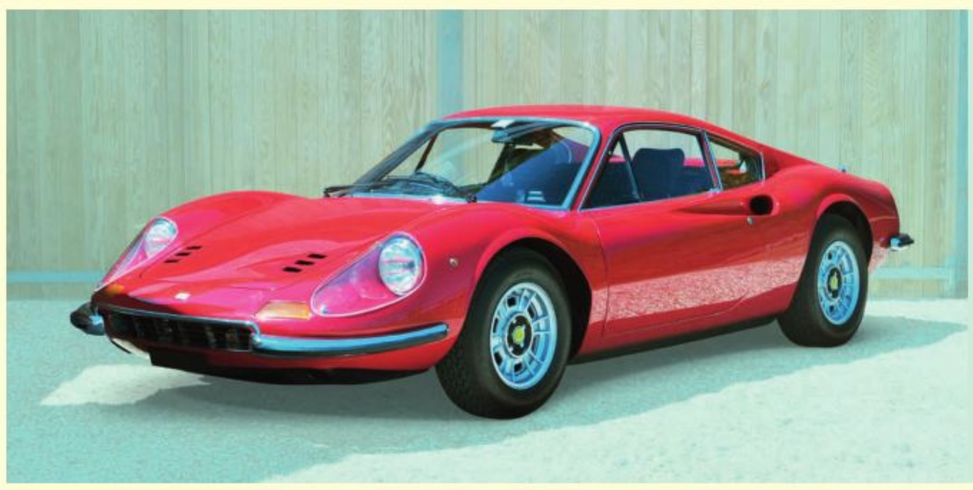
1934 Rolls Royce 20/25 Three Position Drophead by Gurney Nutting

With single ownership for over 40 years this is a wonderfully restored example of arguably the most elegant coachwork to grace a 20/25. Benefiting from a documented cosmetic refresh this year, it would score high on the judges' sheet in International concours d'élégance competition.

1960 Porsche 356 T5 Cabriolet

Original right hand drive example with complete ownership history from new. Subject of a cosmetic restoration in 2017, this stunning example has had its Super 90 engine rebuilt 300 miles ago by Charles Ivey and benefits from a recent service by Roger Bray.





1972 FERRARI DINO 246 GT

This right hand drive example was delivered new to racing driver Phil Scragg and has enjoyed only two subsequent owners since, covering just 31,000 miles in total. Subject of a comprehensive restoration in 2015 which consumed some 369 man-hours, this premium example has travelled just 200 miles since and comes with the desirable Ferrari Classiche.

GTC

WE OWN - AND SELL - THE BEST.



2005 SALEEN S7 R
#0060
. Rare and competitive GT1
. Three victories in the FIA GT Championship
. Eligible in many races such as Masters Endurance Legends, Global Endurance Legends...
. Spare parts



More than 50
cars in stock.

Contact us for more
information:
+33 442 726 199
gtc@guikasgtc.com
www.guikasgtc.com



1976 TOJ SC 304
#SC 304 10 76
Period racing history. Driven by Jorg Obermoser.
Restored to the highest level. Potential winner.

2008 CRAWFORD FERRARI 430
#001
One-off. Made by Crawford composites from a 430 chassis. Ferrari 430 engine. EMCO gearbox. Full body in carbon fiber . Ex team Level-5. Racing history.

453
HORSEPOWER.

4.4 SECONDS*
0–62 MPH.



THE CAMARO V8: BUILT TO BE A LEGEND.

Experience the Camaro V8. The sixth generation of this iconic sports car combines maximum performance, breathtaking design and innovative technologies. The 453 hp (333 kW), 6.2 L V8 engine with 617 Nm of torque makes it the highest-performing Camaro of all time. As Coupe or Cabriolet.

Learn more about the Camaro V8: chevrolet.co.uk/camaro

CORVETTE GRAND SPORT / **FIND NEW ROADS**™

CHEVROLET

*Fuel consumption urban/extra-urban/combined in mpg (l/100 km): 14.9 (19.0)–16.6 (17.0)/31.0 (9.1)–36.7 (7.7)/22.1 (12.8)–25.4 (11.1); CO2 emissions combined: 292–252 g/km (according to [EC] No. 715/2007). Efficiency class: M. Vehicle shown with optional equipment. *Camaro V8 Coupe with 8-speed automatic transmission. Values vary according to specification.*

Arrange a test drive with your Chevrolet Partner:

ian allan Motors

Sandhills Lane, Virginia Water GU25 4BT
01344 842801
www.ianallanmotors.co.uk

DEMO / USED STOCK

Corvette C5 Coupe Auto in Yellow 22,000mls	*£24995*
Corvette Grand Sport Coupe Auto in Admiral Blue - *Huge savings on list price*	*£75995*
Corvette Stingray Coupe Manual in Grey - *Huge savings on list price*	*£59995*
Corvette Stingray Coupe Manual in Black	*£45995*
68/Camaro V8 Coupe Auto in Mosaic Black/Kalahari - *Huge savings on list price*	*£40995*
68/Camaro V8 Coupe Auto in Hyper Blue - *Huge savings on list price*	*£38995*
68/Camaro V8 Coupe Auto in Silver/Adrenaline Red leather - *Huge savings on list price*	*£39995*
68/Camaro V8 Convertible Auto in White - *Huge savings on list price*	*£40995*
Camaro V8 Coupe Auto in Bright Yellow/Black	*£38995*
Camaro V8 Convertible Auto in Red Hot/Adrenaline Red	*£37995*
Camaro V8 Coupe Auto in Arctic Blue/Black	*£38995*
Camaro Turbo Auto in Hyper Blue/Ceramic	*£28995*
Cadillac Escalade Platinum in Abalone White - *Huge savings on list price*	*£77995*
Cadillac Escalade Platinum in Black	*£64995*
Cadillac Escalade Platinum ESV in Grey Metallic - *Huge savings on list price*	*£79995*

NEW CORVETTES & CAMAROS NOW IN STOCK

RMD

Our passion is classic competition cars

1965 FORD GT40 Mk1
Chassis # GT40 P/1027
P.O.A.

- Born as production racing coupé
- The February 1966 Brussels Motor Show car
- MGM camera car used in the making of the film "Grand Prix" driven by 1961 World Champion Phil Hill
- Proven race winning pre-66 (FIA Period F) GT40
- Fully race prepared with current FIA HTP and extensive spares



1969 Lola T70 Mk3B *(HU76/159)*

Built for Lola boss Martin Birrane and owned by him for several years, the launch car of an exclusive batch of six continuation cars built by the Lola factory. Race winning, and immaculately presented T70 with a faultless finishing record. Stunning, fully race prepared with current HTP and good spares.

GBP 395,000



1983 BMW 635 CSi Gp A *(E24-RA1-08)* **GBP 295,000**



1952 Cooper-Bristol (T20/25) Mk1 *(CB/7/52)* **P.O.A.**

We have a wider variety of great cars for sale. Please call or visit our web-site for more information.

www.rmd.be - salesinfo@rmd.be - +32 (0) 475 422 790 - Schoten, Belgium

RJM OFFER



Jaguar XJR 16 – Group C/IMSA

- Both cars are identical and the only 2 produced by Jaguar.
- Chassis numbers 191 and 291.
- Multiple race winners in period and the current Group C Championship.
- Comprehensive spares package with both cars.
- Both cars are fully certified, fuel cells, seat belts, fire systems and crack testing.

For further information contact

RJM Motorsports

Tel. 07785 354477

Email: richardjeyre@yahoo.co.uk

The School Garage
(MARTIN J DALY) Est 1979

A small selection of up to 60 Prestige and Classic Cars in stock.

47 Buxton Road,
Whaley Bridge, High Peak,
Derbyshire SK23 7HX
Telephone 01663 733209
Mobile 07767 617507
www.classiccarshop.co.uk



1987 MERCEDES 300SL W107. Alpine white with full blue leather trim. Excellent spec including blue hood, white hard top, rear seats, air cond, flat face alloy, 93,000 miles with impeccable full service history last owner 17 years. Stunning..... **£34,950**



1968 ROLLS ROYCE MPW 2 DOOR COUPE. Midnight blue with grey leather and Chippendale walnut dash/trim. Superb and original with wonderful history. Very rare like this..... **£POA**



2002 BENTLEY ARNAGE T. Silver Storm with Black leather quilted seats. Massive spec, 43,000 miles only FBSH. Unmarked, all books, tools and documentation. (This is a mint example with perfect history and not auction fodder). Cherished number available. From **£29,950**



2000, FERRARI 550 MARANELLO LHD. Grigio with Bordeaux leather, aircond, alloys, parcel shelf, 11,000 miles only with FFSH. Stunning and original, all books, tools, and documentation. **£99,950**



1971 ASTON MARTIN DBS V8 AUTO Original RHD with matching numbers. Caribbean blue with navy blue leather. Stainless sports exhaust, Air cons, GKN alloys, face off CD. Recent tyres. 61,000 miles only with FSH, and recently serviced by leading specialists. Registration number DBS 1J. Stunning original rust free specimen. (Including desirable registration number)..... **£169,950 inc plate.**



1994 BENTLEY TURBO R. In Wildberry with parchment leather. Usual high spec and 52,000 miles only with fully documented Bentley history from new. One of the best in the UK. Truly stunning example. **£24,950**



1962 CITROEN 2CV VAN. Original Paris built example in concours champion condition. Matching numbers and perfect..... **£29,950**



2008 PORSCHE 997 CARRERA 2 RHD. Basalt black with black leather trim, 6 speed manual, alloys, air con, sat nav. Plus good spec, 54,000 miles with full main dealer history, superb original and unmarked **£34,950**



2000 PORSCHE 996 GT3 MK1. Speed yellow with black leather, aircond, Club sport spec, RS Clutch and flywheel, roll cage, full harness set, short shifter gearbox, 31000 miles only with FPSH. Stunning original example.... **£74,950**



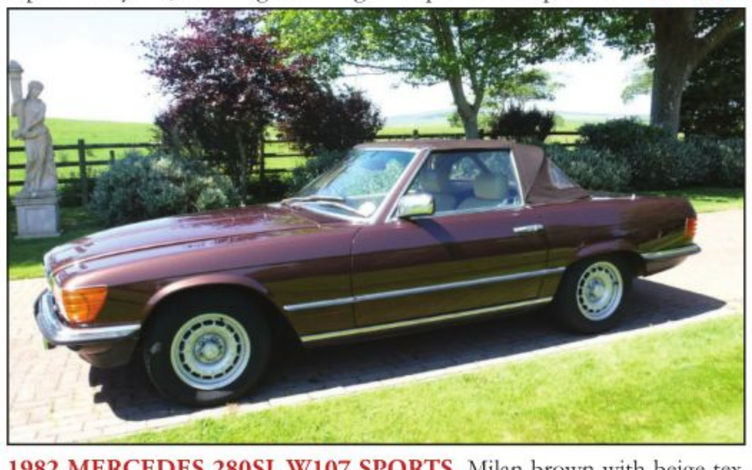
1988 PORSCHE 911 930 TURBO CABRIOLET RHD. Grand Prix white with marine Blue leather and blue mohair power hood. Polished Fuchs alloys, tear drop mirrors, sports exhaust, full Bob Watson porsche upgrades. 30,500 miles with superb history. File, a stunning low mileage example from a Top collection! **£104,950**



1954 JAGUAR XK120 FHC. LHD. Ivory with Tan leather. Lovely original matching numbers example, rust free and driving superbly..... **£79,950**



2015 MERCEDES E 63 AMG. Steel grey with black leather, Panoramic sunroof, black alloys, Plus superb factory spec. One previous owner and 6,800 miles only. Repeat 6,800 miles only with FMBSH As brand new. ... **£39,950**



1982 MERCEDES 280SL W107 SPORTS. Milan brown with beige tex trim. Hard and soft tops. Mexican hat Alloys, and 2 owners with 42000 miles only from new. A mint and original, time warp motorcar..... **£39,950**



1972 MERCEDES 280SE W108. Rare factory floor change manual. Matching numbers RHD example. Original and unrestored time warp car that has covered 11,000 miles only from new. Fully documented provenance. Original hand and service books. Totally unique and unrepeatable...**£39,950**



1967 AUSTIN HEALEY 3000 MK3 PHASE 2. LHD. BRG with black trim and black hood. 2 owners, matching numbers and Heritage Certification. Many concours wins to it name with last owner of over 30 years. The most stunning and correct Healey we have ever seen!... ..... **£64,950**

OSELLI MOTORSPORT

- Race cars for sale
- Built to order to your spec
- Two in progress for 2019
- Storage facilities available



- Race support
- Rolling road tuning
- Ards test support
- Instruction & V box analysis

Arrive and drive race cars for hire



1964 MGB Roadster built to FIA specification and campaigned this year in four events by a novice in the Equipe GTS series..... .....**£37,950**



1959 MGA Twin Cam campaigned throughout Europe over many years, FIA and OTH passports. Currently fitted with 1840cc FIA B series engine but twin cam engine (in bits) available.... **£53,500**



1963 MGB Roadster finished in Iris Blue and has been campaigned by Oselli over the last 5 years in various events including the Equipe GTS. FIA papers (out of date) **£30,000**

Oselli Limited • Unit D3 Greenway Business Park • Winslow Road • Gt Horwood MK17 0NY
Tel: 01993 849610 • Web: www.oselli.com



1961 ALFA ROMEO GIULIETTA SZ



1962 ALFA ROMEO GIULIETTA SZ2



1984 BMW 635 Gpe A



1975 FERRARI 365 GT4 2+2



1967 LOLA T70 MK3



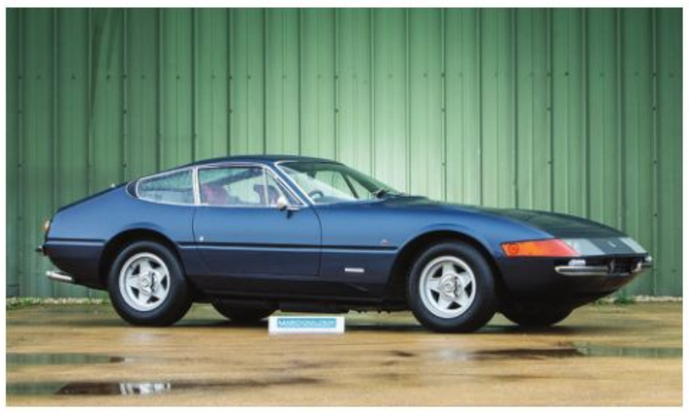
1988 SPICE SE88C

FINE CLASSIC, RACING &
Historic Cars
WWW.HISTORICCARS.FR

Gaël REGENT +33 6 26 48 61 71
Guillaume LE METAYER +33 6 62 11 94 73
cars@historiccars.fr / www.historiccars.fr / Paris showroom by appointment

MARK DONALDSON LTD

SPORTS & COMPETITION CARS OF ALL ERAS



1971 Ferrari 365 GTB/4 Daytona

Rare RHD Plexiglass example, air conditioning from new. Recent bare metal repaint in Metallic Blue Sera and full retrim in burgundy by O'Rourke Coachtrimmers. Classiche certified, matching numbers and complete with books, tools and original keys. Displaying only 26,910 miles. UK registered, truly stunning combination. One of the finest available and priced for today's market.

