FORD CAPRI *Racing the monster from Cologne*

Established 1924

MOTOR SPORT

THE ORIGINAL MO[illegible] RACI[illegible] MAGAZINE

25-PAGE SPECIAL!

EXPLOSIVE 80s!

F1, bikes, sports cars & rallying – inside the 'power decade'

***But...** did it change racing for the worse? Mark Hughes analyses the '80s hangover*

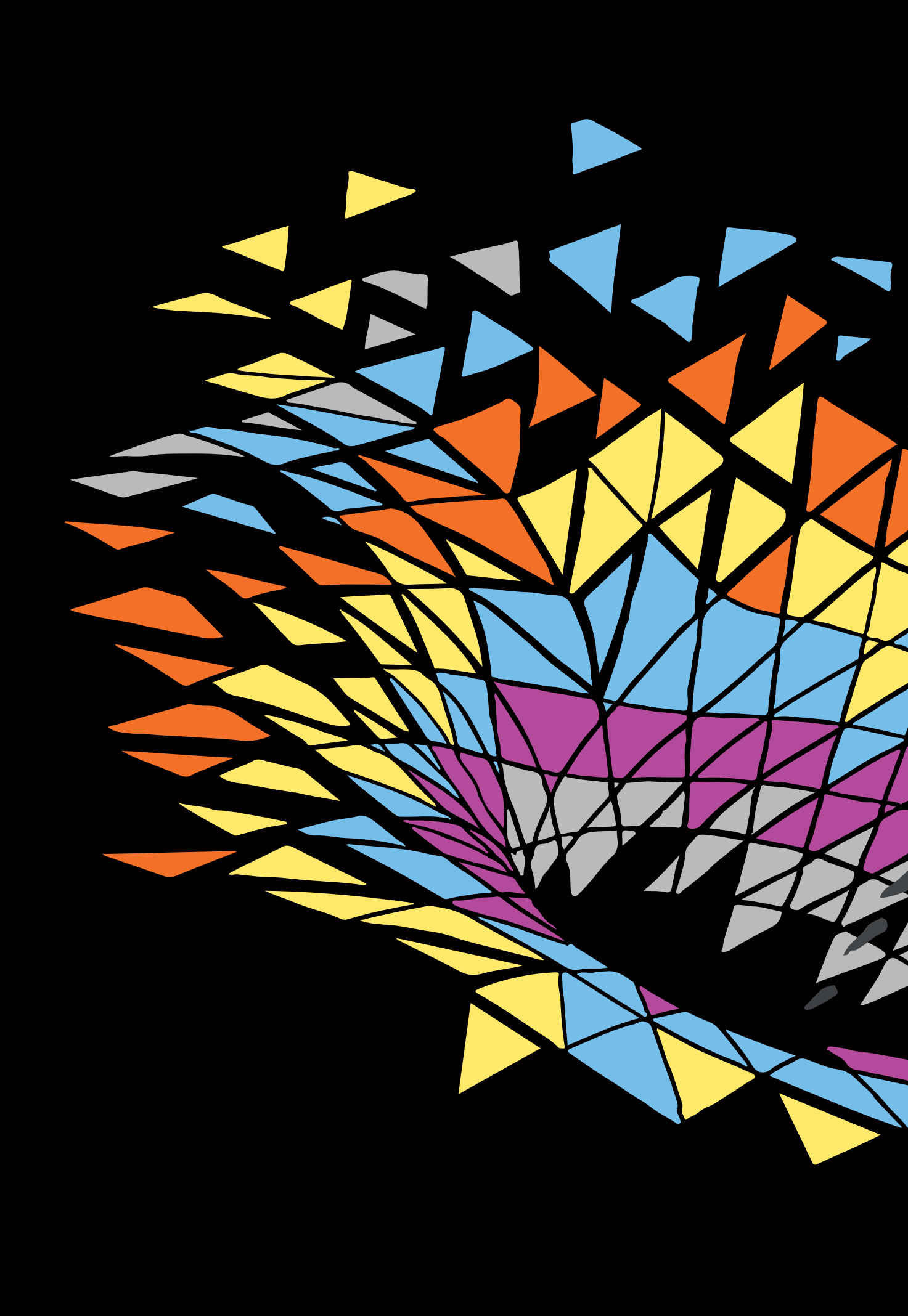
WIN A RIDE IN A GROUP B PEUGEOT

+

LUNCH WITH MASSA
One of racing's good guys speaks his mind

FAREWELL DAN GURNEY
Tribute to the great American innovator

MAR 2018 / ISSUE 1111




PRINCESS
CRAFTED IN PLYMOUTH, ENGLAND
PRINCESSYACHTS.COM

R/EVOLUTION

An entirely new class of yacht

Official fuel consumption figures in mpg (l/100km) for the Ford Mustang range: urban 14.1-28.0 (20.1-10.1), extra urban 28.8-41.5 (9.8-6.8), combined 20.8-35.3 (13.6-8.0). Official CO_2 emissions 306-179g/km.

The mpg figures quoted are sourced from official EU-regulated test results (EU Directive and Regulation 692/2008), are provided for comparability purposes and may not reflect your actual driving experience.


MUSTANG

ALL-NEW 7-SEAT PEUGEOT 5008 SUV

ENTER A NEW DIMENSION

7 INDIVIDUAL ADAPTABLE SEATS

NEW PEUGEOT i-COCKPIT®

ADVANCED DRIVER ASSISTANCE SYSTEMS

PEUGEOT RECOMMENDS TOTAL Official Fuel Consumption in MPG (l/100km) and CO_2 emissions (g/km) for the all-new 5008 SUV Range are: under official EU test conditions, intended as a guide for comparative purposes only and may not reflect actual on-the-road driving conditions.

Model featured is an all-new PEUGEOT 5008 SUV Allure with Emerald metallic paint, a Black Diamond Roof and Advanced Grip Control®. Visit Peugeot.co.uk for more information. Information correct at time of going to print.

Urban 36.2 – 62.8 (7.8 – 4.5), Extra Urban 53.3 – 72.4 (5.3 – 3.9), Combined 46.3 – 68.9 (6.1 – 4.1) and CO_2 140 – 106 (g/km). MPG figures are achieved

Important Sports, Competition and Collectors' Motor Cars
Sunday 18 March 2018
Chichester, Sussex

FURTHER ENTRIES INVITED

ENQUIRIES
+44 (0) 20 7468 5801
ukcars@bonhams.com

GOODWOOD MEMBERS' MEETING SALE

Ferrari Classiche Certified, 52,000 miles from new
1974 FERRARI DINO 246 GTS
1 of circa 21 right-hand drive versions ordered with fared wheel arches and wide Campagnolo wheels

1958 AC ACE ROADSTER

1921 VAUXHALL 30/98 E TYPE

Bonhams

bonhams.com/motorcars

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 Nick Trott
Deputy Editor Joe Dunn
Editor-at-Large Gordon Cruickshank
Features Editor Simon Arron
Grand Prix Editor Mark Hughes
Art Editor Damon Cogman
Digital Editor Jack Phillips
Project Manager Zamir Walimohamed
Designer Andy Coates
Photographer Lyndon McNeil
Writer Samarth Kanal
Filmmaker Hamish McAllister
Contributing Editors
Andrew Frankel, Doug Nye, Mat Oxley, Richard Meaden, Richard Williams
Special Contributors
Paul Lawrence, Gary Watkins, Paul Fearnley, Nigel Rees
Picture Library
LAT Photographic 020 8267 3000

ADVERTISING
020 7349 8484
sales@motorsportmagazine.co.uk

Commercial Director Sean Costa
Commercial Manager Mike O'Hare
Advertising Manager Laura Holloway
Account Manager Sanjay Gandecha
Sales Executive William Hunt

PUBLISHING
Managing Director Giovanna Latimer
Publisher Steve Kendall
Financial Controller Niall Colbert
Marketing & Operations Director Gerard O'Brien
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 Camilla Royce

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.

Contents

Volume 94 / Number 3

REGULARS

FEATURES

In the spirit of Bod and Jenks

www.hankooktire.com

HANKOOK
driving emotion

ventus F200

Top-notch performance slick tyre with consistency and high mileage in dry conditions

Be one with your tyres,
and the road will be one with you.

BE ONE WITH HANKOOK

Official Partner of DTM

WRAPS COME OFF NEW GINETTA LMP1

Ambitious Leeds firm aims to be in a position to challenge for victory at Le Mans

Gary Watkins

Ginetta boss Lawrence Tomlinson made some bold claims on the launch of his firm's new LMP1 contender. "Our target is overall victory at the Le Mans 24 Hours and in the World Endurance Championship," he said as the covers came off a car christened the G60-LT-P1. "We have designed this car to be competitive with the Toyota."

The engineers in the drawing office at Ginetta's Garforth headquarters, on the outskirts of Leeds, are understandably more circumspect, but they, too, have high hopes for an LMP1 design that has gone from inception to launch and then onto the track for initial testing in little more than 12 months.

"We didn't embark on this project to be also-rans," said Ginetta Cars' technical director Ewan Baldry. "Our expectations are to run at the front."

That confidence is based on a clear commitment from the rule makers to give privately run non-hybrid P1 machinery lap-time parity with the hybrid cars from Toyota, the only remaining manufacturer team in the WEC, as well as empirical data. Baldry insists that simulations undertaken by AVL GmbH in Austria, a global leader in the field, suggest the Ginetta can be competitive with the Toyota TS050 HYBRID over the course of the seven-race 2018/19 WEC 'superseason'.

"AVL has had an input into the design process and used its technology to come up with performance predictions," he said. "If the numbers stack up like they suggest, then we will be competing right at the front with Toyota."

Manor, the only team that has so far concrete plans to run a Ginetta, has similar aspirations. Manor sporting director Graeme Lowdon insists that a team that is expanding from the LMP2 ranks for the superseason isn't underestimating the challenge, but he reckons a first victory for a privateer at Le Mans in more than 20 years isn't out of reach.

"The way I look at it," he said, "there were five heavily-funded factory entries at the 24 Hours last season, but a P2 car came close to winning it. So is it possible for a privateer P1 car to win Le Mans this year? Yes it is."

THE NEW CHASSIS

The Ginetta has been developed by a Baldry-led five-strong in-house team, which includes ex-Williams aerodynamicist Andy Lewis, in conjunction with a number of key partners.

Williams Advanced Engineering, which helped developed Porsche's line of successful 919 Hybrids, has undertaken the wind-tunnel programme, while British design legend Adrian Reynard's Auto Research Center in Indianapolis has been responsible for the computational fluid dynamics (CFD) study. Ginetta has also employed Paolo Catone, whose design credits include Peugeot's 908 HDi, as a consultant. His task, says Baldry, was "to ensure that we don't stray too far from the right path".

The new Ginetta is distinguished by its high nose - Baldry reckons it's the highest seen on an LMP1 car with the exception of the 2016 Audi R18 e-tron quattro.

"We have seen some great performance

The Ginetta LMP1 was launched at Birmingham's NEC in January. Left, boss Tomlinson (on right) with Manor's Graeme Lowdon

gains as a result of that," Baldry said. "We were concerned about going too high and making life difficult for the drivers, but very early on in the programme we made a wooden mock-up. That's how we have arrived at what we have now."

Baldry explained that particular attention had been given to weight-saving. The Ginetta has come in under the marque's weight target. It had set a goal of hitting 770kg, already more than 60kg under the class minimum of 833. The first chassis, albeit with a few systems missing, was nearer to 750kg when it first went on the scales after the car was bolted together for the first time.

Formula 1-specification carbon composites and the incorporation of the mandatory Zylon side-impact panels into the chassis, rather than bonding them onto the exterior, have both played a part.

The Ginetta unveiled in January was fitted with the new Mecachrome direct-injection V6 turbo, which is based around the engine that will come on stream in the Formula 2 (né GP2) Grand Prix support series this year. The car undertook its first tests with this engine in January, though Manor has yet to confirm that it will use the French powerplant.

WHO WILL RACE IT?

For the moment it can only be said with any certainty that there will be one Ginetta racing in the WEC superseason. Manor, however, hadn't entirely ruled out a second car as the entry deadline at the end of the month approached. A second team, whose identity had yet to be revealed at press time, has put down deposits on a trio of Ginettas with the intention of running two.

Baldry insisted that this team "hadn't disappeared" despite the lack of news about the project and its situation remained unchanged. "Their money was always scheduled to start flowing in January," he said, while stressing that a late commitment wouldn't prevent Ginetta from building its cars in time. "That's not a problem because Lawrence has put his money where his mouth is and committed to laying down a batch of 10 chassis and building stuff speculatively."

Manor has yet to announce drivers, though it will be compelled to list at least one when it submits its entry for the WEC. Lowdon is promising a top-line driver line-up, despite the commercial realities of mounting a privateer campaign in a global series.

"We have a fantastic car in the Ginetta and have put together a really good team of people," he said. "There is no point doing that if you don't have world-class drivers to race the car."

Manor has revealed, however, the name of its new technical director. It has brought back Dave Greenwood, who was on the books of the Manor-run Virgin Racing/Marussia F1 team in 2010-14 before spending the past three seasons as Kimi Räikkönen's race engineer at Ferrari to fill the new post.

"Racing at the level we will be competing at in the superseason will require an F1-level technical set-up – the only difference is the letter in front of the '1'," added Lowdon. "The demands of F1 and P1 are different, but the skill-set is the same and that's why we have created the position of technical director."

Tomlinson is hopeful that there will be more Ginettas on the grid in the future, which explains why he has committed to the 10 chassis, which he says will equate to six race cars. The purchase price of £1,340,000 and a fixed price for a Mecachrome engine lease and technical support from Ginetta makes it a cost-effective package, he insists.

"At Ginetta we pride ourselves in giving people a great product that offers value for money," he said. "What we are bringing to P1 is an affordable car that can ran at the front." ◘

HOT TOPIC

HOT HATCH ON THE HORIZON

Germany's premier tin-tops are returning to Kent

There is a 2018 date that every British motor sport fan should block out. It's August 12, when the DTM will be visiting Brands Hatch. Or more pertinently the Brands Hatch Grand Prix circuit.

This will be a spectacle to behold. Forget about the DTM boreathons at Brands in 2006-13. They were on the Indy layout and Class 1 touring cars just didn't work on such a short track, which presents few passing opportunities for such high-downforce cars. So much so there was even a scheme – which got as far a planning permission application – to modify Graham Hill Bend.

But 2.43 glorious miles of the full track will be different. There should be overtaking, but even if Brands doesn't create amazing racing, the prospect of a DTM car charging through Hawthorn, Westfield or Clearways is too good to miss. And that's without thinking about what's going to be happening as cars barrel through the uphill Dingle Dell.

The DTM is presenting a rare opportunity to see super-quick machinery on the GP circuit. They don't come along very often. In the recent past, the A1GP World Cup of Motorsport briefly offered that chance, as did the short-lived Superleague Formula big-banger single-seaters and circuit boss Jonathan Palmer's Formula 2 series.

They are all now consigned to the dustbin of motor sport history, so make sure you don't miss the DTM.

GOODING & COMPANY PRESENTS

THE AMELIA ISLAND *florida* AUCTION

FRIDAY March 9 11am

1960 LOTUS 18 F1
The Last of Six Factory Lotus 18 Formula 1 Models Built
Driven by Jim Clark, Graham Hill, John Surtees, and Innes Ireland | Chassis 374

1967 FORD GT40 Mk IV
The Last of 12 GT40 Mk IV Chassis Built
Chassis J12

1976 PORSCHE 934
Extensive European and US Racing History
10th Overall at the 1979 24 Hours of Daytona
Chassis 930 670 0162

1990 PORSCHE 962C
Campaigned by Brun Motorsport at the 1990 24 Hours of Le Mans
Chassis 962-160

1974 PORSCHE 911 CARRERA RSR 2.1 TURBO
One of Only Four Examples Built | 2nd Overall at the 1974 24 Hours of Le Mans | Chassis 911 460 9102 (R13)

GOODING&COMPANY®

REGISTER TO BID GOODINGCO.COM +1.310.899.1960 AUCTIONS & PRIVATE BROKERAGE

NOW INVITING CONSIGNMENTS
Pebble Beach Auctions through June 1

quality is our style™

CASH BARRIERS

Did Williams simply opt for the biggest pot of gold when finalising its 2018 driver line-up? The truth is rather more complex than that

Mark Hughes

A very delicate balancing of a uniquely vulnerable team's books is behind the controversial 2018 driver line-up at Williams.

Predictably, its announcement of Sergey Sirotkin – and not Robert Kubica – as its 2018 race driver alongside Lance Stroll has initiated a lot of vitriol from fans. The gist of the objections? A great sporting comeback has been sacrificed for a pay driver. 'Williams is no longer a serious race team' was a typical comment on forums. But that's to misunderstand the economics of an independent team in the current F1 environment. What makes Williams so vulnerable – and therefore the team pressing hardest in using drivers as an income source – is its size. In many ways it's structured as if it were still a manufacturer-supported team.

In the era of big car manufacturer money (late '90s/early 2000s), Williams expanded vastly, just like all the other factory-supported teams. But although it hasn't been a works team since parting with BMW 13 years ago, it still employs a staff of more than 600, still has a big, expansive engineering core manufacturing a vastly bigger proportion of its own parts than, say, Force India (staffed at about 360). As an independent team with such a scale of facility, staff and costs, Williams is something of an outlier among a grid of either works teams or much smaller independents. McLaren is now as similarly independent as Williams, albeit supported by an increasingly successful automotive group.

A lot of the vitriol around Williams's driver choice comes from the perception of it still being a top team because of the blockbusting title-winning heritage its name carries. It isn't, and expecting a team at this level to be able to command the calibre of driver it did back in the days of Mansell/Piquet is just dreaming. The financial realities of its vulnerable position are what has driven a Stroll/Sirotkin line-up, which brings a substantial budget to the team at a combined estimate of about £33 million (37 million euros) for this coming season.

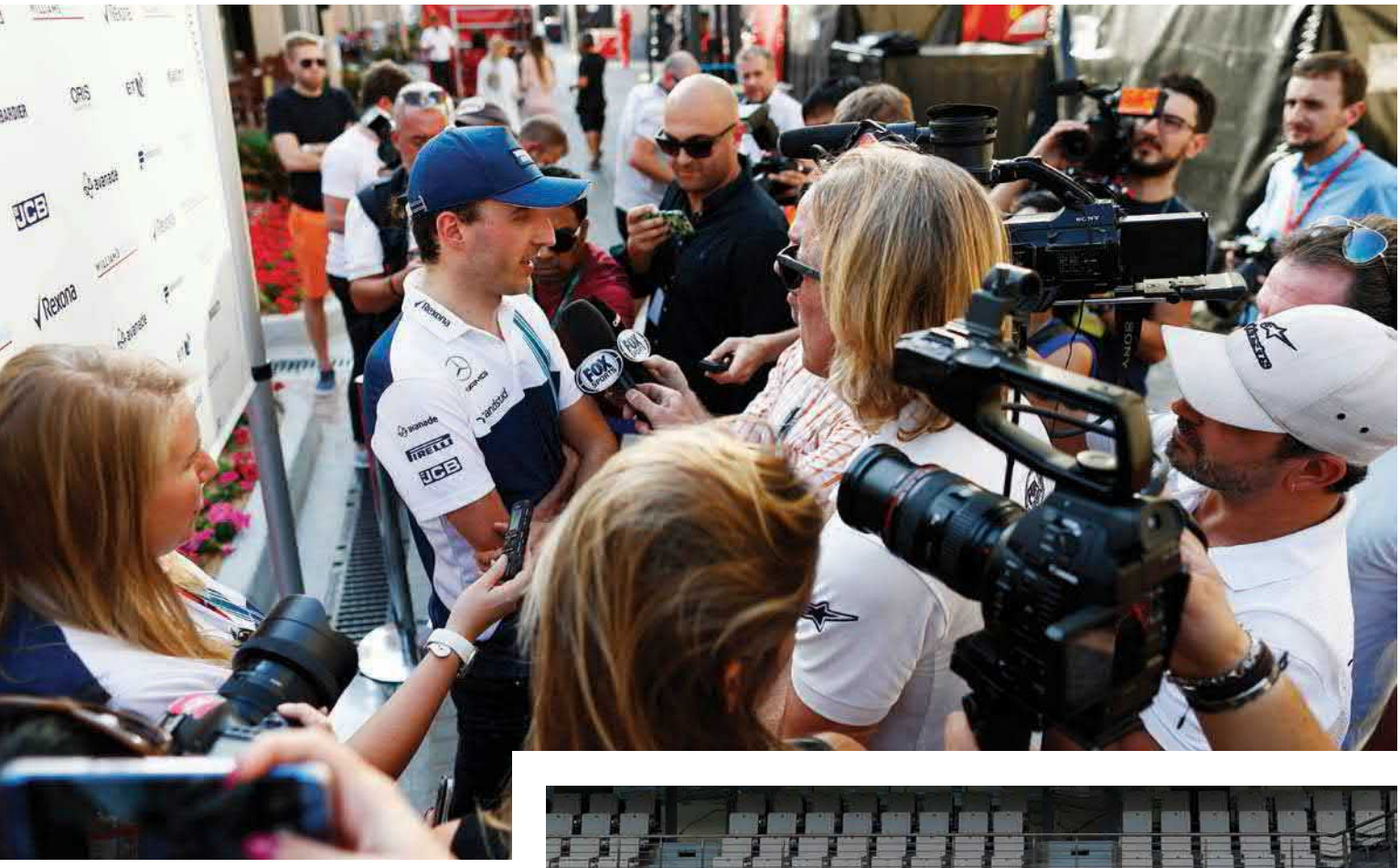
However, targeting income was only part of the equation. On the other side sits performance and the two factors are interlinked; a faster driver is potentially going to boost the team's position in the income-generating championship for constructors. So, while the faster driver may not bring as much budget directly (or even be a cost), his net worth to the team might be more if he delivers. But it's a tricky equation to solve.

Unlike Stroll, Sirotkin is not a pay driver in the strict sense. He has commercial backers who have chosen him – based on his performances. It isn't family money. He's shown himself to be a competitively quick, ▶

Sirotkin (below left) in action during the post-season test in Abu Dhabi. He fared better than Kubica, but fell shy of Massa's race weekend pace

ALL IMAGES LAT


Rexona



race-winning GP2 driver and has the sort of intelligence, serious application and deep technical understanding that could yet see him develop into a properly competitive F1 driver. But how sure can Williams be that he will not be losing them points compared to who they could have had?

This was not how Williams initially planned to address the problem. The original plan was to attack it from the performance end. With the rookie Stroll in one seat, Felipe Massa was the designated solid foundation, the points scorer-designate. He was a solid, known quantity but it had been calculated that at about 0.25sec off the ultimate pace, he was responsible for 14 per cent of the team's total performance shortfall to the front. Could they simultaneously reduce the remaining 86 per cent whilst getting someone quicker? That was the thinking within the team around Monza time, when approaches were being made to Fernando Alonso.

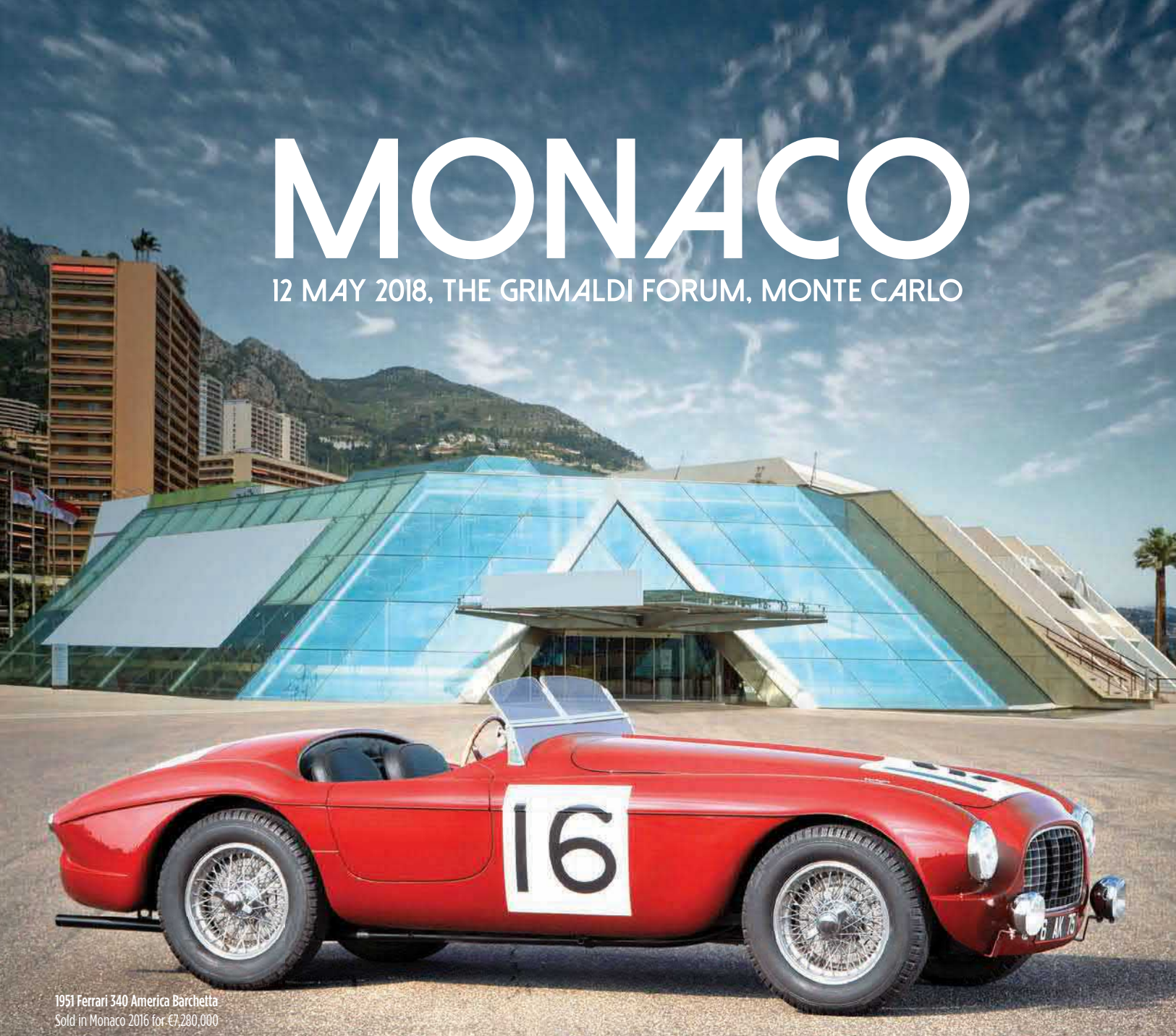
A five-star, guaranteed provider of relentless performance, with the authority implicit in that status, would give Williams a very stark measure of its strengths and weaknesses - without the ambiguity that even a decent performer like Massa brought. That was the attraction for the technical team. The recruitment of such a driver would push the team forward, inject a sense of urgency and remove that ambiguity that can be used by team members to hide under-performance. There'd be nowhere to hide with Alonso in the car. It was surely worth a try - after three desolate seasons at McLaren, he just might have been ready to jump. Except he wasn't, and duly extended his McLaren contract once Honda's departure was confirmed.

But that train of thought at Williams led it to wonder if there was another possibility, another way of gaining access to such a driver. Robert Kubica (pictured, top) - a performer of similar level to Alonso back in the day, someone reckoned by Alonso himself as 'the best of us all' - was trying for a comeback. If, despite the permanent arm disability from his 2011 rallying accident, and the seven-year absence from F1, he could be like the driver he once was, then Williams might have its man.

So began the long, drawn-out process of finding if this was the Kubica of old. Two tests were inconclusive. At one of them he was slower than the team's third driver Paul di Resta. He was saying he was unfamiliar with the tyres and needed a while to adapt. But time was moving on. Massa was demanding an answer about whether he was wanted in 2018 before his home race in Brazil '17. The Strolls had refused to allow their '14 car to be used at Suzuka for a Kubica test, so delaying things

MONACO

12 MAY 2018, THE GRIMALDI FORUM, MONTE CARLO



1951 Ferrari 340 America Barchetta
Sold in Monaco 2016 for €7,280,000

NOW INVITING CONSIGNMENTS

RM | Sotheby's

www.rmsothebys.com

further. With the team unable to give Massa an answer before Brazil, he took matters into his own hands and announced his retirement from F1. But after the test alongside di Resta, the questions about Kubica's outright speed were still unanswered - and now the back-stop of reliable performance had stepped down. In going for a hoped-for Alonso replica to step up driver performance, Williams was in danger of making a performance downgrade. A lot therefore was hanging on the final test, at Abu Dhabi after the season's final race, where Massa had been in top form.