£575,000 GBP



1986 Ford RS200 Ex-Works Group B

Regarded as one of three works-entered, works sponsored RS200s extant. 1986 World Rally Championship contender driven by Stig Blomqvist. 2012 ground-up restoration by Rally World overseen by RS200 project Chief Engineer John Wheeler. Since completion this important works RS200 has seen regular exercise. Ideal for retrospective events it is now ready for its next custodian.

€550,000 Eur



1977 Lancia Stratos Group 4

Successful period Italian rally history driven by Francesco Ferretti ("Ragastas"). Subject of recent works totalling £67,000, including engine and gearbox rebuilds, electrical and brake overhaul and new fire system. A fabulous example with fine provenance, it is presented in period livery and benefits from UK registration. Freshly issued FIA HTP documentation makes this highly eligible for the 2019 season.

€675,000 Eur

Please visit our website for more information and to subscribe to our newsletter

+44 (0)1252 759009 • www.markdonaldson.com



020 7244 7323
WWW.LONDONMORGAN.CO.UK/LMV6

MORGAN
LONDON MORGAN

MORGAN LMV6
EXCLUSIVELY LIMITED TO 6 CARS
EXCLUSIVELY AVAILABLE
THROUGH LONDON MORGAN



THE RACER

Pit talk from the HRDC

HRDC CLASSIC ALFA CHALLENGE 2019



14 APRIL VSCC SILVERSTONE NATIONAL

2 JUNE THRUXTON HISTORIC FESTIVAL

5 OCTOBER CASTLE COMBE AUTUMN CLASSIC

COMPETITION ENQUIRIES: JULIUS THURGOOD 07850 361159 • direct@juliusthurgood.co.uk • www.hrdc.eu

JOIN THE BEST TEAM IN HISTORIC RACING!

PERCIVAL
motor company

1980 Ferrari 308GT4



£49,995

2008 Jaguar XK60 Special Edition



£22,495

1960 Reliant Sabra, Prototype



£23,995

1964 Rover 3.0 litre Mk11 Coupe



£13,495

1956 MGA Roadster



£34,995

1968 Rover 3500 V8 Series



£12,995

www.percivalmotorco.co.uk

01622 851841

Percival Motor Company, The Old Forge, Pye Corner, Ulcombe, Maidstone, Kent ME171EH

trevorfarrington

CLASSIC, VINTAGE AND COMPETITION CAR RESTORATION AND SALES



2006 Crossle 9S Continuation
The first HTP continuation car built by the Crossle factory. Fitted with an all steel Lotus twin cam and Hewland Mk 5 box. Successful car in excellent condition.
£79,950

1982 Van Diemen RF82
A superb example of the most successful Formula Ford 2000 of its era and the HSCC/URS series. Immaculate throughout with an extensive spares package.
£19,950



Telephone Damon Milnes on 01565 722151 or 07802 779301

www.trevorfarrington.co.uk

sales@trevorfarrington.co.uk

IVAN DUTTON LTD



Bugatti Type 35B

Built from original GP major mechanical components including original chassis, registered on a Bugatti Chassis number not BC.

Please contact us for full specification and price.

Peacehaven Farm, Worminghall Road, Ickford, Bucks, HP189JE

Tel: 01844 339457 • Fax: 01844 338933 • Ten minutes from M40 Junction 8a • www.duttonbugatti.co.uk

Melvyn Rutter Limited

International Morgan Sales, Service, Parts and Restoration for Morgan Cars from 1936 to Present Day

MORGAN
MAIN DEALER



2018 4/4, our high spec demonstrator with only 782 miles, **£44,995**



2017 Morgan 3 wheeler, ours from new, 2,820 miles, **£38,500**



1993 Plus 4, superb, 46,000 miles, **£26,250**



1990 4/4, indigo blue/red leather, **£18,450**

Full details of these cars and others on our web site

Talk to Melvyn about the new Anniversary 110 models with selected no cost options.

3 Wheeler, Plus 4 and Roadster for early delivery

MORGAN HIRE
Both 3 and 4 wheeler models
£220 per day

NEW RUTTER PARTS CATALOGUE
40 Year Anniversary Edition, 84 Page Parts Catalogue
£5 UK, £7 Europe, £9 overseas elsewhere

Melvyn Rutter 40 years OF FUN AND PASSION

The Morgan Garage, Little Hallingbury, Nr Bishops Stortford, Herts CM22 7RA England
Tel: 01279 725725 www.melvyn-rutter.co.uk Email: mr@melvyn-rutter.net

BEECH HILL GARAGE

BRITISH CLASSIC CARS SINCE 1979



1959 MGA 1600 ROADSTER £37,995

Fully restored to the highest of standards, the best we've ever seen



1960 MGA £30,995

Chariot Red, red leather, 1622cc fully restored, used regularly, excellent condition

BEECH HILL, NR READING, BERKSHIRE • WWW.BEECHHILLGARAGE.COM • 0118 9884 774

Foskers

The UK's oldest independent Ferrari specialist

@FOSKERS
FOSKERSFERRARI
@FOSKERS

THINKING OF SELLING YOUR FERRARI? WE ALWAYS REQUIRE TOP QUALITY USED FERRARI



Ferrari 550M **£89,995**
Fantastic Condition, Great History, 38K miles.



Ferrari F360 F1 **£59,995**
Pristine example, Nero leather, 21,500 miles.



Ferrari Dino 246 GT **Please Call**
Recently Foskers restored, matching numbers.



Ferrari F430 Manual **£89,995**
Rare manual example. Crema hide, 29k miles.



Ferrari 308 GTS **Please Call**
Lovely history file, 14 inch alloys, XWX tyres.



Ferrari 308 GTS QV **£79,995**
Immaculate original example, books & tools.

SALES LINES: +44 (0)1474 874555 WORKSHOP: +44 (0)1474 874777

EMAIL: sales@foskers.com Jeff Fosker: +44 (0) 7703 355355 Tom Sutton: +44 (0)7515 430430

FOSKERS.COM

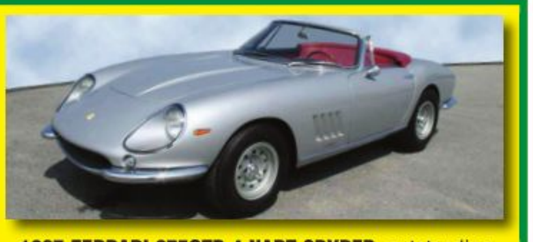


A S Motorsport Ltd

Poplar Farm, Fersfield Road
Bressingham, Diss, Norfolk. IP22 2AP
www.asmotorsport.co.uk Tel: 01379 688356 Mob: 07909 531816



1991 FERRARI F40, 7000km from new. Euro spec, 3 careful owners. Outstanding cosmetic and mechanical condition are evidence of attentive meticulous ownership. Ferrari Classique certified, ready to be enjoyed on the rally and show circuit.



1967 FERRARI 275GTB 4 NART SPYDER, outstanding mechanical & cosmetic condition. Very accurate NART Spyder conversion, cannot be told from an original. Rebuilt eng., drive-line. Ready for show or rally circuit.



1994 LAMBORGHINI DIABLO VT, Red/tan all-wheel drive, 21,000 km. One of approximately 400 of the 500 hp, 5-speeds. Stunning cosmetics, incredible performance. The last Lamborghini built, Lamborghini.



1977 PORSCHE 930 TURBO CARRERA: Silver/black. **12,800 original miles.** Fully certified, serviced and documented. Original paint. Built Feb. 1977. Looks runs and drives as new. True investor/collector grade.



1977 PORSCHE CARRERA 3.0, Matching numbers, 25,000 km from new, sunroof, Grand Prix white/plaid inserts, 5-speed, sport seats, Bosch K-Jetronic, rare investment collector grade Porsche.



1954 JAGUAR XK120 DROPHEAD COUPE, Matching numbers, red/tan. Frame up restoration, show quality. triple SU carbs, stainless steel headers and exhaust, powder coated frame. Great rally event and show car.

CONSIGNMENTS WELCOME

MOTOR CLASSIC & COMPETITION CORP

WE WILL BUY ALL FERRARI AND ALL VINTAGE SPORTS, RACING AND GT CARS

350 ADAMS STREET, BEDFORD HILLS, NY 10507
Tel 914-997-9133 Fax 914-997-9136 sales@motorclassiccorp.com

www.motorclassiccorp.com

SPEEDMASTER

PLEASE CONTACT THE SALES TEAM AT SPEEDMASTER
T +44 (0)1937 220360 M +44(0)7768 800773
INFO@SPEEDMASTERCARS.COM
WWW.SPEEDMASTERCARS.COM



1962 Porsche 356 T6B S90/GT

A fully restored and well-prepared Porsche 356 T6B 1600 Super 90, originally supplied in March 1962 via Sonauto in Paris, complete with rare factory GT specification – lightweight aluminium doors and Plexiglass windows. The car was restored between 2001-2003 by respected Swiss-based Porsche 356 specialists, TANNER. In 2010, it was purchased in France and then fully prepared for historic racing by Maxted-Page and Prill and further periodcorrect Carrera 2 GT upgrades were added. The ultimate in Porsche 356 performance with 165bhp, lightweight panels, annular disc-brakes, GT dampers, shortened gear ratios and LSD - this car performs, sounds and handles superbly on both road and the track.

Please call for further information.



1966 MCLAREN M1B - CHEVROLET EX DAN BLOCKER TEAM CAR WINNER IN '66. REBUILT CHASSIS AND KNIGHT ENGINE. FIA PAPERS, **£235,000**



1981 FITTIPALDI F8 - COSWORTH DFV COMPETITIVE AND FRONT RUNNING CAR IN MASTERS F1 TMAX DFV ENGINE, CURRENT FIA HTP **£320,000**



ENSIGN N177 COSWORTH DFV. READY TO RACE, ENTERED FOR MONACO 18. FRESH ENGINE REBUILD. PRICE: **£300,000**



ALFA GIULIA SUPER 1600TI ELIGIBLE FOR HDRC HSCC ETC. REBUILT ENGINE, RACE READY **£34,995**



LOLA 210 - COSWORTH FVC EX K FOITEK, LE MANS CLASSIC ELIGIBLE, READY TO RACE **£230,000**



1984 ROVER 3500 TWR REPLICA USING ORIGINAL SUSPENSION AND ENGINE. FRESHLY BUILT, NEW HTP, SEALED ENGINE. **£110,000**

MOTORS EUROPE

ZWAKMAN

The Dutch world of historic Jaguars



WWW.ZWAKMANMOTORS.COM

RESTORATIONS, REBUILDS & RACING

GARAGISTA

***THIS MONTH** Alan Mann Racing Ford Escort Mk1 • MGB Roadster • Aston Martin DB2/4*



RACE CAR RESTORATION

Gp5 Ford Escort

X00 346F has looked more complete in recent months, but appearances can be deceptive. Owner Grahame Goudie thinks the finishing line is close.

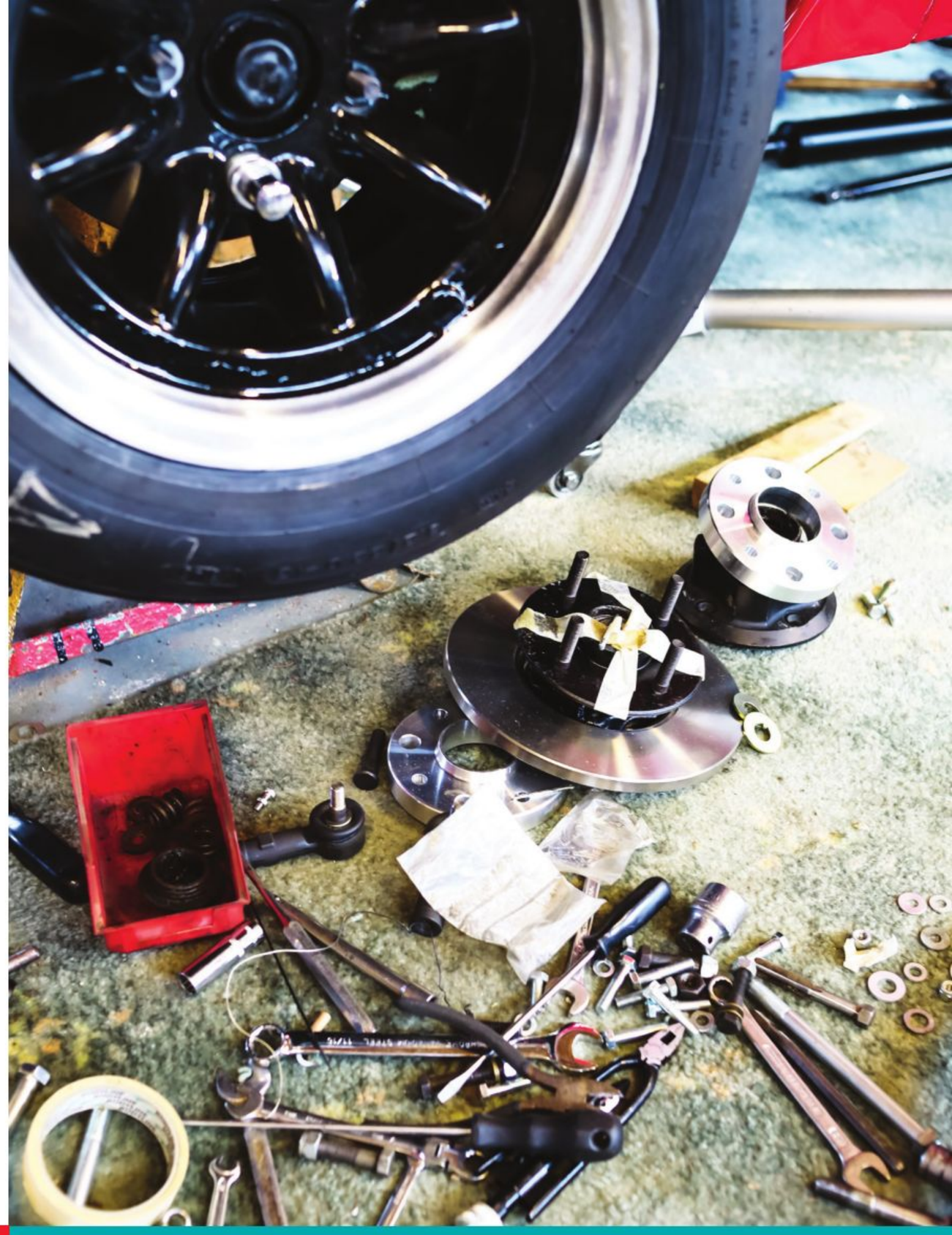
There is a certain irony, as I look around my workshop, that my Alan Mann Racing Ford Escort looks partly to be in component form yet is actually quite close to completion. The reason? A few small, last-minute parts have now arrived - and I've had to remove things in order to fit them.

The rear axle is a case in point. I have taken it off the car in order to mount the brake calipers - sourced from a Lotus Elan - before refitting the whole assembly. If I knuckle down I can probably get all that done in a day.

The engine is presently missing, too - at the time of writing it is with Init Racing in Daventry. Some test work was delayed by a few days because the four-into-one exhaust was fouling on the dyno, but Init found another one so by the time this appears in print everything will have been checked and the engine should be back with me. I expect it to produce about 225bhp - not bad from 1.6 litres. I know it has a primitive supercharger - basically a fan motor blowing into a plenum chamber - but, as in period, it's not terribly efficient...

Anything else? I still have to install some interior trim. I have done much of this work myself, including making a roof lining. I could have paid somebody else, but felt there was a risk that it wouldn't be quite what I needed. I know how the original looked and by doing it myself I can make sure I get what I want.

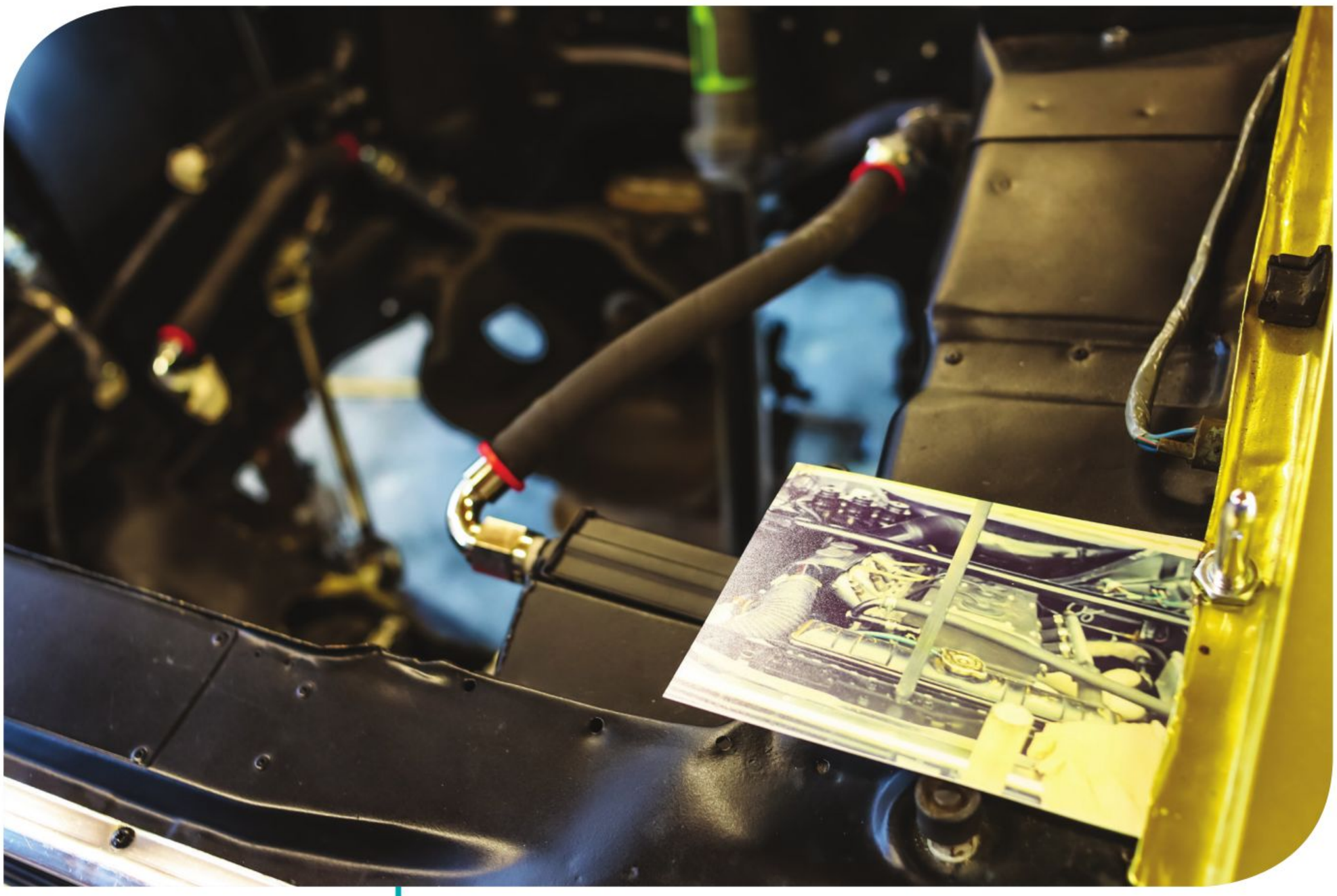




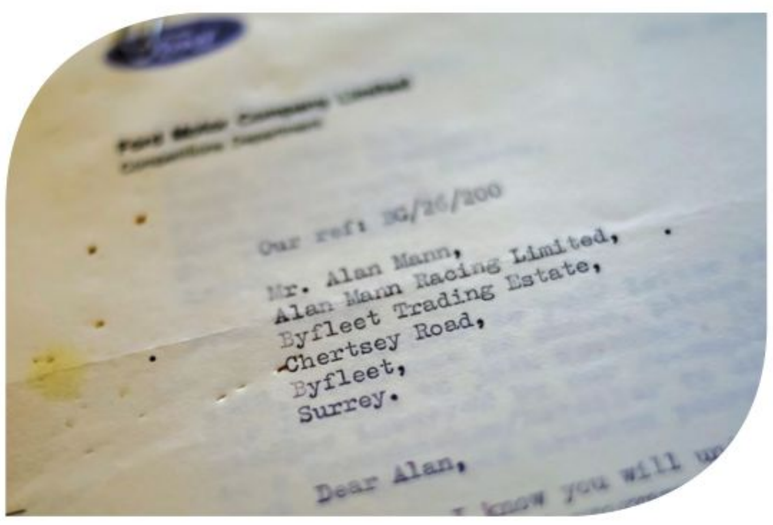




A brake overhaul has taken priority in recent weeks, with new calipers from an Elan being fitted to the Escort



Goudie has spent almost a decade on the Escort, but says he's loved every minute as the home stretch nears





For the seat I have a replica frame and, again, I'll do the rest to make sure it looks correct. It's currently in a secondary workshop - out of sight, out of mind - but I am aware that I need to get on with it. I also need to modify the front wing apertures slightly, to enable the car to turn cleanly without the wheels catching the edge of the arch - but that's a fairly straightforward task.

Even though it will have taken me more than a decade, the whole task has been an absolute pleasure. So many things have got in the way - not least work! And then there were other projects, such as building my son a Lotus Cortina - I have mentioned that before - and restoring a road-going Ford RS200, which took nine months. Really, XOO 346F has only become a priority in the fairly recent past.

"Once everything is screwed back together, the plan is to give the car a run before Christmas, hopefully with some of the original AMR guys"

It has been fascinating finding out 346F's history as I've gone along. After I'd acquired the car from Alan Mann, when I was helping to prepare cars for him during his second racing career, he and I would always sit and chat about the old days. It's been a nice journey.

Once everything is screwed back together, the plan is to give the car a run before Christmas, hopefully with some of the original AMR guys in attendance. There might be a few details unfinished - for instance a small component towards of the rear of the engine bay. I can't work out what it is, or what it did, and nobody else can remember, but that's the kind of conundrum that can arise when you're working mainly from photographs. You can easily waste weeks chasing stuff like that, rather than getting on with more significant tasks. Also, 346F will start its new life on Avon tyres rather than the Dunlops it ran in period. The tread pattern is correct, but at some stage I'll order a set of Dunlops for accuracy's sake.

Beyond the shakedown? Who knows? If anybody from Goodwood is reading this, it will definitely be ready in time for the next Festival of Speed... M

RACE CAR RESTORATION

MGB Roadster

Having written off his B GT at Mallory Park, Paul Eales from Oselli Classic and Sports Cars needed a new project. Cue another MG...



Paul Eales in action at Snetterton, contesting an Equipe GTS race during summer 2018

Current projects

1963 MGB Roadster
This is another FIA-spec car being built up out of a car that had been in storage with us for more than 20 years. It will be British Racing Green with a white roof and 'lipstick' around the grille.
***Status:** Just back from the paint shop ready to be built up.*

1964 TVR Grantura
A series 2 model with a B-series MGA crossflow engine – an extremely fast car. The owner wants us to look after it for a year while he gets his novice cross off the back.
***Status:** Needs a thorough going over before a plan is formulated.*

This 1963 MG B Roadster is an important car to me. We built it during the winter after destroying my MG B GT in a big shunt at Mallory Park in 2016. I'd been wondering what to do next and my father, David, suggested that we have a look at doing a car to FIA appendix K specification. This was the result.

I managed to win my class and finish fifth overall in an Equipe GTS race on the Snetterton 300 circuit aboard the car in 2017, and then sold the car to someone who was there watching at the track. It helped me grow the race-preparation side of the business. Previously I'd really just prepared my own and dad's cars at the races, but running this car for someone else gave us the confidence to build an arrive-and-drive MGB Roadster for 2018. We're looking after five cars at the tracks now and have our own dedicated race workshop.

The build was pretty straightforward around a British Motor Heritage shell, into which we installed the narrow transmission tunnel, an early gearbox and a 1840cc race engine. Building it to appendix K rules means you have to run standard suspension and brakes. The car has to be as it left the factory and most parts are available off the shelf.

The hardest thing was choosing the colour, but we settled on Iris Blue with an Old English White roof and number boards. It was important that the car looked as good on the outside as it did on the inside.

A restoration always seems memorable when you fire up the car or drive it out onto the race track for the first time. I was enjoying racing this car so much, but it's also satisfying watching other people driving it and helping them move forward as drivers.

Now, we've moved into doing an FIA-spec MG B the opportunities are there to go and do some of the big races over in Europe, such as the Spa 6 Hours.

That's something we looking at for the 2019 season, when Oselli will also be increasing its 'arrive-and-drive' options. We ran MGBs successfully on that basis in 2018 and will be increasing the fleet by two cars next season. Also, as a contemporary contrast, we'll have an Aston Martin GT4 for hire in AMOC GT and other events.

If you or your company has undertaken an important or unusual restoration we'd love to hear from you. Email us with a brief description of the project and your contact details: *restoration@motorsportmagazine.com*

WWW.MOTOTECHNIQUE.COM

The one stop Exotic Sports Car Specialist,
Check out our amazing website.



Completion of a five year full ground up restoration on this beautiful Iso Grifo after decades of slumbering. Our work culminated in a prize at Salon Prive and included total mechanical, bodywork, paint and interior trim. Some subtle up-grades were included to enhance safety, drive-ability, performance and reliability.

Call for Carbon Fibre Work, Chassis Repairs,
Servicing, Mechanical Rebuilds, Restoration,
Paintwork, Interior Trim and Crash Repairs.

Contact 0044 0 208 941 3510
141, Molesey Avenue, West Molesey,
Surrey KT82RY

CompetitionEngineServices.co.uk

Engine Rebuild & Machining Services



CES
COMPETITION ENGINE SERVICES

- Full Engine Builds / Rebuilds & Dyno Testing
- Block, Head & Crank Machining
- All Marques: Pre and Post War, Road & Race
- Competition Car Preparation & Track Support

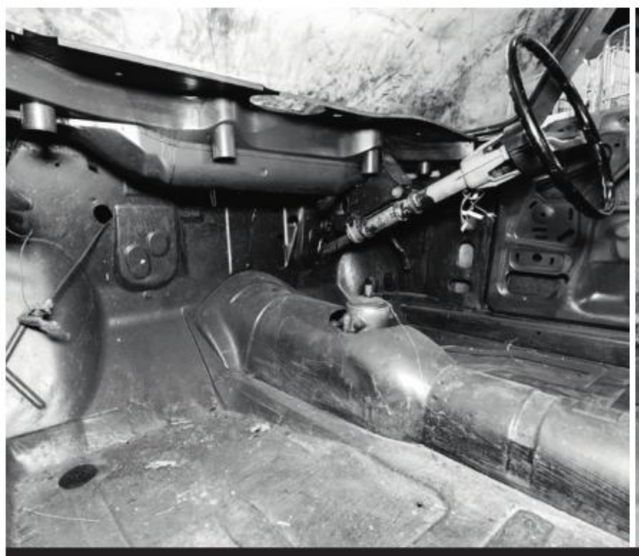
Tel - 01283 566 783
E - info@competitionengineservices.co.uk

CES is a member of ISW

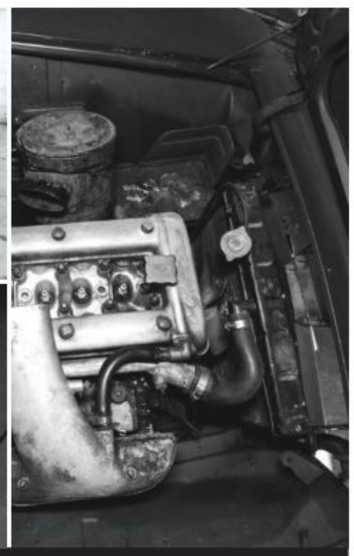
Cross Street,
Burton-On-Trent,
Staffordshire

@competitionengineservices

Coming SOON...
INHOUSE ENGINE DYNO
follow us for news





FOR SALE CLASSIC CAR RESTORATION PROJECT

Alfa Romeo GT1300 Junior / 1968 RHD

Alfa Romeo GT1300 Junior, available to reserve and restore in our workshop.
We can tailor the restoration to your ideal specification.

This Alfa Romeo GT1300 step front is a great base car, perfect for full restoration, GTA replica, retro mod car, FIA race car, or whatever your ideal specification. Available for completion in the spring.

To see the car close up visit https://youtu.be/bUPPnNbyDUw

Whether we're helping you restore a weekend driver or a concourse winner, all our work is carried out with the utmost care to the highest possible standard and fully guaranteed.