BALANCING ACT

Late in the day Sirotkin's backers, the Russian SMP bank, contacted the team and expressed an interest in placing its man in the race seat, with an initial offer understood to be 15 million euros (£13 million). So Sirotkin was added to the test. The technical side of the team - headed by Paddy Lowe - wanted the fastest candidate. The commercial side - Mike O'Driscoll and Claire Williams - was very aware of the bottom line, given the team's heavy cost base and its declining performance (and therefore income) over the last couple of seasons. The technical side had the veto. Had Kubica tested faster, they'd have chosen him (and the eight million euros he was said to bring). The team would then have tried to negotiate a similar sum for the role of Friday driver (either from Sirotkin's backers or those of F2 driver Nicholas Latifi, who has since joined Force India in that role). In this scenario they'd be generating about £14 million in addition to Stroll's money. But Kubica did not go faster. In fact, he struggled for single-lap pace more than he had at the previous two tests and was about 0.3sec off Sirotkin - who in turn was about 0.3sec off the pace set by Massa in qualifying. That was three tests and three times Kubica had struggled with the tyre traits. On that cost/performance equation, Williams did not feel it could justify the risk. Sirotkin appeared faster - and brought more money.

Ironically, the chase for more driver performance had triggered a sequence of events that had arguably cost it driver performance. But the upside was a boost in income and the realistic possibility that Sirotkin could develop into a properly competitive F1 driver. It is believed that SMP upped its original offer to nearer £18 million to help its man secure the drive. Kubica had to be content with a (paid) third driver role in which he gets what is expected to be eight Friday practice sessions and several tests to see if he can unlock the very special driver he once was. While Williams stands accused of just taking the money, the actual difference in income between a) Kubica in the race seat/pay driver in the reserve role and b) what we have, is about £3.5 million. The prime decider was performance, the money just made it easier. Had Kubica been conclusively faster, they would have taken him, losing only that £3.5 million difference - and with every likelihood of more than making that back from the constructor payments.

To understand how driver performance impacts upon income, we can look at last year's 'Column 2' payments. These are based on finishing positions in the previous year's championship. Williams's fifth place in 2016 (with Bottas/Massa) earned it about £24 million. It finished in the same position in 2017 (albeit much further adrift of fourth) and so can expect a similar sum this year. But in terms of lap-time pace, there was very little difference between Force India in fourth place all the way down to Haas in eighth. But the difference between finishing fourth and eighth is about £12 million. It would be very easy, with an uncompetitive driver line-up, to fall down to eighth, as the car pace is so similar in that group. That might make the difference between being in business or bankrupt for a team of Williams's overheads. However, it is more than covered by Sirotkin's £18 million, and with the proviso that he - together with any improvement in Williams's car competitiveness - might be good enough to keep the heavy points rolling in.

It's a precarious situation in the long term and simply underlines the fact that cost and payments are out of kilter for independent teams. But to say that Williams simply took the money in signing Sirotkin is a vast over-simplification.

Pictured in action at his home race in Montréal, Stroll delivered some strong performances in 2017 – but was also inconsistent

TAILORED FINANCE FOR STUNNING SPORTS & RACING CARS

JBR CAPITAL

Call us now for a competitive quote on **020 3603 0083**
or visit our website: **jbrcapital.com**

Finance and terms subject to status. Advances between £25,000 and £3m.

LAMBORGHINI CLUB UK

Offcial Finance Partner

TRIBUTES TO 50 YEARS OF THE ESCORT

Special events commemorate half a century of Ford's competitive stalwart

Paul Lawrence

Three events in September will celebrate 50 years of the Ford Escort and its enduring popularity in both rallying and racing.

A dedicated Escort race at Brands Hatch, a celebration of the Mk1 twin-cam at the Castle Combe Rallyday and a new rally in Belgium - all solely for Ford Escorts - will honour the car that remains a favourite with competitors and fans alike.

The Historic Sports Car Club will mark 50 years of the Escort in saloon car racing with two special one-model races at Brands Hatch on Sunday, September 23. The races on the Indy circuit will be open to a wide range of race-prepared Escorts and it is hoped to have one or two period special saloon examples on the grid.

One of the best-known racing Escorts will be there as Henry Mann will drive Alan Mann Racing's XOO 349F, the ex-Frank Gardner Mk1 British Saloon Car Championship winner from 1968. Although not able to compete, the iconic red-and-gold car will run some demo laps.

Grahame White of the HSCC said: "We thought it was appropriate to mark 50 years of a car that has had such an impact on the sport. We also hope to attract some former Ford Escort racers to join in the celebrations."

Fifty years of the original Ford Escort Mk1 twin-cam will be a key theme of the Castle Combe Rallyday, 24 hours beforehand. As well as period cars on show, several examples will be in action on the event's demonstration special stage.

"Everybody loves the Mk1 Escort," said event organiser Tom Davis. "There's so much history about this car and so much of it is relevant to Rallyday.

"We're delighted to be paying homage to the original Escort twin-cam."

Meanwhile, Belgian fans will mark the model's golden jubilee with the Escort Rally Special on September 16. Based in the town of Couvin, the closed-road special stage rally has the support of Ford Belgium and is expected to draw rally cars from across Europe. The rally will feature a 25km stage that will be run four times.

The Escort made its competition debut in a rallycross meeting at Croft in February 1968, with its rally baptism a month later on the San Remo Rally in Italy. It went on to become one of the most successful and enduring competition cars of all time. Hundreds are still in use in rallying and racing and the Escort is widely regarded as one of most popular competition cars of all time.

RALLY TRAGEDY

The deaths of historic rally competitors Shawn Rayner and Steve Dear during December's Loco 2 Stages Rally cast a shadow over the sport during the Christmas holiday.

The driver and co-driver of the Ford Escort Mk2 died in an accident during a low-key event at Bramley Camp, near Basingstoke, on December 29. It is believed their car went sideways into a tree at high speed. It is the first

Ford's Escort will be celebrated this year. Right, a Thruxton rarity, 1950s sports cars will race at 50th anniversary event. Below, rallying is mourning Shawn Rayner and Steve Dear

FORD LAT

"A mixture of racing and demos will echo five decades of the circuit. This is going to be more of a festival than just a traditional meeting"

time a competitor has died in a historic-spec rally car since the sport's increase in popularity started before the turn of the millennium.

A statement by the organising club, the Sutton and Cheam Motor Club, confirmed that the accident was being investigated by the MSA and Hampshire Police.

Rayner, 52, was a popular figure in historic rallying. He enjoyed success in the early 1990s before stopping rallying after two major accidents in Welsh forests. In 2009 he decided to make a return in the historic branch of the sport. Rayner enjoyed notable success last season on closed-road rallies in Ireland. His regular co-driver had been Declan Dear, but on this occasion Declan's father Steve, 64, took over co-driving duties. He had been a regular competitor a decade ago, but then stepped back from competition to support his son's rallying.

A statement from their Hehku Rally Sport team said: "We can take some solace in the fact that they were competing in the sport they loved so much."

RETRO THRUXTON

On June 2-3, a high quality historic race programme and appropriate demonstration runs will mark the 50th anniversary of Thruxton as a permanent car racing venue.

Historic categories that are rarely – if ever – seen at the popular Hampshire circuit will headline an event designed to celebrate five decades since it opened in its current form in March 1968.

Among the grids will be the Royal Automobile Club Woodcote Trophy, the Stirling Moss Trophy and the Historic Touring Car Challenge, featuring grids of pre '56 sports cars, pre '61 sports-racing cars and pre '91 touring cars from Motor Racing Legends. From the HSCC will be the Super Touring Trophy, Historic Formula Ford and Guards Trophy.

Three car race meetings were held on the airfield runways at Thruxton in the early 1950s, and bikes continued to use the site, but cars did not return until the British Automobile Racing Club needed a new home track after the closure of Goodwood in 1966. The rebuilt Thruxton opened for racing on March 17 1968 and hosted an international Formula 2 race less than a month later. Half a century on, the high-speed track layout remains unchanged while a programme of re-investment continues to improve facilities.

Bill Coombs, Thruxton's managing director said: "We will have a mixture of racing and demonstrations over both days, all of which will echo five decades of the circuit," said Coombs. "This is going to be more of a festival than just a traditional race meeting."

To mark the occasion, a new hospitality building will be officially opened to the inside of Allard Corner.

BTCC HONOURED

The Silverstone Classic will celebrate 60 years of the British Touring Car Championship with a dedicated 'Tin Top Sunday' on July 22, when about 200 racing saloon cars will be in action on the GP circuit. Sunday's programme will feature races for the pre '66 U2TC, the Trans-Atlantic Touring Car Trophy for pre '66 V8s, the Historic Touring Car Challenge for cars of the 1970s and 1980s and the Super Touring Car Trophy for BTCC cars of the 1990s.

Past and present touring car aces like Matt Neal, Gordon Shedden, John Cleland, Tim Harvey, Colin Turkington, Jeff Allam, Gianfranco Brancatelli, Rob Huff, Mike Jordan and Steve Soper are all likely to be racing.

"These four evocative grids will be a wonderful tribute to 60 memorable years of great BTCC action," said event boss Nick Wigley of Goose Live Events. "The BTCC boasts an incredible history of thrills and spills stretching right back to 1958."

RAC SET FOR 2019

The organisers of the Roger Albert Clark Rally have revealed provisional details of the event's 12th edition, which will run from November 21-25 2019. After the success of 2017, rally manager Colin Heppenstall confirmed that the 2019 rally will build on that platform by following a broadly similar format.

Heppenstall's outline plan is for an event covering between 250 and 300 stage miles across four days with legs in Wales, Kielder and Scotland. The rally will start from Brightwells in Leominster, which will also be the base for documentation and scrutineering. Meanwhile, there will be a new finish venue on Monday afternoon within easy reach of Kielder Forest.

"We were overwhelmed with the hugely positive feedback from the 2017 event; from competitors, marshals and spectators," said Heppenstall. "So we are not going to re-invent the wheel.

"There will be lots of detail changes, however, and we plan to introduce some new stages to ensure the rally remains fresh."

GT40s AT COMBE

There will be a flavour of Le Mans at the seventh Castle Combe Autumn Classic, which is confirmed for Saturday October 6.

Key elements of the 2018 edition will be celebrations of the Ford GT40's Castle Combe heritage, with local racer Ron Fry, as well as the 65th anniversary of the last race at the circuit for Sir Stirling Moss OBE.

Several Ford GT40s will take part in demonstration sessions alongside other cars with Le Mans heritage. Closer to home, Bath garage owner Ron Fry raced two GT40s at Combe, chassis 1017 and the ex-Targa Florio chassis 1073. His racing career and close links with the venue will be featured.

At the time of the 2018 event it will be 65 years since Sir Stirling Moss OBE had his final race at Castle Combe - and it nearly ended in disaster when his Formula 2 Cooper flipped at Quarry after contact with the Connaught of Tony Brooks. Moss was thrown out and suffered a broken shoulder, damaged arm and twisted knee. The racing lives of Moss and Brooks will also be in the spotlight.

HOT TOPIC

ON YOUR MARQUES

Is a pre '66 Porsche series a step in the right direction?

One-make racing is largely a feature of modern motor sport, with hordes of identical cars providing close, action-packed competition on what is generally a level playing field.

The concept is much rarer in historic racing, which has always thrived on the diversity of cars involved in each race. So the news of a one-make series dedicated to pre '66 Porsche 911s has generated a lot of discussion. Launched by Peter Auto, the 2.0L Cup will start with three races in 2018, at Spa, Dijon and Paul Ricard.

Those behind the series are targeting 40-strong grids - bold, given that there were only a handful of cars being raced regularly towards the end of last season. If it can be made to work, it will certainly be a fine spectacle, with the added bonus of some notable Porsche racers on the grid.

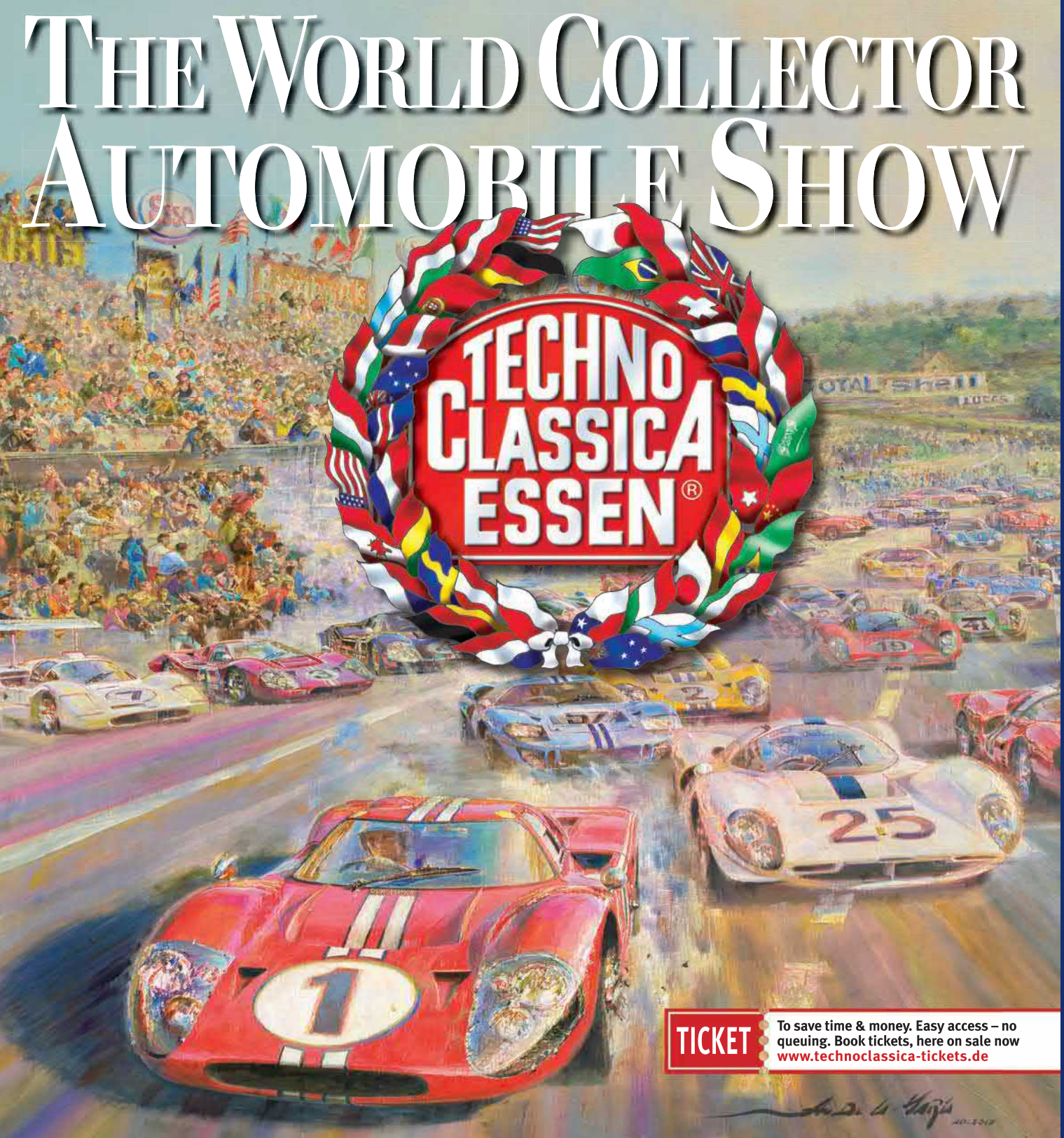
But will it take off? In truth, the jury is out and only when the first grid lines up at Spa in late May will we know the answer.