For more information call 01582 664772

smartautomotive.co

Smart AUTOMOTIVE

Units 17 & 18a Icknield Way Farm, Tring Rd, Eaton Bray LU6 2JX

ROAD CAR RESTORATION

Aston Martin DB2/4

Ed Butcher explains how EAB Classic Cars spent two years restoring this 1956 Alpine Rally veteran to its former glory





Current projects

1964 Jaguar E-type
This is a complete rebuild of a Series 1 4.2-litre roadster – right down to the last nut, bolt and washer. *Status:* It's off to be trimmed in January and is due to be delivered to the customer in March.

1963 Mini Cooper S
Another rebuild to original specs, this car's shell is going to need extensive work because incorrect panels have been fitted in the past. But all the major components – the glass, engine and gearbox – are dated correctly. *Status:* Due for completion some time in 2019.

My customer bought this Aston Martin specifically because of its history in the Alpine Rally with Count Charles de Salis. He finished second in the Alpine Cup - for entries finishing without time penalties – in the 1956 event and Aston Martin picked up on that for promotional proposes. This DB2/4 Mark II became quite a famous car and our brief was to restore it to the exact specification in which it had left the factory that year.

We had to be very honest to the originality of the car. The devil was in the detail, and we ended up taking two years on the restoration before it left our workshops early in 2018.

The aluminium body of the DB2/4 sits over a steel frame, which leads to corrosion. It would have been more cost-effective to replace the body, but our brief was to retain as much of the car as possible. About three inches of every panel – where it sits on the steel – had to be remanufactured, but the rest is original even down to the door frames.

The leather interior wasn't retrievable, but because the car had never been retrimmed we knew exactly how it would have looked in 1956. The rest of the interior we looked to refurbish rather than replace.

Every switch for the car can be bought new today, but they are inevitably not quite the same. We stripped down all the old ones and built them back up again in working order. That included the biometal heat indicators. I couldn't calculate the hours I spent on those.

One concession to modernity was the tiny electric motor we put in for the windscreen washer jets. They were vacuum driven in period, which means the water only dribbled out if you were going uphill. That's not what you want if you are doing some kind of event, which the owner intends to do, but I was able to retain the original switch on the dash with Trico embossed on it.

I never suggested to our customer that I was going to build him a concours car, but he took it to the Englefield House Aston Martin Owners' Club event in the summer and ended up winning. That suggests that we got it right.

Restoring the Aston was a much bigger job that we thought, and much more expensive than we thought, too, but it ended up being a very enjoyable journey.

If you or your company has undertaken an important or unusual restoration, we'd love to hear from you. Email us with a brief description of the project and your contact details: *restoration@motorsportmagazine.com*

Directory

To advertise, please call Connor Garnett-Comerford on 020 7349 8470
or email connor.garnett@motorsportmagazine.com

ATTIRE / CAR CARE / GARAGE / GEARBOXES





THE CHAILEY
£3,150+ VAT*
**T&Cs available upon request. Offer ends 31/03*

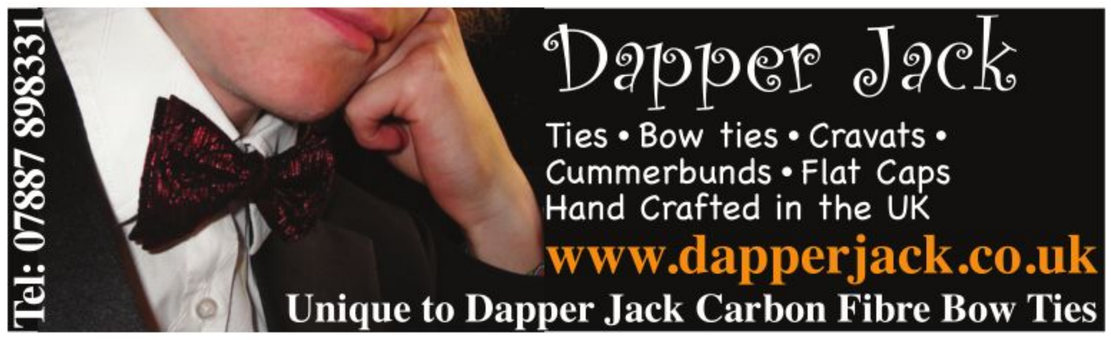


Oak framed buildings | Outdoor living | Garages | Car ports
Home offices | Garage + first floor | Dual purpose building | Gazebos

Please visit our website **oak-designs.co.uk** to see further examples of our product range. You can also now design your own garage using our **'Quote my Design'** tool online.

01273 400411 sales@oak-designs.co.uk
www.oak-designs.co.uk

Oak Designs Co.



Dapper Jack
Ties • Bow ties • Cravats •
Cummerbunds • Flat Caps
Hand Crafted in the UK
www.dapperjack.co.uk
Unique to Dapper Jack Carbon Fibre Bow Ties

LAST MINUTE CHRISTMAS!



4HP* METRO BLASTER DRYER
USA Made
Loads more gear on our website!
5 YEAR WARRANTY

For over 18 years we have imported a wide range of quality car detailing gear including: Metro Dryers, ACF-50, Winners Polishes, Waxes, Degreasers, Microfibres & More! Check out our website. *Peak E&OE MSO1149

020 8445 6811 WWW.KILLERBRANDS.CO.UK

JonWilliamStables.co.uk



Garaging ~ Carriage Houses ~ Workshops
Call us today on 01380 850965

BPA Engineering
SPECIALIST TRANSMISSION SERVICES
HEWLAND BUILD & REBUILD • NEW & S/H SPARES
GEARS, SPARES & COMPETITION GEAR • KITS DESIGNED & MANUFACTURED
CASTINGS PRODUCED FROM DRAWINGS OR SAMPLES
Tel: +44 (0)1256 895757 • Fax: +44 (0)1256 895151
www.bpaengineering.com
HEWLAND

metex
car covers

THE BEST PROTECTION FOR GARAGED CARS

THE FLEECY SOFT FABRIC OF A METEX CAR DUST COVER WILL GUARANTEE TO KEEP YOUR GARAGED CAR FREE FROM DUST AND DAMPNESS.

EASY TO USE, THE COVER SIMPLY DRAPES OVER YOUR CAR COVERING IT COMPLETELY.

WE COVER *ALL* MAKES, MODELS AND SIZE OF CARS.

EXAMPLE CAR COVER SIZE, E-TYPE JAGUAR 18ft X 11ft.



from only
£37.50
Postage cost £7.50 per order

Phone now with your order: 01254 704625
or order online at: www.cardustcovers.co.uk

Machine Mart®
28307
WHERE QUALITY COSTS LESS
65 SUPERSTORES NATIONWIDE
Clarke GARAGES/WORKSHOPS UP TO 24' (7.3M) LONG



MODEL SHOWN CIG81220 (4.9x3.7x2.6m)

FROM ONLY
£229.00 EXC.VAT
£274.80 INC.VAT

Great for use as a garage, workshop or storage area
● Extra tough, triple-layer, waterproof cover ● Fully UV treated for long-term protection ● Heavy duty, powder coated steel tubing for stability in all weathers ● Ratchet tightening to ensure drum-tight cover ● Includes ground anchoring system

MODEL	SIZE (LxWxH)	EXC.VAT	INC.VAT
CIG81015	4.5 x 3 x 2.4M	£229.00	£274.80
CIG81020	6.1 x 3 x 2.4M	£289.00	£346.80
CIG81216	4.8 x 3.7 x 2.5M	£279.00	£334.80
CIG81220	6.1 x 3.7 x 2.5M	£339.00	£406.80
CIG81224	7.3 x 3.7 x 2.5M	£419.00	£502.80

5 EASY WAYS TO BUY...
SUPERSTORES NATIONWIDE
TELESALES 0115 956 5555
CALL & COLLECT AT STORES TODAY
CLICK & COLLECT OVER 10,000 LOCATIONS
ONLINE www.machinemart.co.uk



• Garages • Garden Rooms • Complexes • Gazebos • Pergolas
01323 765410
Quality in its finest form

Over 50 years' experience in oak framed buildings

www.monarchoak.co.uk

LOCKHEED & GIRLING
BRAKE & CLUTCH
HYDRAULIC CYLINDERS

FOR BRITISH VEHICLES 1935-1980. MASTER CYLINDERS, WHEEL CYLINDERS, CALIPERS, CLUTCH SLAVES, FLEXIBLE HOSES, PADS, KITS ETC.
WORLDWIDE MAIL ORDER

POWERTRACK Ltd
Tel/Fax: 01344 886522
www.powertrackbrakes.co.uk

Bespoke Garage Doors

Commercial | Domestic | Listed & Heritage | Special Projects









Solid Timber | Aluminium | Brass | Glass

T: 0151 280 6626 I E: info@rundum.co.uk I W: www.rundum.co.uk

RUNDUM meir

Can't find pistons for your engine?

Fast and reliable delivery on custom forged pistons.
4 stroke pistons made from sample.

Have the pistons you need, not a compromise.



CALL: (0)1462 684300
sales@cambridgemotorsport.com

Cambridge Motorsport Parts
Unit 5 Lacre Way, Letchworth, Herts, SG6 1NR. www.cambridgemotorsport.com

T +44(0)1263 768768
F +44(0)1263 768336
bmw@jaymic.com
2002 Thurgarton Road, Aldborough, Norfolk, NR11 7NY, UK



JAYMIC
CLASSIC BMW PARTS

See our NEW Online Shop at www.jaymic.com

Discreet Classic Car DRL's

Headlights
Flashers
Dashboards
Stop & tail
More



Superb lighting upgrades
Headlamps & LED bulbs



inside & outside



0121 773 7000
www.bettercarlighting.co.uk
enquiries@bettercarlighting.co.uk

Image® WHEELS INTERNATIONAL LTD EST 1987

- Manufacturers of two & three piece aluminium road / race wheels.
- All our wheels are made to order with a range of classic & modern styles available.
- Checkout our website for the full range of wheel styles... Available from 10" to 22" diameter & widths from 3" to 16" wide.

CLASSIC & MODERN ALLOY WHEELS
MADE IN ENGLAND SINCE 1987 so...
...Celebrating 30 years of manufacturing!



www.imagewheels.co.uk +44 (0) 121 522 2442

Flying Spares

Quality parts for post-war Rolls-Royce & Bentley cars

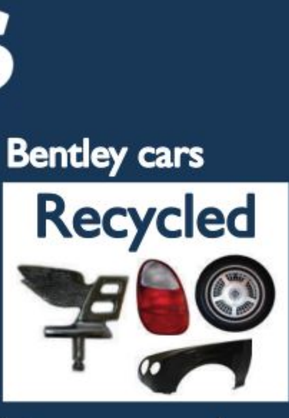
New



Reconditioned



Recycled



www.flyingspares.com | 01455 292949 | sales@flyingspares.co.uk

Quote discount code 'MSPORT18' and save £10 on orders over £75

EAB Classic Cars Ltd
www.eabclassiccars.co.uk



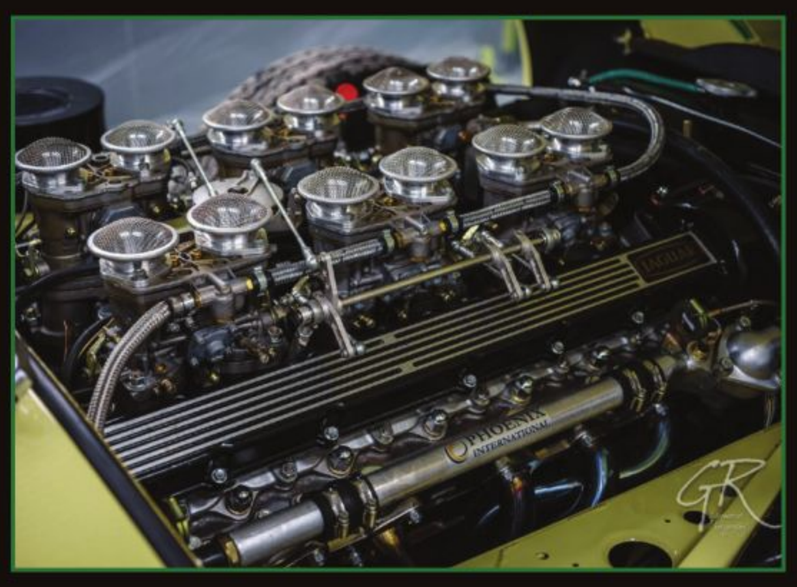
Aston Martin Spring 2018 Concours Winner

We offer restoration, modification, repairs & paintwork to all marques of car
Over 30 years experience in Bentley & Jaguar
EAB Classic Cars Ltd, Blunts Farm, Thaxted, Essex 01371 831588

tennyson james
CLASSIC CAR WORKSHOP

Full Restoration, Service & Sales To Order
Jaguar And British Classics a Speciality

Full or part restorations
Bodywork restorations
Servicing & Upgrades
Engine and Mechanical
Trim & Interiors
Car Sourcing & Sales
Ring for your requirements
Sensible Pricing
Monthly Budgets Catered for



Enquire about our bespoke series 3 E-type, with 6.3 litres and more than 500 horse-power available in FHC or Roadster, Demo available from January.

Visit our website for our full list of cars for sale.

Unit B, Crigglestone Industrial Estate,
High Street, Wakefield, WF4 3HT

Call: 01924 256426
www.tennysonjames.co.uk
enquiries@tennysonjames.co.uk
@Tennysonjamesltd



Nuts, bolts and two smoking barrels

Whether your car needs restoration or an annual service, we have the skills and experience to hand. Although we are Ferrari specialists we provide servicing and restoration for Maserati, Aston Martin, Jaguar, Bentley, Rolls Royce and de Tomaso, from our Surrey base near Guildford.

SMDG
Ferrari Specialists

Classic and modern servicing, restoration and race preparation

01306 627770 www.smdg.co.uk

Ridge Farm, Rowhook, Horsham RH12 3QB office@smdg.co.uk



Welcome to the all-new Tifosi J.E.M.

Product of 18 months' Design & Development.
Based on the famous "Jacobs Midget" coupe design.
Brought up-to-date with wind-up windows, locking doors, and of course, fully trimmed interior offering luxury not available to the original.
This kit will not be sold for home fitting, but is available either as a fitted kit to your donor vehicle, or as a complete turn-key car.
Price subject to condition of donor vehicle and specification.