The only guide to date was the one-off John Aldington Trophy race at Goodwood in March 2015, when a grid of 22 cars was assembled. Elsewhere, the Jaguar E-type had its own race series to mark its half-century in 2011 and Ford GT40s and pre '66 Minis have enjoyed dedicated grids at Goodwood.

However, converting a Goodwood grid into a viable race series is no easy task. On the back of a successful grid at Goodwood, Masters Historic Racing launched a Mini-only series but it quickly faltered through lack of support.

There is no doubt that a pre '66 2-litre Porsche 911 is a desirable car and values have gone through the roof in recent years. Are there enough potential racers to fill a 40-car grid? That remains to be seen, but if the 2.0L Cup hits those numbers it will be a massive success.

The World Collector Automobile Show



TICKET To save time & money. Easy access – no queuing. Book tickets, here on sale now
www.technoclassica-tickets.de

30TH WORLD SHOW FOR VINTAGE, CLASSIC AND PRESTIGE AUTOMOBILES, MOTOR-SPORT, MOTORCYCLES, SPARE PARTS, RESTORATION AND WORLD CLUB MEETING

Essen, 21*-25 March 2018

MESSE ESSEN

* Wednesday, 21st March, 2 p.m. to 8 p.m.: Happy View Day / Preview

Thursday 9 a.m. to 6 p.m., Friday 9 a.m. to 7 p.m., Saturday + Sunday 9 a.m. to 6 p.m.

SIHA AUSSTELLUNGEN PROMOTION GMBH VERANSTALTER/ORGANISER

Artist: Alfredo De la María, www.cckunst.de

INFO

VISITOR AND EXHIBITOR INFORMATION WORLDWIDE: S.I.H.A. Ausstellungen Promotion GmbH, Postfach 3164, 52118 Herzogenrath, Germany, Phone: +49(0)2407-17300/-18064, Fax: +49(0)2407-17711, info@siha.de • **For the UK:** S.I.H.A. Ausstellungen Promotion GmbH, c/o Mr. Mark Charles, P.O. Box 502, Addlestone, GB Surrey KT15 3YJ, Phone: +44(0)8712-770363, Fax: +44(0)1932-403478, Mail: shows@ciltd.co.uk
Hotelroomsand Tourist-Information: Phone: +49(0)201-8872046, touristikzentrale@essen.de, www.essen.de
20 minutes from International Airport Düsseldorf • **Advance Tickets:** technoclassica-tickets.de

www.siha.de

NIGHTS IN SHINING ARMOUR

Le Mans in June? A British winter? Racing beyond dusk always has a certain ambience

Simon Arron

Winter clubbies might not have the clout of yore, when the televised BBC Grandstand Formula Ford 2000 Championship was something worth winning – a potential career advancement, indeed – and decent crowds turned out to watch both that and a strong supporting cast, but they retain a distinct charm. And at this time of the year a drizzly, grey day feels like the perfect backdrop: guerrillas in the mist, then...

BRANDS HATCH

The Kent circuit is not alone in hosting hibernal race meetings, but has always been foremost in this domain. Among the bygone Grandstand FF2000 champions here crowned were future Formula 1 drivers Julian Bailey, Martin Donnelly and Mark Blundell, while Damon Hill made his car racing debut in the series (without great distinction, but that's not the point).

There was no single-seater competition on the menu during successive into-the-night race weekends in mid-November – and the first of them, organised by the reliably well-drilled Classic Sports Car Club, was a template for how racing should be at all times of the year, with colossal grids and even greater diversity. The club motto is 'racing for cars of all ages' and sometimes it applies simultaneously, so you find a platoon of Caterhams going wheel to wheel against Ford Anglias, a VW Fun Cup racer and a TCR-spec Audi RS3 that was getting in some early laps prior to the introduction this year of a new UK series for such cars.

The conditions were often treacherous – 'into-the-night' was something of a relative term, given the shortage of daylight – and track etiquette reflected as much. Drivers in the CSCC Tin Tops series spun with such regularity that there were four in the Paddock Hill Bend gravel by the end of practice – and a couple of the others picked up penalties for failing to heed flag signals (though in their defence it was at times so gloomy that even bright yellow didn't really stand out).

Other potential impediments included a Jaguar XJ6 coating about half the circuit in oil (some races had to be reduced in length as a result of delays) and the safety car emerging in completely the wrong place during the first (and shorter) of Saturday's night races. Even the officials, it seemed, found circumstances quite challenging...

The rapid (just the 275bhp) Ford Fiesta of Richard Wheeler and BTCC regular Jake Hill won the opening day's main event, more than a lap clear of Tom Mensley's Renault Clio, but the most dramatic finish came in the Adams & Page Swinging Sixties race. Leader Ian Everett (BMW 1502) had a quick spin at the final corner, but recovered just in time to defeat Daniel Williamson's Corvette by four tenths after 30 minutes of racing. Crossing the line among a clutch of slower cars, the winner then failed to spot the chequered flag and completed another lap at racing speed before the penny dropped.

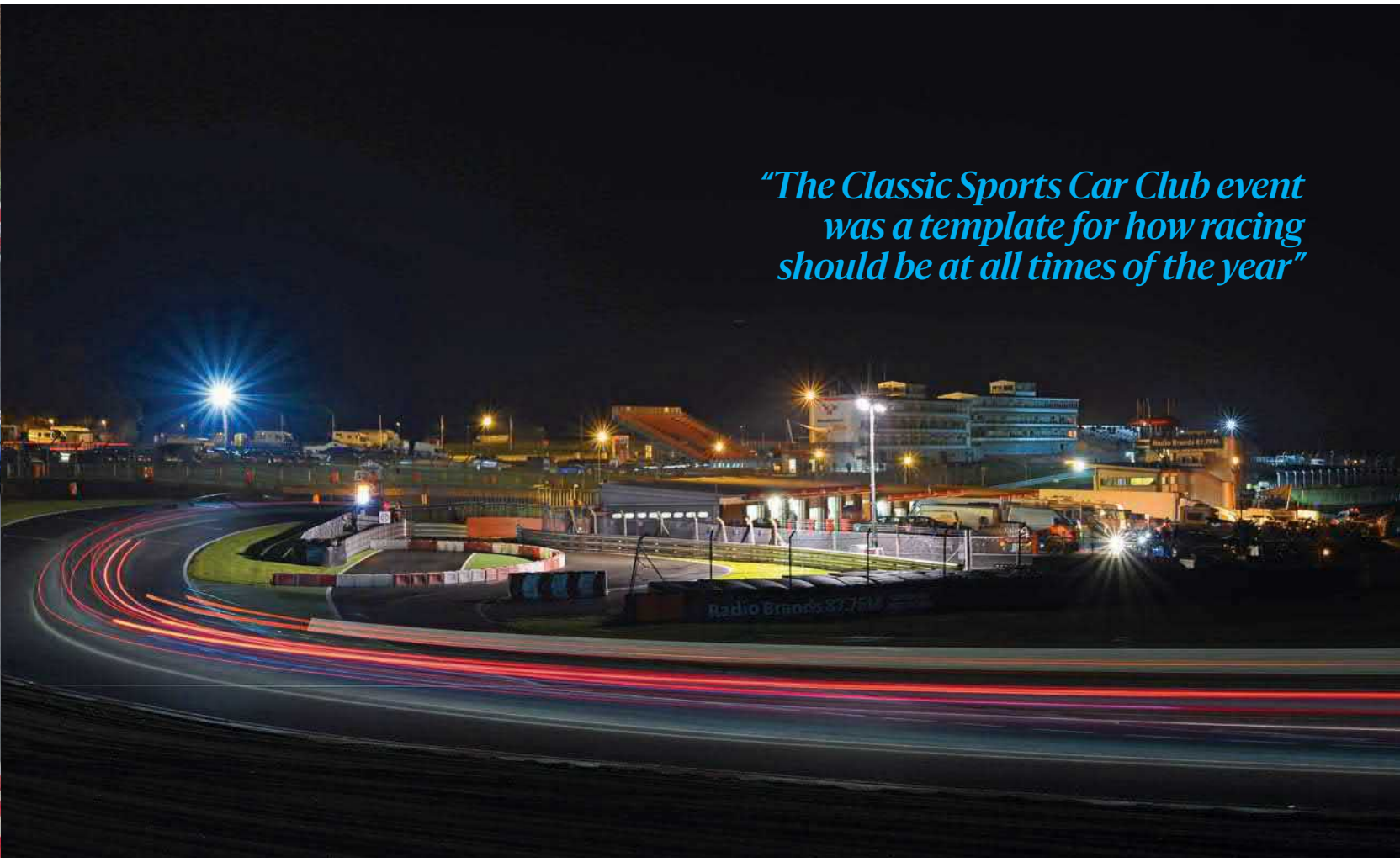
Yes there was murk and a bit of pandemonium, but there was also some very fine racing, with the added frisson of competitive twilight. It was one of the most engaging meetings I'd watched all year.

SEVEN DAYS ON, THE ENTRY WAS MUCH thinner for the BARC-run Britcar finale's opening day – and from late morning the weather was even worse (though nobody appeared to have mentioned as much to the Ginetta Junior drivers, who are ever worth watching).

A bunch of young kids, with a future star or two perhaps in their midst, they tend to put their cars where they want them and then try to sort things out when they get there. And most of them have sufficient car control to do just that (even if there were a couple of stoppages).

Their counterparts in the Renault Clio Junior series were slightly less disciplined: despite there being only nine cars, they still managed to conjure four red flags during qualifying...

Some racing broke out between interruptions and a combined Mini Miglia/Se7en race was a welcome throwback to winter meetings of old. It was quite an



"The Classic Sports Car Club event was a template for how racing should be at all times of the year"

ALL IMAGES SIMON ARRON

introduction for Miglia newcomer Liam Deegan, who had never previously driven on slicks - and in the opening race had to do so in the rain. He recovered from a spin to finish second to Nick Padmore, then reversed the balance of power in race two (by which time all were on more suitable, treaded rubber).

In theory the Britcar race was the only one scheduled to take place under cover of darkness, but visibility was close to zero when the second Mini race started (several cars for some reason having only one functioning headlight) and even more so when the Ginettas came out again.

They don't have headlights at all, but that didn't dilute their commitment.

MALLORY PARK

The good news, heading through West Dulwich on Boxing Day morn, was that Australia had 'slumped' to 170-3. The bad? Skipper Steve Smith was now at the crease, so the Radio 5 commentary threatened to be a painful companion *en route* to the outskirts of Hinckley. He cracked his first ball for four and remained unbeaten when stumps were drawn just past Newport Pagnell services, but

there was more positive sporting news about 50 miles ahead: the 43rd Plum Pudding meeting.

Customarily the UK's only race event catering for two, three and four wheels (and one of a reduced number of automotive sporting options over the festive period, particularly since Wimbledon Stadium's demise), it had to be adjusted in 2017 as there were insufficient sidecars to justify a grid. What remained, however, was a pleasing combination of the utterly random, with sports and saloon car fields blending the

obvious (Caterhams, Mazda MX-5s, Honda Civics and Renault Clios) with the somewhat unexpected (a rallycross-spec Ford Puma V6, for instance), while the solo motorcycles all ran together whether they had 300 or 1000cc.

The customary qualifying system was in place - the field lining up according to the order in which entries were received, so a first-class stamp counted for more than hand-to-eye co-ordination or throttle delicacy - and the grid for the second race was a mirror image of the finishing order in the first. Not for the purist, perhaps, but a good way to ensure a constant stream of passing manoeuvres without resorting to DRS.

Mallory had changed slightly since my most recent visit, a couple of years beforehand, with an increased number of sound insulation barriers (for the benefit of local residents) and public access opened up to the inside of the John Cooper Esses. In an age when spectators tend to be ever more distant from the action, Mallory - now and always a friendly place - is doing things slightly in reverse. Debris fencing remains scarce, too.

I know modern custom dictates that

queuing outside Next is a popular pastime in the immediate slipstream of Christmas, but strolling Mallory Park's perimeter is surely a healthier alternative, even if you have first consumed the local delicacy known as a fried breakfast.

And here it's worth sounding a note of caution. The repast remains fine value, at £6 including a finely brewed cuppa, but the hash browns were a touch underdone, the fried eggs just a touch too firm.

And in this respect Mallory, of all venues, has a certain reputation to maintain. M

CLUB RACING SPOTLIGHT

Historic F1 champ Nick Padmore's ideal racer? A Mini

In a contemporary context his name is linked with success in powerful old cars. Nick Padmore is a multiple champion in the FIA Historic F1 series and his 1min 18.217sec, set almost three years ago at Goodwood aboard a Lola T70, remains the outright circuit record.

But when he's not making headlines at retro events, Padmore can be found among the van-and-trailer clutter at club meetings, working with his father Keith on a Mini Miglia. "Dad raced a Miglia in the 1960s and '70s," he says, "and I have been obsessed with them ever since. I've been extremely lucky to race some awesome cars, but there has always been a thought gnawing away in the back of my mind: 'One day I want to get a Miglia...' It probably didn't help that Dad kept telling me that I hadn't really raced until I'd tried one."

At the end of 2016 Padmore bought serial Miglia winner Bill Sollis's old car, with a view to doing a few events - which turned out to be the Brands Hatch Mini Festival ("Where a whack in the second race set the programme back a bit") and a November clubbie at the same venue.

"I've had it prepared to look exactly the same as Dad's old car," he says, "and I'm hoping he'll do a few races in it. I have a very busy year in prospect, with several major historic events - including Monaco and Le Mans - but I'll fit in as many Miglia races as I can. It's something Dad and I can take away for the weekend to chill out. I love it."

MAR/APR 2017

COMING ATTRACTIONS

INTERNATIONAL *Mar 3-4 – Australian Supercars, Adelaide*
The 20th running of the Adelaide 500 will be celebrated with a historic racing display, while about 250,000 spectators are expected to watch the opening bouts of this visceral racing series.

IN THE UK *Mar 10 – Evening with David Richards, National Motor Museum, Beaulieu* **Historian Graham Robson interviews Prodrive and MSA chairman David Richards at the National Motor Museum. It will be open to ticket holders for a private viewing prior to the evening's lecture.**

INTERNATIONAL *March 14-17 – Sebring 12 Hours, USA* **The United States' oldest road racing track, a former World War II airbase, hosts the 66th iteration of this prestigious endurance staple.**

IN THE UK *March 17-18 – 76th Members' Meeting, Goodwood* **The historic motor sport season begins in style as GRRC Members get the chance to see tin-tops, GTs, motorcycles and open-wheelers in an intimate, friendly atmosphere, pictured top.**

IN THE UK *Mar 31-Apr 2 – British GT and F3 Championships, Oulton Park*
British GT, the UK's premier sports car series, kicks off at Oulton Park with two one-hour races over the Easter weekend and support from the British F3 Championship.

IN THE UK *Apr 7-8 – BTCC, Brands Hatch*
Celebrations for the 60th anniversary of the British Touring Car Championship begin in Kent, with the season-opening triple-header on the Indy track. Expect the usual close racing from a packed grid as the BTCC continues in reassuringly rude health.

MAR 11	INDYCAR St Petersburg
MAR 11	NASCAR Phoenix
MAR 17	FORMULA E Uruguay ePrix
MAR 18	MOTOGP Grand Prix of Qatar
MAR 25	F1 Australian Grand Prix
APR 05	WRC Tour de Course

SHORT BREAK

TESTING TIMES

See the new Formula 1 cars hit the track for the first time in 2018 – and there's no need to break the bank

Get a first look at the 2018 Formula 1 cars, now equipped with the mandatory halo device, at the Circuit de Barcelona-Catalunya. Williams recruits Robert Kubica and Sergey Sirotkin will be out on track after a busy winter of musical chairs, with the new-look Alfa Romeo Sauber making its first public appearance – now equipped with updated Ferrari engines.

Bucking the trend of F1's lofty ticket prices, entry starts from just €18/£16, and you won't have to shell out extra for a trackside seat, either. Most of the circuit's grandstands will be open during testing, so you can also get a decent, value-for-money view of the Spanish Grand Prix venue.

The intimate atmosphere also means that you may be able to snag an autograph or photo with your driver of choice. In fact, we'd recommend strolling around the track and making the most of the informal atmosphere. Note that snow, wind and rain aren't out of the question – last year's event was a somewhat chilly affair.

Of course, teams might be sandbagging – hiding their true performance until the first race of the season – and reliability could be an issue, although this is the second year of the newest specification of hybrid cars, and the creases should be ironed out to a greater degree this season. Above all, this will be your only chance to see the 2018 F1 machinery before the Melbourne GP on March 23.

There are two four-day tests: February 26 - March 1 and March 6-9.

HOW TO GET THERE

Teams and media occupy the best hotels closest to the track, so fly to Barcelona (El Prat airport), stay in the city, take the metro to Barcelona Sants and then the train to Montmeló Station, from which the circuit is about a 30-minute walk or an eight-minute taxi ride.

ALSO GOING ON

Visit the Retro Auto Moto Museum's collection of about 80 vehicles from the United States, Europe, the UK and ex-Soviet countries. Oddities from Le Zebre, Delahaye, Monet & Goyon and more await in this museum, located in the Gothic Quarter. Entry is €8/£7.

DON'T MISS

Guided tours of the Circuit de Barcelona-Catalunya take place at 10am, 12pm and 3pm on F1 testing days. Shell out €50/£44 and get a 90-minute look behind the scenes of one of the mainstays of the Formula 1 calendar. Entry to testing is included in that price.

race retro

INTERNATIONAL HISTORIC MOTORSPORT SHOW

23–25 FEB 2018
STONELEIGH PARK

POWERED BY MOTORSPORT

EUROPE'S #1 HISTORIC MOTORSPORT SHOW

ICONIC RACING CARS | LIVE RALLY ACTION | SPECIALIST EXHIBITORS | MOTORSPORT LEGENDS

100s of stunning racing & rally cars on display | 250 specialist exhibitors, 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: RR18MS4

*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 £1.50. Advance tickets are on sale until 23rd February. After that date, tickets can only be purchased at the show. 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 · 8 STRAIGHT EIGHT LOGISTICS · CLARION EVENTS

Roll up to Race Retro

The biggest historic motor sport show of its kind in Europe is gearing up for action and this year promises to be the best yet

A galaxy of stars from racing's past and present is set to descend on Race Retro, which takes place on February 23-25, as Britain's leading historic motor sport show opens its doors. Most of the action will take place around the *Motor Sport* stage, which will feature a packed programme of live interviews with drivers, engineers and members of the magazine's editorial team.

The star attraction over the weekend is likely to be Brian Redman (right), who is travelling from his home in America to talk about his career. The Lancastrian is best known for his spectacular success in 1969 with a works Porsche 908, co-driven by Jo Siffert. They won five times to help clinch the Stuttgart marque's first World Sportscar Championship. He drove John Wyer's Porsche 917 during 1970 and landmarks included victories in the Daytona 24 Hours and Targa Florio, before he switched to Ferrari.

One of the nicest men in racing, Redman was inducted into the *Motor Sport* Hall of Fame last year and he will be joined over the course of the weekend by other famous names. They include John Barnard, the McLaren and Ferrari designer; Frank Dernie, one of the the men responsible for the Williams FW07; Peter Connew of the eponymous F1 race team; Norman Dewis, the legendary Jaguar test driver; Paddy Hopkirk, England's best loved rally driver and BRDC president; Matt Neal, triple BTCC champion; and Tony Jardine, rally driver and TV pundit. Visitors should come armed with questions...

race retro
INTERNATIONAL HISTORIC MOTORSPORT SHOW
23–25 FEB 2018 • STONELEIGH PARK
POWERED BY MOTOR SPORT

HALL OF FAME LIVE

Adjacent to the *Motor Sport* stage will be a special Hall of Fame Live exhibition that has been curated by the *Motor Sport* team. It will celebrate the 40th anniversary of the ground effects era in F1. To bring the celebration to life we have collected a stunning selection of cars that tell the story of one of racing's finest eras and visitors will be able to get up close over the weekend. Confirmed cars include a Lotus 79, Williams FW07, the 1983 Ralt RT3 F3 car that was raced by Martin Brundle against Ayrton Senna in period, a Chevron B48 and the Porsche 956 (chassis 103) that featured in the February issue of *Motor Sport*.

HALL OF FAME INDUCTEE TRIBUTE

The area will also host a special tribute to David Richards, one of the most influential men in British motor sport, whose career has included a world rally championship as a co-driver, a successful stint as team manager with Prodrive and most recently the chairmanship of the Motor Sport Association. Richards was inducted into the Hall of Fame last year and the display will comprise a car from each of the key eras of his career including a 1984 Porsche 911, a Colin McRae 1996 Group A Subaru Impreza, a BAR F1 racer from 2004 and a 2015 Aston Martin GTE.

OTHER HALL OF FAME TRIBUTES

And that's not all: other displays will celebrate Jaguar at Le Mans, 30 years after it won at la Sarthe with the Jaguar XJR-9 in Silk Cut livery, and a 1956 long-nose D-type that raced at Le Mans, finishing sixth. The influence of Porsche in motor sport will be marked with the display of a 991 GT3 RS, a race-prepared 997 and a short-wheelbase 911 all courtesy of the Porsche Club GB. There will also be a Dan Gurney tribute to remember the life of the great American racer who died in January. The 50th anniversary of the London to Sydney Rally will be marked with the display of a replica of the winning Hillman Hunter. A new Racing Car Award will be introduced at this year's Hall of Fame, aimed at recognising some of the finest machinery from rallying, sports car racing, touring cars and Formula 1. The short list comprises some of the most fearsome machines ever to race and will be represented at Race Retro by the fire-breathing Ford Sierra Cosworth RS500 and Audi S1 Quattro.

RALLY LEGENDS

One of the most popular attractions of Race Retro is the live action stage - a one-mile-bespoke rally course featuring about 80 rally cars, including Group B monsters.

This year's rally theme has been expanded and the show will welcome Italian legend Miki Biasion, who is celebrating 30 years since the first of two WRC title wins and who will be back behind the wheel on the live stage to remind spectators of his pedigree.

Other cars in action over the weekend include Markku Alén's Fiat 131 Abarth, the Ford RS1700T tested in period by Ari Vatanen (plus a lesser known Vatanen car - a BMW M3), and an ex-Jimmy McRae Vauxhall Chevette HSR.

And spectators can do more than just watch: Rallying with Group B, the organisation putting on the feature, will also be offering passenger rides for charity donations as well as introducing modern rally drivers, from those in the junior ranks to British and European champions, so visitors get the chance to see the old alongside the new. Visitors can book a ride in one of the cars for £25.

Readers can also win a ride in a rally car by entering via the Race Retro website, see panel.

PRIDE OF THE PADDOCK

It is not just the organisers who will be putting on a breath-taking display of cars. Private owners can also enter their classics in a Pride of the Paddock competition. Visitors then vote for their favourite over the course of the weekend to decide who wins the title. Entries so far include a Lancia Delta Integrale, a 1956 Austin Healey and a Triumph Vitesse.

HERO EVENTS

The Historic Endurance Rallying Organisation (HERO) will be running its popular Training Session on the Sunday of the event. The course is aimed at newcomers or those looking to brush up on their skills ahead of taking part in historic rallying and covers basic map reading as well as other slightly more advanced topics. HERO is also offering its popular Arrive and Drive Classic Car Experience, giving visitors the chance to get behind the wheel of a variety of classics and drive them on the public roads around the venue. Prices start at £45; please bring your driving licence to the show.

SILVERSTONE AUCTIONS

Last year the auction house recorded its best ever sale results at Race Retro, with lots worth £5.7m going under the hammer. This year looks set to exceed even that figure. The Competition Car Sale takes place on the Friday and the lot list includes an ex-Vatanen and McRae 1993 Subaru Legacy RS Group A, and a 1970 Ford Escort Mk1 RS1600 race car fielded in period by Vince Woodman. The Classic Car Sale takes place on the Saturday and will feature among others a 1956 Jaguar 3.4 XK140 FHC, a 1983 Lamborghini Jalpa and Rowan Atkinson's Ferrari-engined Lancia Thema 8.32.

EXHIBITORS

As ever, among the key attractions of Race Retro are the independent stands of exhibitors specialising in everything from race memorabilia to race kit for the new season. The stands will also include a wide variety of competition car manufacturers and tuners, engineering services and motoring clubs and associations. Race series and clubs confirmed so far include:

- *1000cc F3 Historic Racing Association*
- *750 Motor Club*
- *British Historic Kart Club*
- *Classic & Sports Car Club*
- *Historic Sports Car Club*
- *MG Car Club*
- *Classic Touring Car Racing Club*
- *Equipe Classic Racing*

Motor Sport *is offering two lucky readers the chance to win a ride in an ex-works rally car*

The two winners will get to experience the thrill of Group B rallying from the passenger seat of a Peugeot 205 T16, driven by Kevin Furber, joint owner of the vehicle with Andrew Medlicott.

The prize is open to any reader who has bought a ticket to the show. It consists of one complete lap of the live action stage. The two slots are on Saturday and Sunday.

Readers can enter the competition by buying a ticket to the show via the Race Retro website (www.raceretro.com) and entering the following code: RR18RALLY. Good luck!

SHOW OPENING HOURS

Friday Feb 23 - 9.30am to 5.30pm
Saturday Feb 24- 9.30m to 5.30pm
Sunday Feb 25 - 9.30am to 4.30pm

PARKING

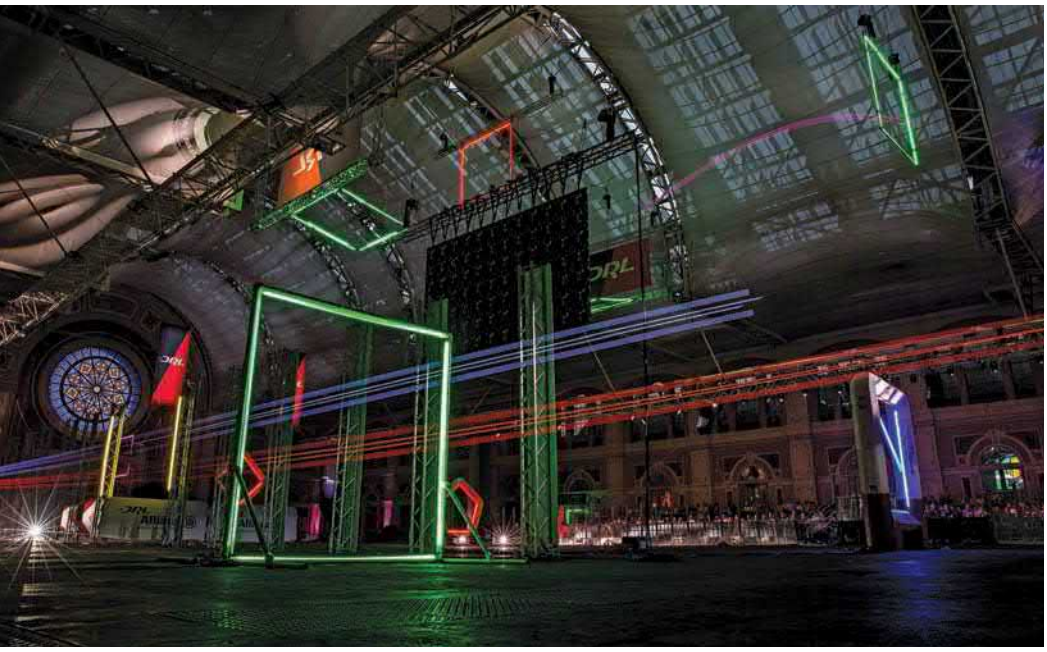
Free standard parking
VIP parking available - Podium parking £16, Pole parking £26

TICKETS

ADVANCE TICKET PRICES
• Adult/Senior 16+: £20
• Child (5-15): £5
• Child (0-5): FREE
• Groups (10 or more adults): £19.50ea
• Weekend pass (Friday & Saturday): £35
• Weekend pass (Saturday & Sunday): £35
• Three-day pass: £54

ON THE DOOR TICKETS
• Adult/Senior 16+: £26
• Child (5-15): £7
• Child (0-5): FREE
• Weekend pass (Friday & Saturday): £48
• Weekend pass (Saturday & Sunday): £48
• Three-day pass: £60

Book tickets at www.raceretro.com



PA ARCHIVE

DRONE RACING

UP, UP AND AWAY

Growing interest could mean racing's next big thing is drones

Jack Phillips

There's big money in drones. Some 1.5 million of them were expected to be sold over Christmas in the UK alone, according to the Civil Aviation Authority. That's less than half a million shy of the number sold in the USA during the entirety of 2016.