HALL'S GARAGE

Morton, Near Bourne, Lincolnshire, PE10 0NS
T . 01778 570286 steve@hallsgarage.co.uk
www.hallsgarage.co.uk

Omicron

CLASSIC **LANCIA** SPECIALISTS

AURELIA • FLAMINIA • FLAVIA • FULVIA • STRATOS

★ Rapid international mail order parts service. We ship to 70+ countries worldwide

★ Full or partial restorations undertaken to concours conditions.

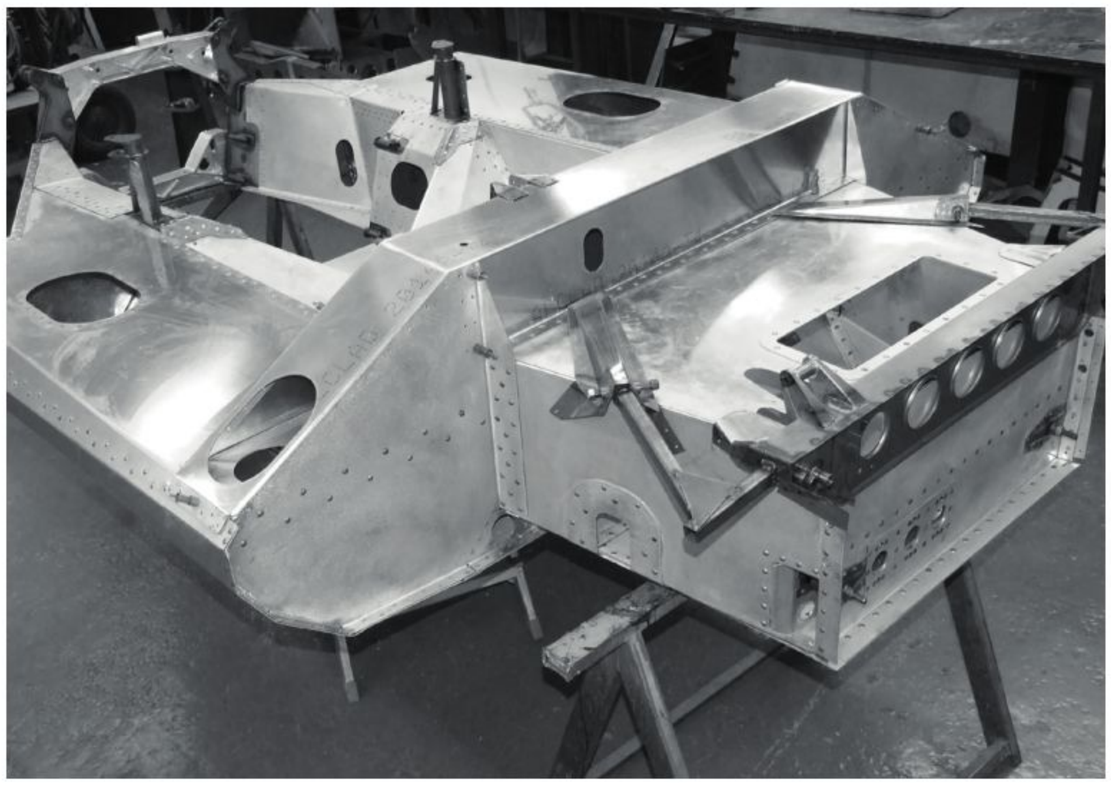
★ Fully equipped bodyshop and mechanical workshops. Race & rally prep undertaken

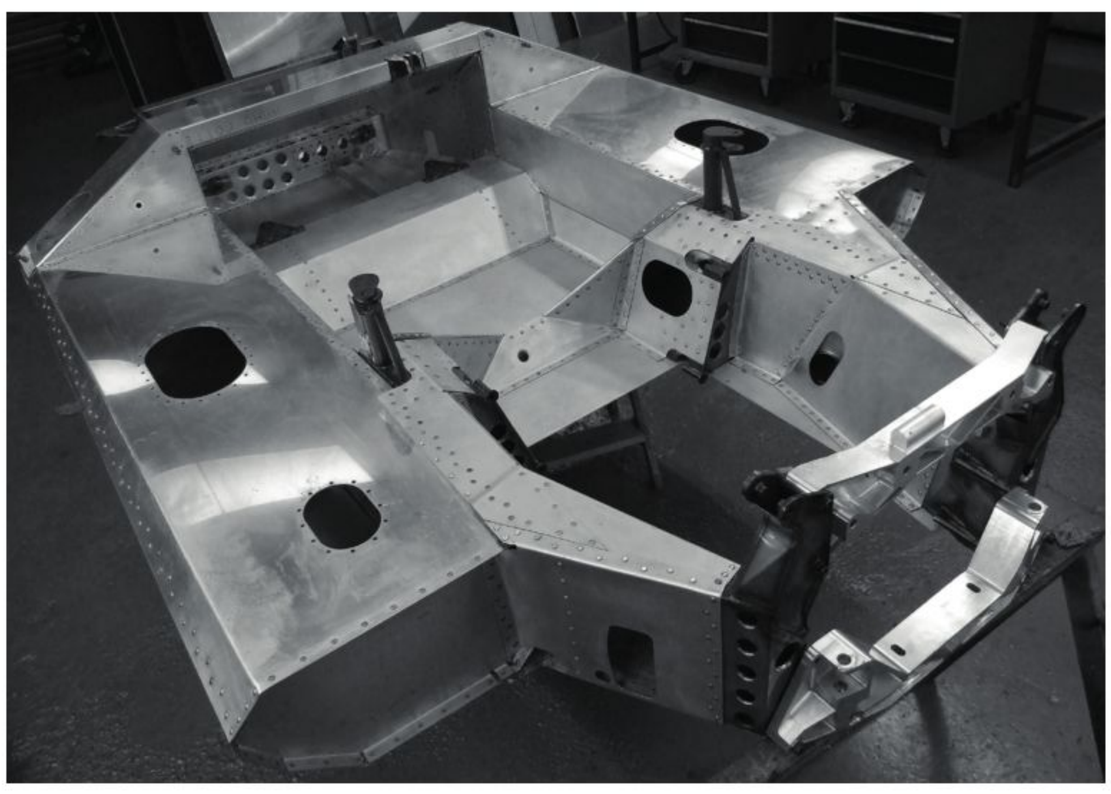
We also look after an increasing number of British cars for East Anglian based customers. Chris Loynes is our British car expert and he brings an encyclopaedic knowledge of Triumphs and MGs in particular.

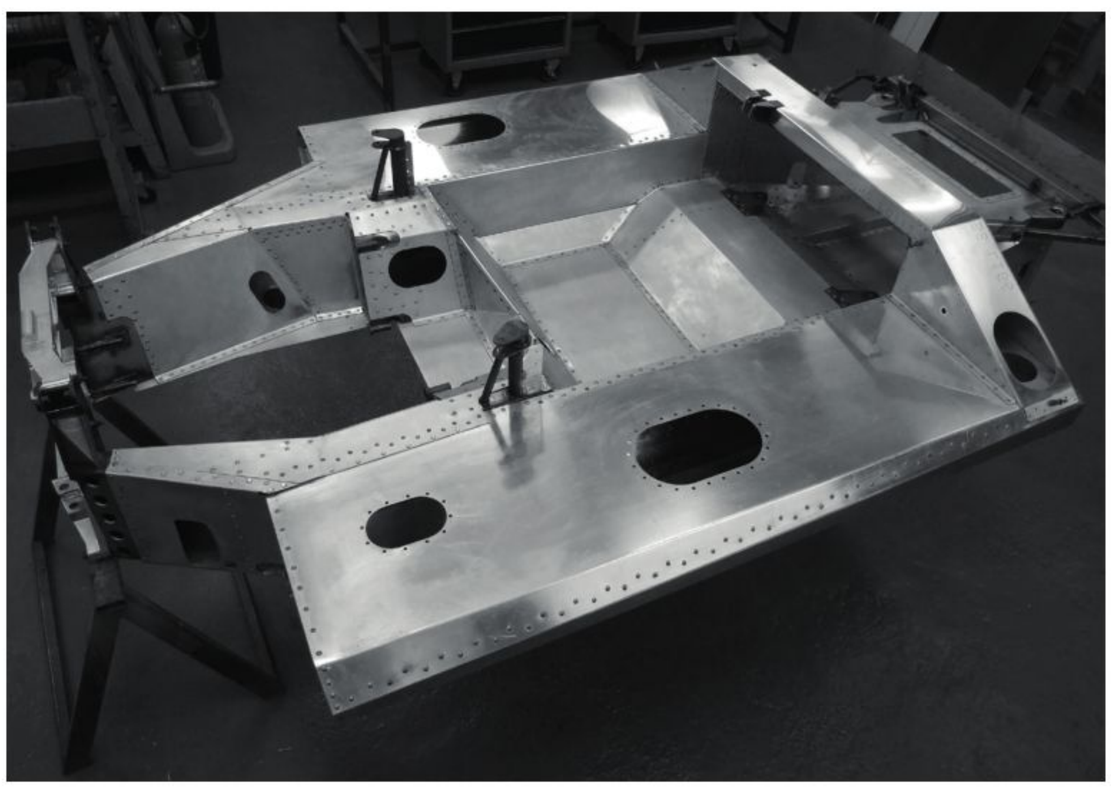
TRIUMPH, MG, MORRIS & MORE...

Omicron Engineering Ltd., 6 miles south of NORWICH
Tel: (01508) 570351 • Web: www.omicron.uk.com









Lola T70 Rebuild

R&J Simpson ENGINEERING Ltd.

Experts in the bespoke manufacture of cars and components for the current and historic motorsport industries

www.randjsimpson.com / 01827 67898 / office@randjsimpson.com

VERDI

PRICE BEATER

We will beat any price from any advertised or official quote (independent or official dealers) for Ferrari, Lamborghini & Maserati service & any mechanical repairs, no matter how big or small



Verdi has a long established history of working on Ferrari cars. Founded over fifteen years ago, we have consistently maintained and repaired the famous marque. Our staff have accumulated years of mechanical expertise - including factory training - and are backed by our long term commitment to the marque.

Our philosophy is simple. We enjoy working on Ferrari's cars and we offer a friendly, informative and comprehensive service to owners.







EXCITING NEWS

Two new retails and service centres coming soon

We offer fixed price menu servicing as well as bodywork repairs, performance upgrades and restoration services. Whatever your Ferrari needs, please call us today and we'll do our utmost to help.

VERDI 9-10 HAYES METRO CENTRE, SPRINGFIELD ROAD, HAYES, MIDDLESEX UB4 OLE

WWW.VERDI-FERRARI.COM 020 8756 0066 / 07785 760606

WE MANUFACTURE ANY TYPE OF HANDMADE PANELS AND CHASSIS TO ORDER.

NDM
NORTH DEVON METALCRAFT LIMITED
Motor Body Engineers
Established 1980

We are now Manufacturing Original FIA Cobra 289s, and Cobra 427 Chassis and Body's with original Suspension and running gear.





Porsche 550 Spyder FIA Body and chassis. Now available as body and chassis package, or Roller based cars.

EST 1980

North Devon Metalcraft Ltd, Unit 6 Lauder Lane, Roundswell Business Park (West), Barnstaple North Devon, EX31 3TA

T (0044 01271 322526)
northdevonmetal@btconnect.com | www.ndmetal.co.uk

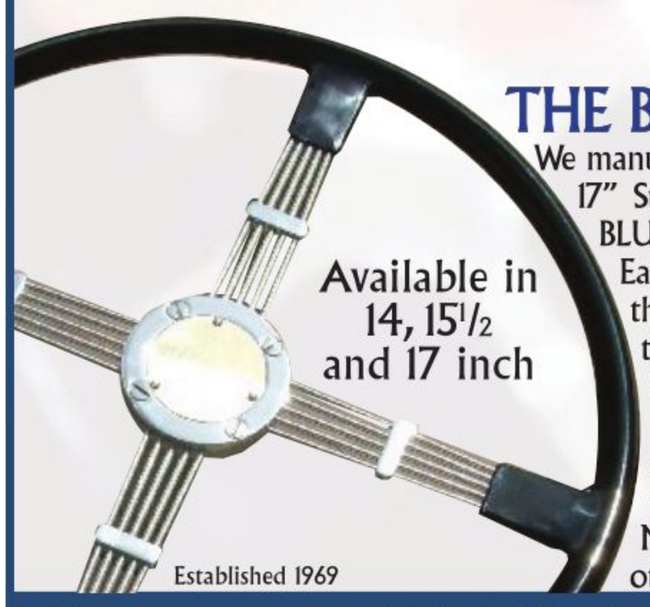
BROOKLANDS AERO SCREENS & STEERING WHEELS

MADE IN THE UK



BROOKLANDS AERO SCREENS

made using laminated glass to original specification to suit all vintage and sports cars.



THE BROOKLANDS

We manufacture the BROOKLANDS 17" Steering Wheel from the original BLUEMEL tooling. It is not a Far Eastern copy and is made using the original methods and traditional materials. The CENTRE BOSS fixing kit, again from the original tooling, not only fits the MG TC and pre-war MGs, but the TD, TF and MGA. There are boss kits for other makes and kit cars too.

Available in 14, 15½ and 17 inch

Established 1969

KIMBLE ENGINEERING LTD

Tel: 01803 835757 • Fax: 01803 834567

Email: john@johnkimble.co.uk • www.johnkimble.co.uk

Unit 5, Old Mill Creek, Dartmouth, Devon TQ6 0HN

TRAILERS, TRAILER CONVERSION KITS, COVERS

When it comes to trailer conversions, look no further. As specialists in the trailer conversion industry, we offer a bespoke service to turn your car transporter or flatbed trailer to be fully enclosed. The conversion is tailored to the way you use your trailer, taking all the small details into consideration like hidden zips and a translucent roof to make your life easier.



Weatherweave Professional Trailers

Weatherweave Ltd

12-16 Hockley Road, Rayleigh, Essex

01268 774141 | sales@weatherweave.co.uk

www.weatherweave.co.uk

AUTO BARN

YOUR AUTO BARN SERVICES



ULTRA SECURE STORAGE SOLUTION

Auto Barn is hidden within the grounds of a beautiful private estate and boasts state of the art secure facilities for the most discerning collector.

PRIVATE HELIPAD & AIRSTRIP

CLIMATE CONTROLLED

BATTERY MAINTENANCE, MOT & SERVICING

24 HOUR CCTV, FIRE & INTRUDER ALARMS

SPECIALIST VALETING & DETAILING

TRANSPORT & SHIPPING

office@autobarn.uk

01666 800272

www.autobarn.uk



HIGH QUALITY TRAILERS FOR CLUB, PRIVATE AND PRO MOTORSPORTS

www.WOODFORDTRAILERS.com

Woodford Trailers Limited • 14 Great Central Way • Daventry • Woodford Halse • Northants • NN11 3PZ

Telephone: 01327 263384







Silverstone Classic & Race Car Storage



- 24Hr Security
- Fully climate controlled
- Collection/Delivery options
- Maintenance options & MOT testing for uninterrupted storage
- Secure location close to Silverstone Circuit, M1 & M40.