Naturally drone racing has similarly, erm, taken off.

The format is similar to that of the Red Bull Air Race, with a course of gates and obstacles laid out for pilots to thread their aircraft through. It sounds simple enough, but perfect lines and precision are needed with the 100mph-plus drones. Special goggles give the pilots a first-person view of the action via the drone's camera, helping them clear the gates and avoid the other drones.

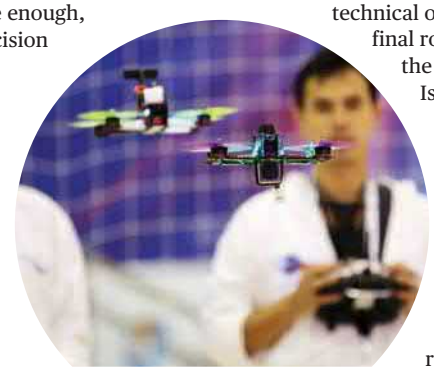
While consumer drones are only now increasing in popularity, there's been money in drone racing for a few years already. Luke Bannister, aged 15 at the time, pocketed $250,000 in 2016 by winning the World Drone Prix, an event organised by Dubai's Crown Prince.

Now though, two major worldwide leagues are battling it out for supremacy. It's Champ Car vs IndyCar and ALMS vs Grand Am for the skies.

The two leagues, the Drone Racing League (DRL) and DR1, have lucrative television deals already – DRL is on Sky Sports and ESPN, DR1 can be found on Eurosport, Fox and CBS.

That coverage has helped the leagues attract big-name sponsors and DRL's list of backers would be the envy of most racing series. Despite being founded as recently as 2015, the series has Allianz as its title sponsor and backing from Liberty Media, Bud Light and Swatch, reportedly earning itself $20 million. That's up from $12 million the year before, its debut racing season. The final round, held at Alexandra Palace in London last summer, was witnessed by 1500 fans, but more importantly it found its way into millions of homes during the year.

DR1, meanwhile, has DHL and Mountain Dew on board, and tours the world with technical outdoor race tracks. The final round even tackled part of the mountain course on the Isle of Man.



As a spectator sport it is impressive, and on a national level there are racing clubs cropping up all over, helped by the relatively low price of drones. There's no reason to suggest drone racing can't continue its rapid ascent.

HOT TOPIC

OLD-SCHOOL THRILLS

Introducing the racing game packed with wistful nostalgia

It's easy to forget in this modern world of gaming that they are indeed that: games. The fun, it could be argued, is being lost in the quest for realism and the need to be taken seriously.

Step forward *Racing Apex*, a game in the truest sense. Fittingly for this 1980s issue, it's inspired by racing games such as *Winning Run*.

It's a throwback to the earliest 3D arcade racers: no smooth graphics, no advanced handling models, no inch-perfect race tracks.

You just choose a car – these aren't '80s, with a jaunty 911 GT1, Gulf 917, Martini 935, a Speed 8, Panoz, Vantage and plenty more – and go racing.

There appears to be genuine racing enthusiasm beneath all of this – a Panoz doesn't come easily to too many, after all. More importantly it's an antidote to the growing complexity of existing racing games. Created by former EA Sports staff, it had pedigree too.

Racing Apex is to be released on Mac, PC and Linux later this year.

H AND H
AUCTIONEERS
FOR THE CLASSIC COLLECTOR

CELEBRATING 25 Years Est. 1993

1966 Aston Martin DB6
Estimate: £170,000 - 210,000

IWM DUXFORD

The Imperial War Museum Duxford Auction

An Auction of Selected Classic Cars | **Wednesday 21st March**


Current ownership since 1972


Red Leather Interior/Manual Gearbox


Matching Chassis/Engine Numbers

NOW ACCEPTING ENTRIES

Contact one of our classic car specialists today for a free valuation.

+44 (0)1925 210035 | www.HandH.co.uk

MERCEDES REINVENTS AN ICON

All-new G-Wagen looks back four decades for image

Andrew Frankel

Mercedes-Benz has unveiled a brand new G-wagon looking almost indistinguishable from the car that's been on sale for almost 40 years. Different in every dimension and panel, with new powertrains and structure, depending on who you talk to at the company there are between just three and five components that have survived the transition, including the door handles, headlamp washer jets and sun visors.

The decision to make little difference to the car's appearance came from the fact that the old car had become phenomenally successful in later life, selling 22,000 units in 2017. That is, for instance, only 3000 fewer sales than those of the Porsche Cayman and Boxster combined in the same period. Nor is it just the car's appearance that survives: its concept stays the same too, down to its old-fashioned body on frame construction and live rear axle. It retains old G-class iconography too, including external spare wheel, indicators in wing-top pods, and doors that thunk rather than bleep when locked.

But contrary to appearances, different it is. The new chassis is 55 per cent stiffer, and though the car is bigger in every dimension, its weight has dropped by 170kg, not least thanks to new aluminium panels.

For a true flavour of how different the new G-wagon really is, look inside and you'll see an interior that closer to an S-class limousine than a car that was originally designed primarily for farmers and the military.

Two engines will be offered, the first being AMG's twin-turbo 4-litre V8 producing a mighty 603bhp in the AMG G63. A lower-spec G500 model won't reach the UK; instead, after the G63 has gone on sale here this year, it will be followed in 2019 by a 2.9-litre straight-six diesel G350 with a rather more sensible sounding 282bhp. And while the G63 is likely to cost around £140,000, around £4000 more than the car it replacing, the G350 will likely retail for about £85,000, a saving of over £7000 relative to the outgoing model.

DEFENDER REVIVED

Land Rover is celebrating the 70th anniversary of the Defender by resurrecting the iconic model with a 400bhp 5-litre V8 engine under its bonnet. Just 150 examples of the Defender Works V8 70th Edition will be made, with a choice of short (90in) and long (110in) wheelbases. The car will hit 60mph from rest in just 5.6sec and reaching a (clearly electronically limited) top speed of 106mph.

The power of the 70th anniversary Defender is more than double that of any previous version, the most powerful until now being the 190bhp 4-litre V8 Defender released to celebrate its 50th birthday in 1998. The engine is a close relative to that in top of the range V8 Range Rovers but normally aspirated, and with an eight-speed ZF automatic gearbox. A raft of modifications to the suspension includes new springs, dampers and anti-roll bars as well as chunky 265-section all-terrain tyres. That said, all the traditional Defender architecture is there from its ladder chassis and live axles at both ends to its low-range transfer box.

Visually the understated 70th Edition can be told from the exterior only by its unique alloy wheels, subtle badging and machined aluminium door handles, fuel filler cap and bonnet lettering. Inside Recaro sports seats are upholstered in Windsor leather, as are the door cards, dashboard and headlining.

The car is available to order now through Land Rover Classic with UK prices starting at £150,000 for a 90. Land Rover will also shortly be making available rather more affordable performance upgrades for more normal Defenders including more power for TDCi engines, suspension and braking kits.

TVR CLOSER TO LAUNCH

TVR's plan to make its new Griffith a production reality has moved a step forward after the Welsh government took a three per cent stake in the company for £500,000. This is in addition to the £2 million of public funds already loaned to TVR to secure the factory in Ebbw Vale where the 500bhp, £90,000 sports car will be built. The plan is for 500 'launch edition' TVRs to be built in 2019, with production ramping up to 1000 units per year thereafter, though the facility has a capacity in excess of 2000 units per year.

FORD TRIGGERS BULLITT

At the quietest Detroit auto show in years, Ford stole headlines with a new 'Bullitt' version of its Mustang, built to celebrate the 50th anniversary of the Steve McQueen crime caper. Unveiled alongside one of two original Mustangs used in the film, the 5-litre Bullitt gains 15bhp to 475bhp for a 163mph top speed. The car comes only in deep Highland green or black paint with green stitching, a fake rear fuel filler and cue-ball gear lever. Ford has not yet said if the Bullitt Mustang is coming to the UK.

ASTON OUTPUT RISES

Aston Martin's long-awaited turnaround appears to be gathering pace. The rapturous reception afforded the DB11 meant 2017 production increased by 58 per cent, with pre-tax profits of £180 million. Aston Martin made just over 5100 cars in 2017, more than in any year since the crash of 2008. With sales of the new Vantage starting later this year it is realistic to expect that Aston Martin will be operating at full stretch again for the first time in a decade. Within five years the company should be able to build close to 15,000 cars, half at Gaydon and half at its new factory in St Athan, Glamorganshire where the new DBX SUV and two new Lagondas will be built.

SIDE BY SLIDE

BMW has smashed the record for the longest continuous drift by a production car, its new M5 oversteering for a staggering 232.5 miles with racing driver Johan Schwartz at the wheel. The previous record, by a Toyota GT86, was under 90 miles. Conducted on a wet steering pad, the feat was only possible thanks to in-drift refuelling: another M5 came alongside in a similar attitude while a rear passenger leaned out of a window with a hose and docked it to a fuel filler. Such was the rate of consumption it needed filling five times. During the event BMW also broke the record for the longest twin drift, racking up 49.3 miles with the two cars in a synchronised skid.

McLAREN PACKS MORE IN

McLaren has revealed a new 'Sport Pack' for its best-selling model, the 570GT. It adopts the suspension, steering and electronics settings from the more sporting 570S sports car in an attempt to combine the practicality and looks of the GT with the response and driver involvement offered by the S. The £4900 pack also includes track-friendly Pirelli P-Zero Corsa tyres. Carbon-ceramic brakes which have hitherto been options on the GT are now made standard regardless of whether the Sports pack has been fitted or not.

F1 FRONTLINE

Mark Hughes

Lewis Hamilton was at his best in 2017... for the very reason that Toto Wolff believes the Mercedes F1 team fell short of peak performance

Stability versus response has long been a racing driver's set-up dilemma. For example, in last year's F3 European championship the fast guys found that the traits of the control tyres - with rears that didn't like a sudden increase in load - meant the car needed to be set up to pivot delicately around a small degree of steering lock. Such a set-up demanded the car be driven with minimal steering input. But when the less experienced or gifted guys got into such a car, they'd try to drive it in the conventional way and struggle with the resultant oversteer. They didn't have the sensitivity, precision or confidence to combine big entry speeds with minimal steering inputs. For them, the best way was to tune out the oversteer, giving them something a bit more confidence-instilling. Their engineers would shake their heads and insist the fastest set-up was the nervous one and that's the way all the fast guys had it. But while that may have been true, it wasn't the fastest way for the guys who couldn't drive it that way.

While the dilemma is exaggerated in F3 because of the tyre traits, it's there in most categories, especially in winged single-seaters that by default want to understeer through slow corners and oversteer through faster ones. The more instability you can tolerate without losing momentum in the fast turns, the less understeer you'll have in the slow turns and the faster you'll be over the lap. If you are adept at getting the car turned with the minimum of steering lock into the slow turns by manipulating the weight with the brake and throttle pedals, you will shave yet more lap time. But a car set up to respond like this, if driven with more steering, will be a difficult, oversteering beast.

Lewis Hamilton last year was very good at getting around the Mercedes W08's low-speed understeer in this way, manipulating the weight, minimising steering inputs. It was a very different style to the late turn-in/bold steering of his early F1 years with McLaren, but was the way he achieved his mastery over a fast, but often difficult, car. Its narrow set-up window meant through fast corners it could be a little unstable even while understeery through slower ones. But it was fast if you could live with that.

Meanwhile, the team in which Hamilton was performing was a relatively serene place, with traits almost the opposite to that of the car, the Hamilton-Bottas pairing providing a much more stable atmosphere than the preceding Hamilton/Rosberg. Once the title battle between Hamilton and Sebastian Vettel began to get serious, there was no question of who was the team number one. At Spa, one race after Hamilton had handed him third place back on the last lap, having failed to pierce Räikkönen's defences, Valtteri Bottas was informed that he would be supporting Hamilton's title quest for the rest of the season. The average qualifying deficit to Hamilton up to that time had been 0.18sec, but in the six subsequent races it was 0.5sec as he seemed to lose confidence and ceased to be a factor.

It actually made the team's task simpler, less ambiguous. Only once Hamilton had virtually wrapped up the title did Bottas come back on song, with strong performances in the final three races. The circumstances of Ferrari's imploding title challenge made things yet easier for Mercedes and there wasn't really all that much for Toto Wolff to manage through race weekends. But that happy, easy environment isn't, he believes, the most appropriate one for a racing team. Having signed Bottas partly because of a personality he felt would make an easier pairing with Hamilton than had Rosberg, by the end of the season Wolff was saying this: "We are not trying to build a new family here; we want to be the most effective racing team, and an effective racing team needs stress, needs tension, needs disruption as much as it needs calmness and a positive attitude and mindset. Like everywhere in life you want to have the mix of both, probably the recipe for success." He wants the team more like a nervy (but quick) racing car.

If Ferrari and/or Red Bull can step up their challenges to Mercedes this year, increasing the pressure, and Bottas can maintain a more consistent internal threat to Hamilton, that cosy atmosphere is probably going to be lost. But interestingly, Hamilton reckons he reached his highest personal level of performance over a season in 2017 - and he attributes that partly to the easier atmosphere in the team. With Bottas there, the tensions of the Rosberg years and the mistrusts they created were gone, he said, and it allowed him to concentrate on performing. Upon being asked if he could have reached this level with Rosberg still in the team he gave an unequivocal, "No."

Interestingly, when a relaxed, civvies-wearing retired Rosberg showed up at the British Grand Prix last year I asked him if psychological warfare had been part of his game plan against Hamilton, he replied: "Sure. It's all part of performance, so it's something to which you have to pay attention. He's one of the fastest guys of all time so is incredibly difficult to beat, so you have to use everything."

This tallies with Wolff's comment that, off track, it was Rosberg who was creating the conflict, more so than Hamilton. It made Wolff's job more stressful, gave him more managing to do. That was OK, especially given the performance advantage they had over the other teams. But Rosberg openly admitting that part of his game was trying to slow Hamilton tallies with Hamilton's feeling that without him, he was performing better.

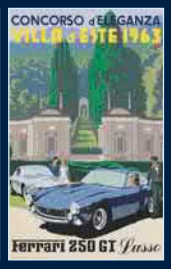
For this year, as Bottas settles in and tries to string together his peaks, is there going to be a conflict between the sort of competitively edgy, nervous team Wolff seeks and the serene environment that Hamilton reckons allows him to access his best stuff? ⊡

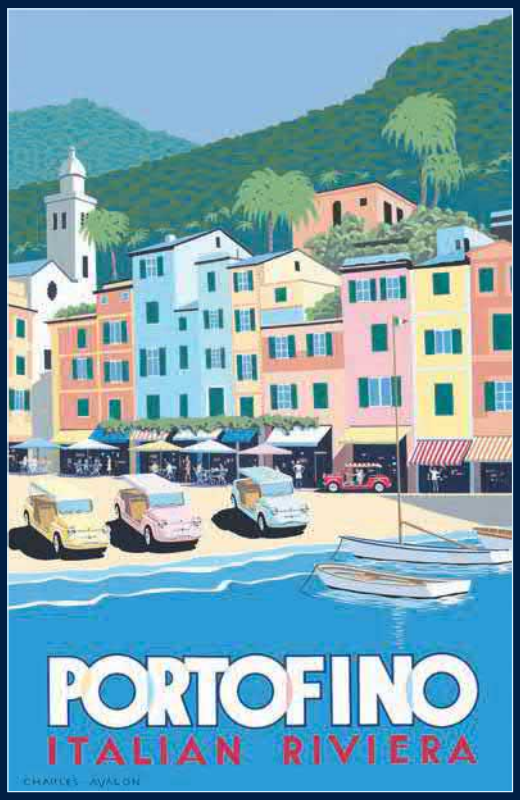
> ***An effective racing team needs stress, needs tension, needs disruption as much as it needs calmness***

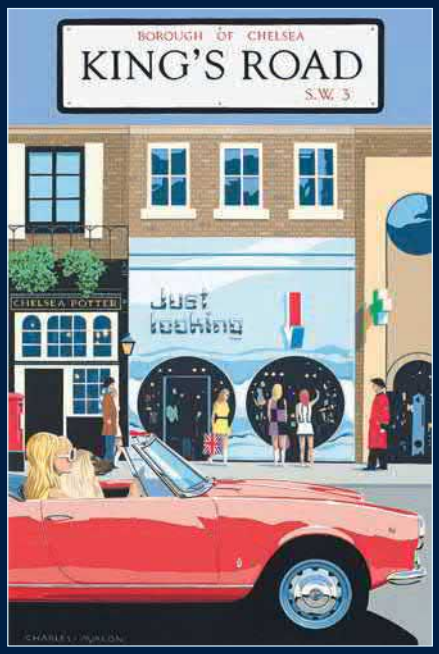
Since he began covering Grand Prix racing in 2000, Mark Hughes has forged a reputation as the finest Formula 1 analyst of his generation

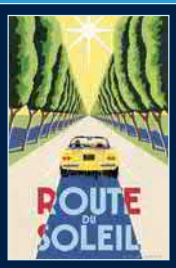
PULLMAN EDITIONS

ORIGINAL, LIMITED-EDITION ART DECO POSTERS









Limited to editions of 280, our newly-commissioned Art Deco posters feature glamorous holiday destinations around the world, ski resorts in the Austrian, French and Swiss Alps, and the world's greatest historic automobiles. **Over 100 designs to choose from**, all printed on 100% cotton fne art paper, measuring 97 x 65 cms.

Priced at £395 each.

Private commissions are also welcome.

Pullman Editions Ltd
94 Pimlico Road
Chelsea
London SW1W 8PL
www.pullmaneditions.com

Tel: +44 (0)20 7730 0547
Email: georgina@pullmaneditions.com

Our central London gallery

View and buy online at www.pullmaneditions.com

RACING LINES

Dickie Meaden

The knowledge that there is a vulnerable human at the heart of the machine is crucial to the appeal of motor racing. Let's not lose it

This year modern Formula 1 embraces the controversial 'halo' cockpit protection system. It marks a pivotal moment in single-seater racing on both physical and philosophical levels. Superficially speaking this simple-looking assembly changes little apart from the cars' look, but to the purist it means the pinnacle of open-cockpit racing is no longer truly open. Sacrilege? I don't feel qualified to comment, but judging by the quotes I've read at least half the drivers on the grid seem to think so...

The upside is those same F1 drivers will be afforded significantly increased (if not complete) protection from the freakish types of single-seater accident that claimed the lives of Henry Surtees, Justin Wilson and, if you have long memories, maybe even poor Tom Pryce. Viewed in the context of those tragedies it's hard to argue against the the halo, yet it still troubles me that yet another layer of clutter has been placed between us and seeing our heroes at work.

Think back to the days before roll hoops or seatbelts, when a driver's best hope of surviving a crash was to be thrown clear of the tumbling carnage and inevitable conflagration, and it's clear attitudes towards risk and safety had to change. And change they did, though not before F1 endured a brutal era in which countless drivers lost their lives. Strange, then, that despite our sport's ever-present dangers there remains an instinctive reticence towards additional safety measures.

Such impassioned contradiction is odd but excusable, at least when dealing with the highest-profile race series of them all. Danger is a shadow that has stalked Grand Prix racing since its inception and, while this took a heartbreaking toll, it cannot be denied that the dangers also bestowed hero status on those prepared not only to accept those risks, but who excelled while confronting them.

Whether this attitude has a place in modern motor sport, and if so what level of risk is deemed acceptable, is a hugely emotive topic. Confusing, too, when in the wider world - that which exists beyond the jurisdiction of the safety-campaigning FIA - extreme sportspeople (ironically almost always funded by Red Bull) regularly perform truly death-defying feats that leave the YouTube generation rightly awed (and make F1 seem a bit tame).

To see what's missing you only need look to F1's two-wheeled equivalent, MotoGP. Not only is the racing far, far closer and consistently more exciting, but you get to see the riders clamber all over their machines, working handlebars and footpegs to balance the bike and aid traction, then leaning so acutely in the corners that their legs, elbows and upper arms are brushing the tarmac.

It's a truly remarkable spectacle.

Grand Prix cars have never demanded such dynamic athleticism from their drivers, but there was a time when we could clearly see them in the cockpit, working the wheel, shifting gears and fighting against the g forces. In addition the way the cars behaved meant we could see (and hear) their artistry in action, individual driving styles expressed through deft precision, edgy commitment or exuberant showmanship. What a contrast to today's F1, which requires a forensic eye to spot and interpret the differences between cars and drivers.

It might not be politically correct to say so, but safety has played its part in reducing and homogenising the show. Not I hasten to add because there's pleasure to be had from seeing cars crash and people get hurt, but with drivers sat lower and more reclined, the cockpit sides getting higher and thicker and now the cumbersome halo framework further obscuring our view, the stars we watch from trackside or sofa are almost entirely hidden from view.

In the dim and distant pre-war days, drivers sat bolt upright, unrestrained with elbows out and chests in the breeze, their begoggled phizogs grimacing beneath flimsy leather or cotton headgear. After the war drivers slowly began to wear more substantial headwear, then as front-engined designs made way for the now ubiquitous mid-engined layout, so cars began to sport roll hoops and drivers were restrained by harnesses. Yet still the men behind the wheel were centre stage.

No one epitomised that era with more panache than Stirling Moss. Whether driving a Mercedes W196 or Rob Walker's Lotus 18, his relaxed straight-arm style and pristine white crash helmet cocked nonchalantly to one side was a defining image of the age. Once he famously raced at Monaco with the side panels of his Lotus removed. It was ostensibly to keep him cool, but it also offered a unique window into the hidden realm of the world's best driver at the top of his game.

Fast-forward to the '80s and '90s and, despite the advent of full-face helmets and carbon fibre monocoques, the drivers were still the stars. Look back at race footage from those halcyon days and the expressive, slightly manic style of Jean Alesi is a joy to behold, while the effect of Ayrton Senna's yellow, blue and green crash helmet appearing in his rivals' mirrors is the stuff of legend.

And no, I haven't forgotten he was killed by just the kind of cranial impact the halo is designed to prevent, but then nor have I forgotten his accident led to the introduction of wheel tethers - a brilliant and highly effective (though not infallible) safety measure that did nothing to erode or dilute F1's essence.

When a driver is injured - fatally or otherwise - it's a sickening moment. Yet as competitors and fans, I believe we know deep down that its the visceral notion of there being a vulnerable human at the heart of the machine that makes motor racing so compelling. Nobody wants a return to F1's dark and dangerous days, but there are positive lessons to be learned from its past. Making the drivers - and their dazzling skills - more visible to all is surely one of them? ⊠

> ***Look back at footage from those days and the expressive, slightly manic style of Jean Alesi is a joy to behold***

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

MAXTED-PAGE

HISTORIC RACING PORSCHE

The ex-Brian Evans 1974 / 1975 / 1976 Circuit of Ireland Rally

1 of 17 UK - Right Hand Drive

1973 Porsche 911 Carrera 2.7 RS Lightweight - M471 RHD | Chassis #911 360 1101

One of 17 UK RHD (M471) Porsche Carrera 2.7 RS Lightweights - Manufactured by Porsche in Stuttgart, West Germany in April 1973 and finished in Tangerine with options: (220) Limited-slip differential and (423) Outside mirror, driver's side.

First registered DWV 911L in the UK in May 1973 and delivered new to Shaun Jackson. The car was then purchased five months later by Englishman, Brian Evans, who rallied the car at International level in the Irish Tarmac Rally Series throughout 1974, 1975 and 1976. Evans became known for his smooth and consistent rally driving style and notably finished with this car on the podium at the 1974 Circuit of Ireland, Manx and Cork rallies and then again at Donegal in 1976.

The car was retired from competition in 1976 and has remained UK registered, complete with continuous ownership history to present day. In 2013 a comprehensive restoration was commissioned, which involved a complete strip, repair and re-assembly of the entire body-shell, fitting where necessary correct replacement OEM (0.8 gauge-lightweight) steel body panels and a fresh overhaul of all mechanical components. The car retains its matching-numbers, type 911/83 - engine case, number: 6631068, which has also been freshly rebuilt.

On behalf of the present owner, we are delighted to offer for sale this truly historic Porsche and one of the very few RHD Carrera 2.7 RS Lightweight cars built.

MP

P.O. Box 7039 • Halstead • Essex • CO9 2WL • United Kingdom

Tel: +44 (0) 1787 477749 • Mob: +44 (0) 7771 922433 (7 Days) • Email: enquiries@maxted-page.com

www.maxted-page.com

Follow us

Mat Oxley

Rider feel and chassis flex are two of the most important factors in getting a rider around a racetrack as fast as possible

Japanese manufacturers have won the last 10 MotoGP world championships, but the most successful chassis engineer in the MotoGP paddock isn't Japanese. Alex Baumgärtel comes from Augsburg in Germany. His Kalex motorcycles are the dominant force in the Moto2 world championship, with a clean sweep of eight rider and constructor titles over the past four seasons.

Baumgärtel is particularly interesting because he comes from a car-racing background. He is probably the first car engineer really to succeed in motorcycle grand prix racing; whereas André de Cortanze, Mario Illien and John Barnard all failed, for one reason or another.

The 50-year-old was working for the Holzer Group when he decided to build his first motorcycle chassis, for his own use on track days. That was 13 years ago. Soon after he established Kalex Engineering with fellow bike-mad car engineer Klaus Hirsekorn. What really attracted Baumgärtel to motorcycle racing, apart from his own interest in thrashing bikes around racetracks, is the nebulous concept of rider feel. The feeling that the rider gets through the seat of his pants is arguably the most important factor in bike racing.

"Car racing is the complete opposite – it's all data, more or less," he says. "I enjoy bikes more than cars because this black hole that the rider calls feeling is super-interesting. You read the rider's eyes to know if the bike is working or not. The look he gives you is more important than what you get from the data-logger, because when a car racer gets into trouble he goes into the gravel and the mechanics clean the car, but when a bike racer gets into trouble he gets a lot of pain."

Baumgärtel has yet to build a chassis for the MotoGP class, but his Moto2 creations are very similar in materials, dimensions and geometry. Like most MotoGP manufacturers, Kalex fabricates its frames and swinging arms from welded aluminium-alloy sections machined from billet.

The hazy concept of rider feel is inextricably linked to the tricky concept of chassis flex. One hundred per cent rigidity isn't desirable in a racing motorcycle, for several reasons.

Grand Prix bikes ride through corners at more than 60deg of lean, which makes their suspension almost useless, because vertical forces are best looked after by something operating in the vertical plane. Frames and swingarms are therefore engineered to offer a modicum of lateral flex that helps the tyres soak up irregularities in the asphalt.

"All race bikes are softer than road bikes in the lateral plane, to achieve flex at high lean angles that absorbs bumps and increases grip," says Baumgärtel. "But they also need to be stiff enough to allow fast changes of direction and to avoid wobbles that can reduce tyre contact. The task is to separate lateral stiffness from longitudinal stiffness, with the frame, swingarm and forks."

This is the most talked-about aspect of chassis flex in MotoGP, but in fact it's not the most important.