SILVERSTONE
CLASSIC & RACE CAR STORAGE

01604 879851
Email: info@scracs.co.uk
www.scracs.co.uk



High specification storage
De-humidified storage
Superb workshop facilities
Maintenance programmes

Secure enclosed car transport
Transportation of 1 - 4 cars
Licensed for UK & International
Recovery non runners/projects

JAR

Superior Car Storage
& Car Transportation

Specialised Motor Sport Services
South East England (Tunbridge Wells)

+44 (0)1580 753939
www.jarcarstorage.co.uk

LONDON CAR STORAGE

Bride Street, Caister House, Underground Storage
London N7 8AX



- Short Term
- Long Term Stay
- Complete Valeting Service
- C.C.T.V 24hr Surveillance
- Collection & Delivery can be arranged

L.C.S. offer a Secure & Discreet Service to suit all your needs
Comprehensive Insured for your piece of mind
For more details & information
Please call 020 7609 8533 – 020 7609 8535
Web: www.londoncarstorage.co.uk

CARSAFE

SECURE STORAGE FOR CLASSIC AND PERFORMANCE VEHICLES



WWW.CARSAFE.CO.UK TEL: CAMBRIDGE 01223 299011

SPECIALISTS IN
CAR SHIPPING &
TRANSPORTATION

WORLDWIDE EXPORT
& IMPORT SERVICES



RJJ

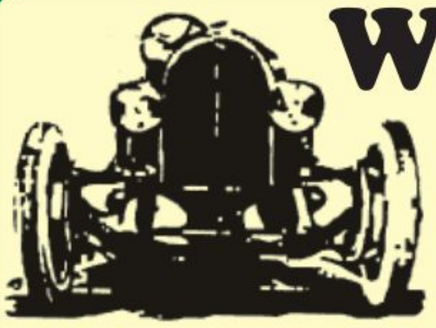
WWW.RJJ-CAR-SHIPPING.CO.UK

Customs clearance • UK & European collection & delivery • Safe, secure, competitive
T +01394 673466 | F +01394 673031 | E carshipping@rjjfreight.co.uk



+44 (0)1242 384092 www.CARSTORING.com

Cars for sale



Westcountry Classics

1931 Armstrong Siddeley 12/6 saloon, complete and very original, dry stored for 25 years, lovely recommissioning project, or we can do it for you..... **£3,995**

1958 Morris Minor 4 door saloon, sound and original, recent brake overhaul, just returned from a French excursion..... **£2,995**

1966 Morris Minor convertible Genuine car, restored by Charles Ware, great useable car, New MOT on sale..... **£7,995**

1967 Morris Minor, Saloon, black 1275cc twin carb engine, disc brakes, body rebuilt by professional fabricator. Great fun, smart little car **£4,750**

1967 Wolseley Hornet straight sound little car, ready to use or gently improve, MOT on sale **£3,995**

1978 MG Midget 1500 very sound with good history, New MOT on sale, cosmetic TLC required **£2,995**

1275cc fast road tuned A series engine, vgc, ready to fit, twin carbs, electronic ign, tubular manifold, with bellhousing to fit 5 speed Ford box, suit A35, Midget, Minor, etc..... **£1500**

TOURING MOTOR SERVICES, ROSUDGEON, PENZANCE, CORNWALL, TR20 9QE

TEL/FAX: 01736 762402

EMAIL: westcountryclassics@btinternet.com

We are open to sensible! Offers on the above vehicles
Viewing by appointment. DELIVERY CAN BE ARRANGED.

www.westcountryclassics.com



1965 Lotus Cortina

The car has just been subject to an extensive ground up restoration to original spec , including a complete engine rebuild. It has retained the original bodyshell and is virtually as new with a photographic portfolio of the restoration available to serious enquiries. 2 named owners plus the original buff logbook makes this a unique opportunity to acquire a proper Lotus Cortina

£72,995.00

Please contact Classic RS Ford on **01243 262943** between 9 and 5 or email **mike380@live.co.uk**

A

Classic Alfa
www.classicalfa.com
GT/GTV (1964-77)
Spider (1955-93)
Super (1962-77)
750/101 (1955-64)
Montreal
Mail order parts worldwide
Tel: **+44 (0)20 8688 4443**



1971 Aston Martin DBS V8 Auto Original RHD with matching numbers. Caribbean blue with navy blue leather. Stainless sports exhaust, Air cons, GKN alloys, face off CD. Recent tyres. 61,000 miles only with FSH, and recently serviced by leading specialists. Registration number DBS 1J. Stunning original rust free specimen. (Including desirable registration number). £169,950 inc plate. . **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

To advertise your car in the Directory, call Connor on 020 7349 8470

A

1967 Austin Healey 3000 MK3 Phase 2. LHD. BRG with black trim and black hood. 2 owners, matching numbers and Heritage Certification. Many concours wins to it name with last owner of over 30 years. The most stunning and correct Healey we have ever seen! £64,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

B

Buying or Selling Aston Martin
allastonmartin.com

F



1972 Ferrari 365GTC/4 LHD - Full Classiche Certification. Now available at www.graemehunt.com. Tel. 020 7937 8487

B



1994 Bentley Turbo R. In Wildberry with parchment leather. Usual high spec and 52,000 miles only with fully documented Bentley history from new. One of the best in the UK. Truly stunning example. £24,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**



2002 Bentley Arnage T. Silver Storm with Black leather quilted seats. Massive spec, 43,000 miles only FBSH. Unmarked, all books, tools and documentation. (This is a mint example with perfect history and not auction fodder). Cherished number available. From £29,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

C



1962 Citroen 2CV Van. Original Paris built example in concours champion condition. Matching numbers and perfect £29,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

J

1954 JAGUAR XK120 FHC. LHD. Ivory with Tan leather. Lovely original matching numbers example, rust free and driving superbly. £79,950 **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

LANES CARS
Specialist buyers and sellers of 'E' type Jaguars
contact Martin Lane
www.lanescars.co.uk
Call 07831 334608

L

CLUB LOTUS

Tel: **01362 691144/ 01362 694459**
Email:
annemarie@clublotus.co.uk

THE ORIGINAL & BEST CLUB FOR ALL LOTUS OWNERS & ENTHUSIASTS

- Colour Magazine
- Insurance & Parts • Discounts
- Free Technical Help

Lotus Regalia & more for only £35 per year

www.clublotus.co.uk
58 MALTHOUSE
CT DEREHAM
NORFOLK NR20 4UA

Cars for sale

MURRAY SCOTT-NELSON

www.classic-spares.com

Austin Healey Specialist

www.murrayscott-nelson.com



Austin Healey 3000 Mk 2A BJ7.
Rare original UK RHD car that still retains its original registration number and unique dealer key fob. The subject of a recent extensive body rebuild. Finished in classic Healey Ice Blue over Ivory White with blue leather trim and blue mohair weather equipment. Fitted with overdrive, chrome 72 spoke wire wheels, stainless side exit sports exhaust system, louvered bonnet, luggage rack, and Lucas PL headlights.
£75,000



Austin Healey 3000 Mk 2 BT7 Tri Carb.
Ex US car. Subject of an older, fully documented nut and bolt restoration by leading marque specialist with only summer use since. Meticulously maintained throughout. Finished in pale primrose yellow with black trim & weather equipment. Fitted with works rally style grille, front wing cooling vents, rear bumperettes, tubular exhaust manifold with sports exhaust system, 72 spoke chrome wire wheels and overdrive.
£65,000



Austin Healey 3000 Mk 2A BJ7
1963. A very rare home market RHD UK supplied car. Purchased by the current owner in 1976 and the subject of a major refurbishment in the mid 90's. Finished in British Racing Green with black leather trim and black hood. It is structurally excellent throughout with a particularly good chassis. Fitted with silver painted wire wheels and overdrive.
£47,500



Austin Healey 3000 Mk 3 BJ8 Phase 2
Rare original RHD car. The subject of an extensive body restoration and it has been well maintained with mainly summer use since. Finished in its original factory specification of Ivory White with red leather trim and black weather equipment. This Big Healey is an excellent example with a nice history file, original green folding log book and the recorded mileage of 69,264 is believed to be genuine. **£69,950**

01723 361 227 | info@murrayscott-nelson.com

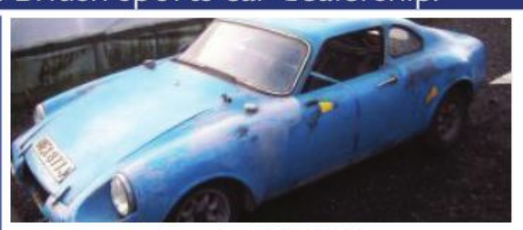
Murray Scott-Nelson, Beaconsfield Street, Scarborough YO12 4EL

AH Classics

Lancashire's BEST Classic and British sports car dealership.



Lotus Elan +2 Spyder Zetec 1968
• White With Black Trim • 2.0l Zetec Engine On Jenvey Injection & Engine Management • MT75 5 Speed Gearbox • Spyder Chassis And Suspension • April 2019 MOT • Excellent Condition
£17,995



Davrian IMP 1970
• Very Original • Requires Full Restoration • Magnesium Wheels • Twin Stronbergs • 2 Owners • Last Owner Since 1978 • Rare Car and a Great Project
£3,750



March 86B F3000
• Fitted With Carbon Fibre Sports Racing Bodywork • Dymag Wheels • Complete Car Less Engine & Gearbox • FG Gearbox Casing • Fitted To Hold Rear Suspension In One Piece
£9,995



Hart Sports Racing Car
• Vauxhall Engine 257 BHP • Hewland FTA 5 speed gearbox • Ralt Suspension • Penske Dampers • AP Brakes • Techcraft Exhaust Spare Bodywork • Great Car
£13,995



OMS 04 Less Engine
• Carbon Tub, Carbon Wings & Floor • Penske Dampers, Updated LD200 Gearbox With Wide 1st Gear & Strong Side Plate • ROPS Certificate • Slicks & Wets • Excellent Condition
£12,995



Sunbeam Alpine Race Car 1964
• Mass Racing Engine 170bhp Last Built In 2016 • 5 Speed • Modified Rear Axle • 4 Wheel Disc Brakes • Lightened Chassis • Lightweight Panels • Former AMOC Champion • Fantastic Car
£24,995

WANTED FF1600 ANYTHING CONSIDERED

Shaw, Oldham, Lancashire • 07761549454
andrewhenson@btinernet.com
www.ah-classic-cars.co.uk

M



1984 Mercedes Benz 500SL. Fully restored. Now available at www.graemehunt.com
Tel. 020 7937 8487

2015 Mercedes E 63 AMG. Steel grey with black leather, Panoramic sunroof, black alloys, Plus superb factory spec. One previous owner and 6,800 miles only. Repeat 6,800 miles only with FMBSH As brand new. £39,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**



1982 Mercedes 280SL W107 sports. Milan brown with beige tex trim. Hard and soft tops. Mexican hat Alloys, and 2 owners with 42000 miles only from new. A mint and original, time warp motorcar. £39,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

M

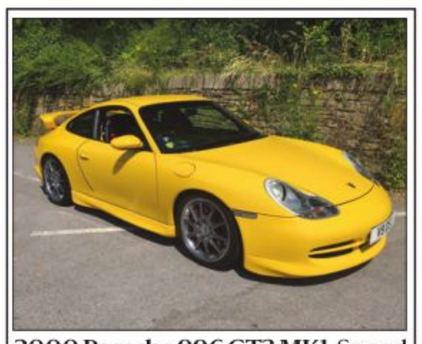


1972 Mercedes 280SE W108. Rare factory floor change manual. Matching numbers RHD example. Original and unrestored time warp car that has covered 11,000 miles only from new. Fully documented provenance. Original hand and service books. Totally unique and unrepeatable. £39,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**



1987 Mercedes 300SL W107. Alpine white with full blue leather trim.Excellent spec including blue hood, white hard top, rear seats, air cond, flat face alloy, 93,000 miles with impeccable full service history last owner 17 years. Stunning. £34,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

P



2000 Porsche 996 GT3 MK1. Speed yellow with black leather, aircond, Club sport spec, RS Clutch and flywheel, roll cage, full harness set, short shifter gearbox, 31000 miles only with FPSH. Stunning original example £74,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**



1988 Porsche 911 930 Turbo cabriolet RHD. Grand Prix white with marine Blue leather and blue mohair power hood. Polished Fuchs alloys, tear drop mirrors, sports exhaust, full Bob Watson porsche upgrades. 30,500 miles with superb history. File, a stunning low mileage example from a Top collection! £104,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk Tel:**

P

2008 Porsche 997 Carrera 2 RHD. Basalt black with black leather trim, 6 speed manual, alloys, air con, sat nav. Plus good spec, 54,000 miles with full main dealer history, superb original and unmarked. £34,950. **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

R



1968 Rolls Royce MPW 2 Door Coupe. Midnight blue with grey leather and Chippendale walnut dash/trim. Superb and original with wonderful history. Very rare like this... £POA **Tel: 01663 733209. Mob: 07767 617507. www.classiccarshop.co.uk**

S



1933 Singer Le Mans. Now available at www.graemehunt.com. **Tel. 020 7937 8487**

STEERING WHEELS

Steering Wheel Restoration



Steering wheel restoration, vintage to modern cars, tractors, lorries, buses, boats. Bluemels, Celluloid, Bakelite, Wood & Plastic.
Tel: +44 (0)1843 844962
Mob: +44 (0)7795 182 563
www.SteeringWheelRestoration.co.uk

To advertise your car in the Directory, call Connor on 020 7349 8470

WANTED

St Andrews Autos

Enthusiastic buyers of
Classic Cars
All interesting classics wanted by a genuine enthusiast
From Barn finds to Concourse show winners. Anything considered from Exotic, Sports, Hot Rods, American, RS Fords & replicas to quaint old English Tin.
Discretion assured.
sales@standrewsautos.co.uk
07836 226228 / 01245
www.standrewsautos.co.uk

All year round Protection

The Award Winning Carcoon celebrates 25 Years of Innovation



Don't let the elements kill your investment. Freezing Winters or baking hot Summers are all destructive.

Let Carcoon take the pain of high levels of UV during the summer and freezing ice- wind and rain throughout the winter .

Protect your investment inside Carcoons fully encapsulating double insulated Active Airflow Environment.

WWW.CARCOON.COM

Carcoon®

0161 737 9690

THE ULTIMATE AUTOMOTIVE STORAGE SYSTEM

Isolate from the constantly changing temperature and humidity of the ambient environment.

Stabilise by removing excess moisture, fuel/oil vapour and other contaminates from within the mini environment.

Ventilate using the patented Active Airflow Concept.

Circulate the air isolated within, by using Activated Carbon Filters under pressure.



Carcoon®

+44 (0)161 737 9690

info@carcoon.com

www.carcoon.com

IN ASSOCIATION WITH HORTONS BOOKS



Donington Park – The Pioneers

John Bailie

I've watched this book through its years of single-handed labour and at times I thought it wouldn't happen. Yet here it is, the most comprehensive, deeply researched and generously illustrated history of any circuit I've seen, collated, designed and even illustrated by author John Bailie. I've seen scores of photos of the 'Silver Arrows' races, yet Bailie has filled page after page with fresh pictures of those, of the park before, during and after racing, of its army occupation, its derelict years and Tom Wheatcroft's resurrection, backed by letters, maps and programmes. Bailie's text combines comprehensive history with first-hand memories back to the 1920s, from locals, spectators, participants and the Shields family who owned the park, plus WB's race reports, and offers fascinating detail on the stillborn 1950s figure-8 project and the 2007 fiasco, all amplified by elegant graphics.

Superimposing old photos onto today's images sounds dubious yet works well, adding depth to an endlessly compelling volume full of fresh information. Impressive. ***GC***

Published by Silverfox Creative, ISBN 978 1 5272 2997 6, £85 (Anniversary edition £185)

Mr Bristol

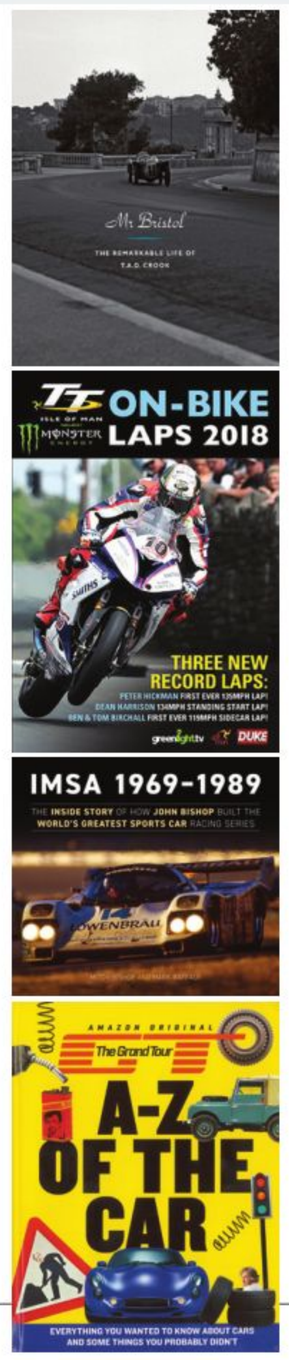
The Remarkable Life of T A D Crook

Michael Barton

A mysterious book, as befits the obfuscatory Tony Crook, the single figure behind Bristol Cars for so many years. A man who always refused to give production numbers for his eccentric handbuilt vehicles, who increasingly refused interviews and latterly banned the motoring press from the factory and refused to allow test drives. (*Motor Sport* was an honourable exception.)

Crook threatened to write his memoirs, and we hoped for dramatic revelations from a man never short of a good story, but he didn't. This is as close as we will get, via a Dutch interview and Michael Barton's own researches, and it does at last give Crook's view of the unpleasant break-up of a famous marque. Yet the biography, while well researched, is just 32 pages from the 220, the rest being salon shoots of significant Bristols and an extensive pictorial spread on Crook's own racing. It's beautifully printed and presented, in slip case, with many unpublished photos, but I'd hoped for more. ***GC***

Published by Butterfield Press, www.butterfieldpress.co.uk, £300



TT 2018 On-Bike Laps

Remember the primitive days of mounted cameras... and the first time they were bolted to bikes on the Isle of Man TT course? I don't recall precisely when first I watched, but it must have been 30-odd years ago and involved Roger Burnett flying past thatched cottages at the best part of 190mph.

Australia had shown the world how best to broadcast motor races with pioneering onboard footage at the Bathurst 1000 and elsewhere, but Burnett's antics stretched expectations of what was possible. Ever since when, things have but improved.

This latest release features five laps – including BMW rider Peter Hickman's 16min 42.778sec, the current outright record at an average speed of 135.452mph, and the Birchall brothers' new sidecar benchmark at an only slightly more pedestrian 119.250mph.

The spectacle remains every bit as compelling as it was in Burnett's day – but with the added benefit of contemporary crispness. ***SA***

dukevideo.com, £6.99

IMSA 1969 – 1989

The Inside Story of How John Bishop Built the World's Greatest Sports Car Racing Series

Mitch Bishop & Mark Raffauf

You don't get much more authoritative a book on IMSA than one by the son of its founder and the organization's senior director of race operations (and former president). And for fans of American racing the book doesn't disappoint in telling the inside story of how IMSA became a global powerhouse. Interviews with many of the top drivers and team owners help shape the book, which also includes hundreds of never-before-published photos. ***JD***

Published by Octane Press
ISBN: 9781937747893, $100

The Grand Tour A-Z of the Car

A blatant cash-in with the third series of Amazon Prime's motoring show on the horizon? Perhaps, but that doesn't automatically disqualify it from merit.

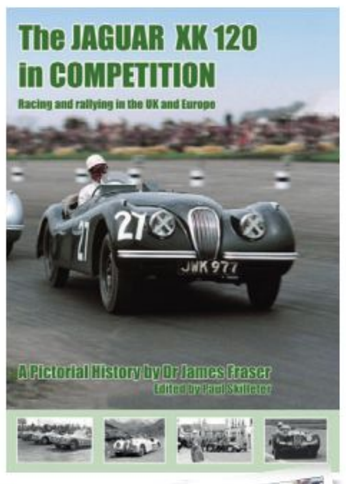
In essence it's a compendium of facts – some obvious, some quirky, some dryly amusing, some puerile – interspersed with a mild sprinkling of quotations attributed to Grand Tour hosts Jeremy Clarkson, James May and Richard Hammond.

There is nothing within to suggest they wrote it; their presence seems but a trigger to encourage purchase (though a photograph of a flying Renault 12 Gordini is perhaps even more persuasive). ***SA***

Published by Harper Collins
ISBN: 978-0-00-825788-0, £20

FOR THE LATEST MOTORING BOOKS GO TO:
www.hortonsbooks.co.uk

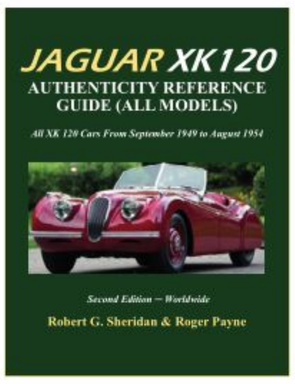
Paul Skilleter BOOKS
www.paulskilleterbooks.co.uk
email: jagworld1@aol.com
01425 612669



The Jaguar XK 120 in Competition.
Stupendous mainly pictorial account of the XK 120's racing and rallying career in the UK and Europe 1949 – 2018. Compiled over four years by historic XK owner and researcher Dr James Fraser, edited by Paul Skilleter. Nearly 500 pages and approx. 1,200 super-quality illustrations including from the best photographers (Klemantaski, Guy Griffiths, Autosport etc) most never seen before, plus lists of cars by reg no/chassis no etc.
Only 550 copies on general sale plus 120 special leather slip-cased editions. Both are now available exclusively from us! List price £245 but special early-bird price £220. Also 120 numbered leather-bound slip-cased editions signed by Mrs Pat Quinn (formerly Pat Appleyard, Sir William & Lady Lyons' eldest daughter), race driver Bob Berry (seen below) and the author at £395. Please see our web site for sample pages and to purchase.







The Jaguar XK 120 Authenticity Reference Guide.
Brand new 2nd edition! By noted XK 120 experts Robert G. Sheridan and Roger Payne, a definitive originality guide to how all models le Jaguar. Hundreds of colour pictures.
For serious XK 120 restorers!
Hardback, 302 pages. From us as sole distributors for UK/Europe at £160.00 inc P&P
UK, £6.00 Europe £395.
Please see our web site for sample pages and to purchase.



Max. £9.95 P&P for any quantity UK. See our website for many more Jaguar books, special offers and overseas shipping rates

REVILO
Revilo Classic Models
Historic Le Mans, F1 and rare classic car models, Art and Memorabilia
Specialising in high end large scale models
www.reviloclassicmodels.co.uk Tel:+44(0)7974 019074
Email:reviloclassicmodels@yahoo.co.uk
Facebook: Revilo Classic Models

POOKS MOTOR BOOKSHOP
Motoring Brochures, Books, Manuals, Programmes, Magazines and original posters BOUGHT AND SOLD
pooks.motorbooks@virgin.net · www.pooksmotorbookshop.co.uk
Shop open: Monday–Friday 9.00am – 5.00pm
Fowke Street, Rothley, Leicestershire LE7 7PJ – Tel. 0116 237 6222

WH05 JOS
UK DVLA Vehicle Registration for sale.
May be of interest to Formula 1 fan and supporter of Max or Red Bull Team
Available on retention certificate for immediate transfer. Price £5500 includes donation of £1000 to Medecins Sans Frontieres and this can be in the successful purchasers name if required.
Please contact Stewart on 0131 449 7140 or stew@onetel.com



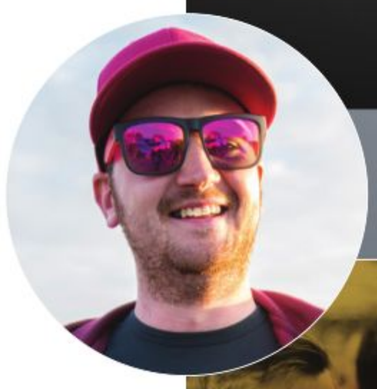
MART

FEATURED ARTIST

Mal Pyke

Slick digitally created car profiles that are recognisable even if not quite 'right'





At one glance you might dismiss these squished car profiles as mere cartoons, but look twice and you'll see the accuracy beneath the proportions.

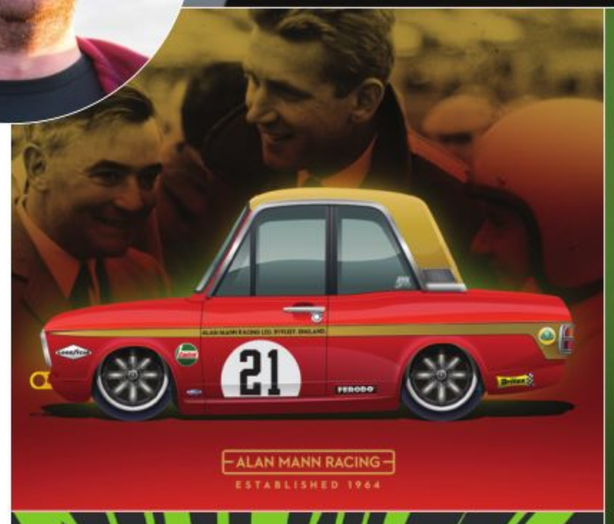
"Without sounding too geeky I think the profile shows the beauty of the car," says Mal Pyke. "It's what creates the look. Also I really like doing the wheels. I'm doing more overhead views too." Those solo wheels feature in his print range, recognisably Porsche Fuchs or Ford RS.

Mal is a commercial illustrator who has done work for Disney and Warner Brothers so it's not surprising that his medium is digital, namely Adobe Illustrator. "A lot of people see digital art as cheating, but it's still art. I still have to create every shape you see. The only cheat you've got is that you can delete and start again!"

Using pencil sketches and photos as a reference, Mal 'assembles' his cars digitally, rendering all the elements faithfully even if the proportions are fanciful, something that may go back to his first illustration in this medium - the *Wacky Races* children's TV cartoon. He's currently working on children's games, which may be keeping the momentum up.

Naturally Mal is a car man - he runs a lowered Cal-look VW Beetle - which goes right back to school days. "I was always drawing cars. I wasn't the best at school so they let me do the wall displays, and now I help out with graphics at local car shows." VWs figure large in his repertoire but so do saloon racers, hence images like the Alan Mann Cortina.

Art can also be a useful trade: "Sometimes I offset artwork against some work on the car," says Mal. Useful.
tictail.com/pyecandy/about, facebook.com/pg/pyecandy









MEMORABILIA MOTORING BADGES



BOAC 1000 badge

Enamelled metal bumper souvenir of 1968 Brands 1000km race – never used, in box. £75
www.automobiliaforsale.co.uk



Silver City Airways badge

Unusual souvenir of travel on England-France 'air bridge' long before the Channel Tunnel. £35
www.automobiliaforsale.co.uk



Morris key fob

Small 1960s enamelled metal badge from Morris key fob, 3.5cm long. £11.50
www.buttonbears.co.uk



Redex Trial bar badge

Competitor's badge for the 1953 Redex economy trial across Australia. Metal with mounting lug. $175
www.xxxxantiques.net

FEATURED MODEL MAKER

Brooklin

Marcus Nicholls on a Bath-based producer that began its life in Canada



When we think of the city of Bath, we might picture the Royal Crescent. But also located within these historical streets we can find a long-established miniature car manufacturer by the name of Brooklin Models. Established in 1974 in Brooklin, Ontario, the company's founder John Hall decided to move his wife and family back to England, where he was raised, and production continues in Bath to this day.

Brooklin has been producing high-quality 1:43 models, focusing on classic American cars, plus some vintage British hardware. The marques covered in the catalogue read like a who's who of motoring icons: AC, Armstrong, Aston Martin, Bentley, Bristol, Brough, Cadillac, Chevrolet, Hudson, Studebaker and Talbot, to name but a few.

All Brooklin's miniatures are hand-built in small runs and most of its output is formed from die-cast white metal. They come fully built and ready to display. As I have described here previously, most die-cast models are made from a zinc alloy called 'Zamac' (sometimes 'Mazak'), but many collectibles are manufactured by a different, more refined rendering process. This is suitable for the production of hundreds of vehicles, but not thousands or more. The average run for Brooklin in the 1990s was about 3000 pieces, though there are special issues of 1000 or fewer.

When creating a white metal model, a master is carefully formed by hand from sheet brass by a highly skilled and experienced model maker, a process that can take hundreds of hours. When the brass master is complete, a rubber mould is then made. A special, malleable alloy of white metal - mostly tin but containing some lead - is brought to a precise temperature and poured into the spinning rubber moulds that rotate at a specific speed for a set period. It's like a science experiment... After the parts have cooled, they are carefully pulled from the moulds. The excess metal around the casting, known as 'flash', is carefully removed and the parts are then prepared for painting or chrome-plating.

In 2004 Brooklin celebrated its 30th anniversary with several special editions - one being the 1936 Pierce-Arrow Silver Arrow. By the end of 2006, more than 120 different American cars, light trucks and trailers had been created by Brooklin, representing American cars and light trucks from the 1930s through to the 1960s.

One of my favourites is a 1965 Chevy Impala two-door hardback. I have a soft spot for big US cars and the Impala in particular looks stunning, especially in pale metallic lilac.

www.brooklinmodels.com

Hot new kits on release and on the way



Tamiya RC Buggyra Racing Fat Fox truck

£135

www.hobbyco.net



Tamiya 1:20 Ferrari SF70H (Vettel)

£49.50

www.hobbyco.net



Revell 1:8 BMW R75/5

£60

www.revell.de/en



Airfix Ford 3-Litre GT Starter Set 1:32

£18.99

www.airfix.com

FORMULA ART DAVID JOHNSON

PREMIUM ARTWORK EDITIONS
FINE ART LIMITED EDITION GICLEE PRINTS






ARTIST SIGNED EDITION
£199.99

These prints are signed and numbered by the artist to a very limited run of just 100 prints. Comes with a certificate of authenticity.
Size: 23"x 33"

All orders can be made through the website plus P&P

CONTACT
32 Stratford Street Oxford OX4 1SW
info@formulaart.co.uk
TWITTER.COM/@formulaart

WWW.FORMULAART.CO.UK

Maserati, the Family Silver
by Nigel Trow

The definitive history of an iconic marque



The master-work of world-renowned automotive historian Nigel Trow, *Maserati, the Family Silver* is the result of fifteen years of painstaking research and unprecedented access to Maserati company and family archives.

Comprising two volumes, 853 pages and over two hundred photographs and technical drawings - many previously unpublished – *Maserati, the Family Silver* was awarded the 2016 *Guild of Motoring Writers'* Mercedes/Montagu of Beaulieu Trophy and has been hailed as:

'A masterpiece of writing and research'.
Pete Vack, Veloce Online

'A master work from a master historian'.
Nick Mason, Maserati aficionado & Pink Floyd legend

'Two fantastic books on the history of Maserati'.
Jo Ramirez, F1 legend and former Maserati employee

'The story of Maserati is told in a way that displays Trow's obvious knowledge and passion.'
Motor Sport Magazine

'Buy your copy now . . . it's certain to be worth considerably more in years to come'.
Octane

Available now from Hortons Books or direct from:
www.maseratifamilysilver.com

CARMAN HISTORIC

ORIGINAL SALES POSTERS AND BROCHURES

MANY FRAMED TO MUSEUM STANDARD FOR DISPLAY

DARRACQ (TALBOT) London Edition – including LAGO – SPECIAL **£395**

DELAGE – Very fine unframed items

MANY OTHER MAKES AND MODELS – OFTEN SPLENDID ARTWORK

For further information please e-mail:
johnscanlon2@aol.co.uk

speedsport gallery

A unique collection of original motor racing paintings, photographs and autographed items for sale.

T: 01327 858 167 | E: info@speedsport.co.uk | www.speedsportgallery.co.uk

Open 9am to 5pm Monday to Friday and also at weekends by appointment
Unit 43, Silverstone Circuit, Nr Towcester, Northamptonshire, NN12 8TN

F1 COLLECTORS .COM

#1 FOR F1 MEMORABILIA & AUTOGRAPHS
We buy and sell F1 items AYRTON SENNA specialists
Call CHRIS GRINT
01763 274448
email:- sales@f1collectors.com

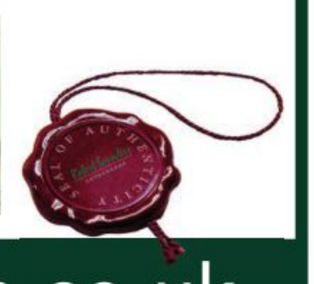


Robert Saunders

AUTOGRAPHS

Robert Saunders Autographs are international dealers in quality autographs and documents for pleasure and investment portfolios. To view our full inventory, please browse our website.





www.autographman.co.uk

Parting Shot

October 11-13, 1993

Sanremo, Italy

Classic car, classic terrain. Lancia had won its home round of the World Rally Championship for the previous seven seasons, but in 1993 Franco Cunico/Stefano Evangelisti and Patrick Snijers/Dany Colebunders secured a Ford Escort Cosworth 1-2. Sanremo was a WRC staple until 2003, after which it was replaced by the Rally Sardinia and became a round of Italy's domestic rally championship. Paolo Andreucci/Anna Andreussi (Peugeot 208) won in 2018.

LAT



1. Colin Chapman in discussion with Team Lotus mechanic Vic McCarthy
2. Chris Amon's Matra MS120C and Mk1 Ford Escort estate. "I was amazed how close I could get to the F1 cars," recalls Norman 3. Emerson Fittipaldi's winning Lotus 72 and distant Connew
4. Jacky Ickx negotiates paddock clutter 5. Peter Gethin's BRM P160B
6. Arturo Merzario's Ferrari 312B2



1 2



3



4

You were there

In 1972 Norman Thomas and wife Elaine gave their one-year-old son his first taste of racing, during a British GP practice day at Brands Hatch



5



6

Send us your images

If you have any photographs that might be suitable for *You Were There*, please send them to: *Motor Sport*, 18-20 Rosemont Road, London, NW3 6NE or e-mail them to: editorial@motorsportmagazine.co.uk

Motor Wheel Service

Renowned worldwide for the manufacture
and restoration of wire wheels



Speak to our specialists or visit our website to learn about our range of wire wheels, tyres and accessories for veteran, vintage and classic cars

www.mwsint.com

+44 (0)1753 549 360

info@mwsint.com

Telephone (01753) 644599

E-mail: sales@runnymedemotorcompany.com

RUNNYMEDE MOTOR COMPANY

Aston Martin in the Thames Valley

Mobile (07836 222111)

www.runnymedemotorcompany.com



1997 Aston Martin V8 Coupe in Mendip Blue with just 29,000 miles from new. One of only 101 cars built. New value price of just..... **£99,500**



2002 Aston Martin Vanquish 2+2 in Stronsay Silver with 2 tone hide. 39,000 miles only with full service history.. **£79,950**



2003 Aston Martin DB7 Vantage Volante in Azurro Blue with Navy hide. Only 34,000 miles from new, perfect condition **£42,500**



1955 Aston Martin DB2/4 in Aston Racing Green with tan hide, mechanically fully restored, Wonderful value at only **£139,950**



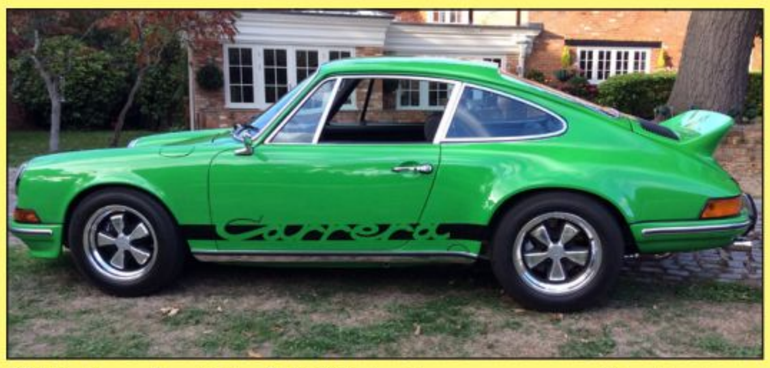
1958 Aston Martin DB MkIII for complete restoration. Not for the faint hearted but an easy task for a capable restorer **£135,000**



1955 Aston Martin DB2/4 finished in Burgundy with tan hide. Fully restored to a very high standard by Four Ashes, Excellent value at **£200,000**



1985 Porsche 911, 3.2 Carrera Targa in Guards Red with pinstripe interior. Beautiful throughout and only 70,000 miles with full service history. **£44,950**



1972 Porsche 911 2.7 RS tool room copy. The best we have ever seen and drives like an original car. Perfect throughout **£119,500**



1972 Porsche 911 2.4 E In Tangerine with Houndstooth check interior, fully restored, very quick and a delight to drive **£115,000**



1971 MGB Roadster in Snowberry white with black hide interior and a fabulous detailed history. Drives perfectly **£13,950**



1965 Sunbeam Tiger. This is a very nice original Tiger that was fully restored in the 90's and remains in excellent condition, Too Cheap at **£59,950**



1954 Jaguar XK120 DHC in Old English White with original black hide interior. Owner now too old to drive, hence seriously good value at only **£79,950**



1964 Jaguar E type Roadster in Carmen red with black hide. It has been the subject of a full restoration and is perfect to drive. **£159,950**



1972 Aston Martin AM V8 series II. £135,000 spent on recent restoration with photographic record. Now a lovely car to drive. Excellent value at ..... **£115,000.**



1988 Ferrari Testarossa in Ferrari Red with Crema hide interior. 21,000 miles only with excellent history. Perfect throughout. **£124,950**



1960 Austin Healey 3000 in original yellow with black hide interior. Restored 15 years ago, still beautiful. Large history, mileage 29,000. Cheap at **£49,950**



1997 Ferrari 550 Maranello in Grigio Titanio with Burgundy hide interior. 31,000 miles, FSH, Perfect driving car. One for keeping..... **£125,000**



1959 Austin Healey BN4 100/6 in original red over black with red hide. Perfect car, recent new clutch and exhaust. Excellent to drive. **£57,950**

Visit our website at www.runnymedemotorcompany.com

VINTAGE, HISTORIC & CLASSIC CAR SERVICES









Motorsport & Alfa Romeo are so inextricably entwined that it is no surprise that so many of the owners that bring their cars to us choose to use them in competition. The fact that we offer all of the services required to build, maintain and support Alfas destined for the track, in addition to restoration work that we are so famous for, means that Jim Stokes Workshops is practically the automatic choice for all 'Alfisti'.

JSWL

- Restoration & Recreation
- Engine Building & Rebuilding
- Gearbox Rebuilding
- Component Manufacturing
- Maintenence & Servicing
- Competition Support
- Acquisition Consultation

Alfa Romeo

NEW ENGINES
6C 1750, 6C 2300 & 8C 2900

Contact us for availability NOW

jswl.co.uk

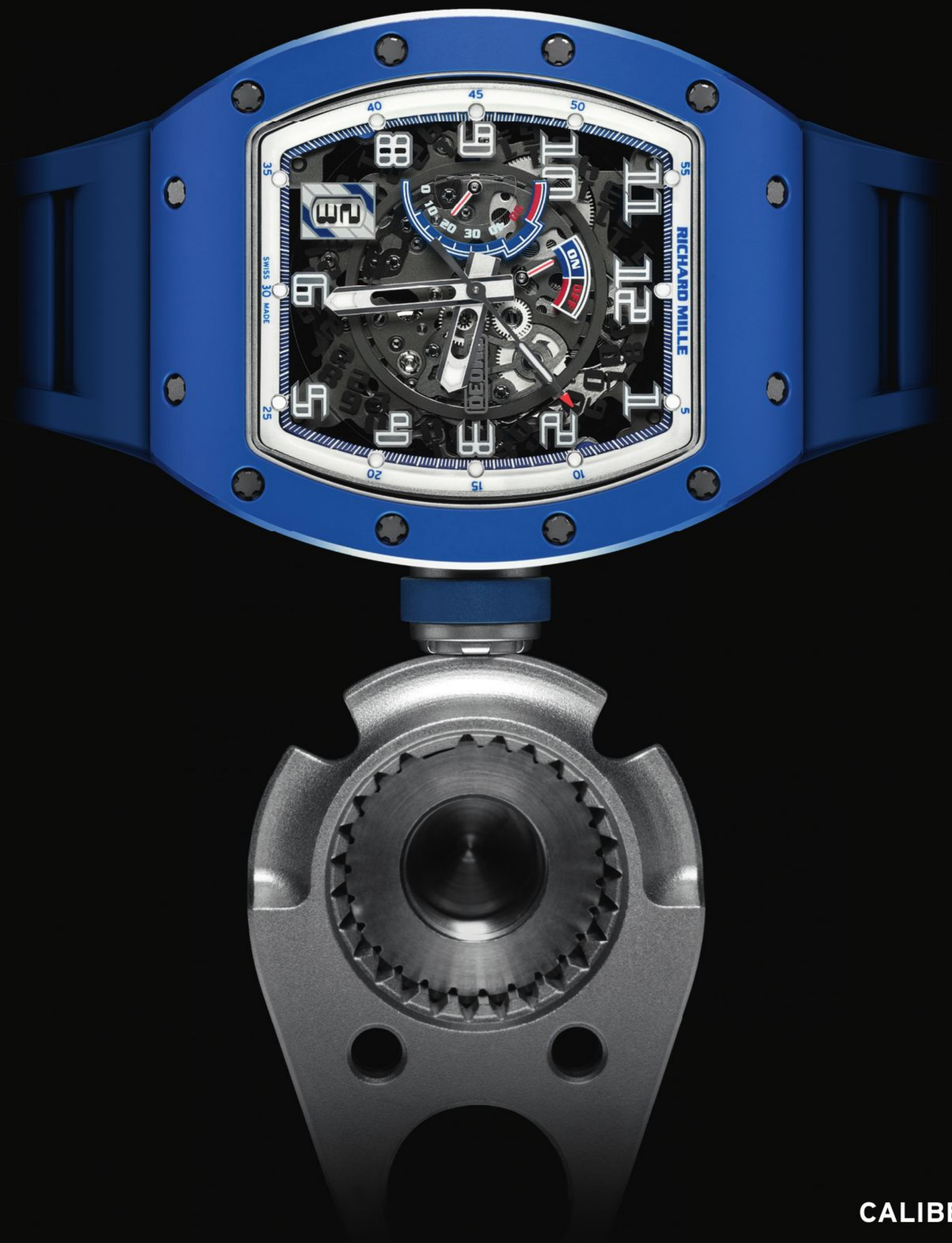
Telephone - +44 (0)2392 254488 Email - info@jswl.co.uk
Pipers Wood Industrial Estate, Waterlooville, Hampshire. PO7 7XU United Kindom

Follow us to see more... **@jimstokesworkshops**

JSWL is a part of the JSW Group

RICHARD MILLE

A RACING MACHINE ON THE WRIST



© Didier Gourdon

CALIBER RM 030

RICHARD MILLE BOUTIQUE LONDON
90 MOUNT STREET, MAYFAIR
0207 1234 155

www.richardmille.com