"Flex is also a tool of steering," adds Baumgärtel. "How the chassis bends under certain loads gives a self-steering effect, which makes the bike turn more easily. Imagine the frame and swingarm curving like a banana. With the centre of gravity more or less in the centre the chassis makes a curving line through the corner. This helps turning because something curved will turn a corner better than something straight, which forces all the turning through the front tyre, which stresses the tyre more. Of course, you need to adapt stiffness to the tyres, so if the tyre construction changes you need to rework it."

This no doubt explains why Ducati finally gave up using its desmodromic-valve V4 MotoGP engine as an integral part of the Desmosedici's frame. Many years ago this was a popular technique in the design of race bikes, but lean angles and cornering loads have come a long way since then. Ducati changed its ways in 2012, once Valentino Rossi had failed to make the Desmosedici steer through corners properly. The company's results have been on the up ever since.

Swingarm flex is another vital quality, both in the corner-entry and corner-exit phases, because most riders get crossed up when they're braking and sideways when they're on the throttle.

"You can make a big difference to the rider's rear-tyre contact feeling during the corner-entry phase by adjusting lateral and torsional stiffness in the swingarm," says Baumgärtel. "Flex is a big thing here, because if you've got a super-stiff swingarm the rear will get very snappy when it steps out, because there's no damping in the side forces.

"We also need to make compromises with chassis stiffness to make the acceleration phase sweet. But getting the drive spin right when the rear is stepping out isn't easy because it's a non-steady state of loadings."

The degree of flex involved in all these situations is very small; just a millimetre or two. But it is vital. Motorcycle chassis engineers only learned of its importance once they could build fully rigid frames and swingarms.

In 1990 Piero Ferrari fabricated a super-stiff carbon-fibre frame and swingarm for Cagiva's 500cc Grand Prix team. The chassis was a nightmare, creating no feel and lots of chatter. Three years later Yamaha built a similarly stiff aluminium chassis for reigning world champion Wayne Rainey.

"At that time chassis stiffness was the black art, nobody knew what was too stiff and what was too soft," recalls the American. "We ended up going way too stiff, which is why we really struggled in 1993, because the chassis put too much force through the tyres." ▣

> ***When a car racer gets into trouble he goes in the gravel. When a bike racer gets into trouble he gets a lot of pain***

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

Doug Nye

The Mini team's disqualification from the 1966 Monte Carlo rally is a yarn well known, but there was almost a repeat two years later

It might not surprise regular readers to hear that I am quite a keen Brexiteer, not bristlingly, but cheerfully, optimistically so. Right now, as those who run the show apparently persist in doing their best to deny our grandchildren a democratic future within an irredeemably corrupt Europe run by self-appointed cronyism, we can look back on the 50th anniversary of a fine example of what the Gauls have ever done for us...

Now the complicated story of the alleged lighting infringement that denied the actual top four finishers in the 1966 Monte Carlo Rally – all British entries – is well known, and was much celebrated upon the 50th anniversary of that entirely shameful scandal two years ago now.

The BMC Competitions Department's team of Mini-Cooper 1275S 'bricks' driven by Timo Mäkinen, Rauno Aaltonen and Paddy Hopkirk completed the event with the best scores, in reality finishing 1-2-3 to score a works Mini hat-trick in this most prestigious international rally of the year. The organising AC de Monaco similarly disqualified Roger Clark's works Ford Cortina, which should have been fourth, and these exclusions elevated Pauli Toivonen and navigator Ensio Mikander to being declared the official winners in their works Citroën ID.

Protests, dismissals, appeals and further dismissals subsequently extended way up to the top echelons of the FIA world governing body. The entire episode stank to high heaven, yet as with so many enmeshments with Gallic regulations writers, the Rosbifs lost – big time, but short term (hurrah).

While the BMC Competitions Department had been denied its hat-trick of Monte Carlo Rally wins, as well as the biggest financial prize available in the contemporary rallying world – and the ACM, most shamefully, even refused those top-four crews finishing plaques for having completed the event, it has been the BMC Comps Department (of fond memory) and the Mini-Cooper performance that has been remembered ever since, while Citroën's 'win' – disclaimed by Toivonen himself – lies forgotten.

But two years later – in the 1968 Monte – battle was rejoined between the BMC Comps Department and the ACM Rally organisers. I was working on *Motor Racing* magazine at the time and I recall we headlined that year's event as 'A piece of cake and no icing', because it was a freak 'no snow' year and Porsche began to dominate the rally with its fabulous 911s.

On high-grip dry roads the front-drive Minis simply could not compete with the rear-engined, rear-drive, effectively GT entries from Porsche and Alpine-Renault. Rauno Aaltonen, Tony Fall and Paddy Hopkirk still finished 3-4-5 overall behind the Porsches of Vic Elford and – yes, him again – Pauli Toivonen. But still BMC Comps managed to get right up the collective nose of the ACM scrutineers... still perhaps enraged by having been vilified virtually worldwide as the xenophobic, sinister guys in black hats back in '66...

Timo Mäkinen had seen a couple of prototype 'split-Weber' carburettors in Finland which really interested him, and through him the engineers at Abingdon. As contemporary Comps manager Peter Browning recalled in his wonderful book *The Works Minis* (GT Foulis, 1971) "By cutting a pair of standard Weber carburettors in half and fitting the two left-hand 'halves' on to the standard Group 2 inlet manifold [in place of the standard SUs], it was possible to gain Group 6 Weber-type performance in Group 2 (an advantage of some 7bhp)".

Peter had studied Group 2 regulations with forensic care and believed that use of such cut-and-shut carburettors was entirely permissible. He took the precaution of sending details and photographs of the modification to both the FIA and Monte Carlo organiser the ACM far in advance of the event. What's more, he released details of the modification to the press in a policy of full disclosure. As he told the tale, "Nobody said anything about it until we arrived in Monte."

There, upon completion of the concentration run from all the various starting cities to the jewel of the Mediterranean – that "sunny place for shady people" - Browning was summoned to a meeting of the sporting commission. Upon initial scrutineering of all the cars arriving in Monte Carlo, the scrutineers had expressed doubts about the eligibility of these cut-and-shut carburettors.

Giving the organisers the benefit of the doubt, Peter considered that they were then giving him the opportunity to help them safeguard both BMC and the rally itself from a repeat of the globally publicised 1966 fiasco. They told him that there was no doubt that a rival manufacturer would protest the new carburettors if the BMC Comps team persisted in their use. Diplomatically, he thanked them for the opportunity to discuss the situation and it was agreed that for the general good everything possible should then be done to avoid a repetition of 1966.

But essentially the English version of the French-language regulations covering permissible modifications to the carburettors read: "The carburettors provided by the manufacturer may be replaced by others of a different size providing that the number be the same as that provided by the manufacturer and that they can be mounted on the inlet manifold of the engine without using any intermediary device and by using the original attachment parts".

> *By that time the atmosphere was 1966 hostility revisited, and Browning considered withdrawing*

The technical commission believed that BMC Comps had fitted "an intermediary device" between the carburettors and the manifold. But there was no such device because the mounting was actually an integral part of the carburettor. Browning emphasised that this was, after all, a prototype carburettor that he interpreted as beginning at the point of junction with the manifold and continuing through the main body of the carburettor to the end of the inlet pipe. He emphasised that the small additional inlet stub on the carburettor was not bolted to the instrument but was welded to it as a complete unit. However, when the original French text was read, it was found – unsurprisingly – that there

Tony Fall and Mike Wood took their Mini to fourth in the 1968 Monte – after yet more wrangling over regs

BMW

was a translation discrepancy between the two. The original French version read "The carburettors must be mounted on the inlet manifold of the engine without modification or deformation" – these words omitted from the English version – "...and without using any intermediary device, and by using the original attachment parts".

Peter diplomatically agreed that only the original French text could be accepted as gospel. The technical commission then pointed out that the modified carburettors had to be ineligible because they had been modified to fit the standard manifold. He argued that "They had not in fact been modified because although his people had used basic Weber principles and some design features and components, this was an entirely new prototype carburettor designed and built in England".

The meeting was adjourned and subsequently the technical commission informed Browning that in the event of a protest they would have to uphold it because they still felt that the carburettors did not accord with the regulations. Unlike in '66, the atmosphere of these discussions had thus far been entirely cordial and mutually helpful, and the officials offered the opportunity of changing the carburettors before the Monte-Vals-Monte circuit. Browning had to reject this concession because, even if his mechanics could find sufficient time to do the work, they hadn't any SU carburettors with them. Peter also pointed out the possibility – or indeed the probability – that rival teams would be outraged by the scandalous possibility of collusion between the ACM and BMC Comps in allowing such a 'secret' carburettor change in mid-competition.

It seems that by this time some heat was entering the conversation. The commission then offered the chance of changing the carburettors in *parc fermé*, but plainly "This proposal was even more stupid than the first and I reminded them that the whole purpose of our discussion was to try and avoid a repetition of 1966 and not to create an even bigger fiasco". It was then reported to him that Paddy Hopkirk was already in *parc fermé* changing his carburettors, which red herring typified the Monégasques' increasingly febrile grasp upon reality...

By that time the atmosphere was '66 hostility revisited, and Browning finally refused to change the carburettors and declared he would consider withdrawing the team. A meeting with the drivers and navigators followed in which the debate was whether or not they were prepared to put everything on the line during the imminent timed stages, with the risk of being disqualified regardless after the risks they would inevitably take.

The BMC hope was that all of their rivals agreed with their interpretation of the regulations, and with the rally run the cars were finally taken to the usual post-event scrutineering. However, instead of just asking for the class-winning car, the scrutineers demanded to inspect all three team cars that had finished. The chief scrutineer was the same hero who had presided in 1966, and he immediately made it clear that he disagreed with the technical commission's 'liberal' interpretation of the regulations.

The scrutineers' inspections then took so long that when their appointed lunchtime chimed, the head official shut up shop without a glance at the winning Porsche. The teams left Monte Carlo after another somewhat tainted rally, which left the once world-class event's stature further diminished. As for the Abingdon team, it resolved the matter when the FIA finally agreed that Peter Browning's interpretation of the regulations had indeed been correct, and that the carburettors were eligible as built, and as fitted to those works 1275S Minis.

Indeed, forgive me if I am from an older generation – buried in the past – but somehow I feel there is a parallel here between these ratchet-clicks in the Monte Carlo Rally's descent to its now much-diminished international stature and significance, and current wider-reaching negotiations being conducted by self-important politicians in, where was it, Brussels...

A plague upon all their houses, indeed.

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

Attending a 'drive in' at a shrine to vintage Bentleys, and recalling perhaps the briefest ever works rally drive – in a tiger enclosure

A sunny Sunday and a motoring invitation – perfect for exercising one of the old cars. But the Mk2 had failed its MoT the day before (on trivial grounds but my first ever fail) and the 635 still needs fettling, so I had to endure modern luxury as I headed toward the South Downs and the village of Liss, where Bentley specialist Willlam Medcalf was having one of his 'drive in' days. Any interesting cars are welcome but I hid the everyday transport nearby instead of joining the array of Bentleys outside the huge glass windows of the Medcalf showroom, with Morgan 3-wheeler, E-type coupé, Elan, MG and a well-executed replica of a Le Mans 289 Cobra adding variety.

Inside, backed by pictures of historic Bentley triumphs and a pit counter stacked with period paraphernalia, gleamed a supercharged 4½, the much-raced Burton 3/4½ and the longest 8-litre two-seater ever, but it was the workshops behind that which kept my notebook busy. There must have been a dozen WO cars in there, from tourers to various levels of race rep, but I liked the 3-litre Doctor's Coupé with dickey and sloper carbs. Another attractive fixed-head 4½ with two-light four-seater accommodation, still had its Maythorn coachwork from 1931.

Medcalf's 25-strong outfit has a bit of a record in preparing vintage Bentleys for long-distance rallies like Pekin-Paris, and it stems from William himself. Growing up in a Bentley family and training as an engineer, the automobile path was obvious, but "in a few years I realised I only wanted to work on vintage Bentleys". And he means vintage - not even a Derby enters here. (The only one here was outside in the cold.)

"I was lucky enough to be riding mechanic on the 2007 Pekin-Paris, and in the Mongolian desert I realised first, how crucial preparation is, and second, that travelling in vintage Bentleys is what I love doing. So I decided I wanted to see my clients winning long-distance rallies, and that's where we are now". The service includes flying a man and parts to wherever an owner needs help. "We have no borders, no timezones," says William proudly.

William reckons he could list 20 things that will eventually fail when you push a vintage Bentley hard enough, and offers customers replacements which won't.

Many are made here. "We're a manufacturing company, and the world's largest supplier of vintage Bentley parts, with 1500 different lines," William says. On my visit they were all still buzzing over preparing 14 cars for the Benjafield Racing Club 500 on the Ascari circuit, all of which finished, while William himself is a vigorous competitor with two Flying Scotsman victories to boast as well as a slew of long-distance rallies.

Outside the showroom sat a blue and black 3-litre saloon which turned out to be an everyday driver for William and family. "It's the kiddie car," he smiled.

Equipped for dealing with all the hardware, including a towering Bentley engine dyno, the firm also handles timber framing and trimming, not to mention the vast spares store. It's when you see massive, chunky gearboxes and differentials out of the car that you recall that WO Bentley was apprenticed first on steam locomotives.

I was puzzled by the mix of old and new material on an open body sitting on a wheel-less chassis, until one of Medcalf's men explained that one client wanted his four-seater shortened, frame and all, into transport for two, but retaining all the patina it had garnered over the years. Hence the fresh timbers for the new tail disappearing under aged body fabric, while some necessarily new interior trim will be carefully aged to match the rest of the time-worn leather inside.

In the corner, the bare alloy nose of a stripped single-seater with an 8-litre motor looked familiar. Turned out to be the Barnato-Hassan, in pieces for some years and now being returned to its 1936 form, when Oliver Bertram achieved a Brooklands lap record at 142.6mph, only just shaded later by John Cobb in the Napier-Railton. Built by Wally Hassan in 1934 with 6½ power for one-time Bentley company owner Woolf Barnato, it was transformed into this narrow centre-steered device after blowing up in the 1934 500-Mile race, but while undoubtedly fast it was repeatedly defeated by the Brooklands handicappers. Eccentric Keith Schellenberg often ran it in VSCC events post-war. It will be great to see it out alongside its little brother, the Pacey-Hassan, which Medcalf drove up the hill at Goodwood last year.

IT WAS THE TIGER POO WHAT DONE IT. I WAS CONFIDENTLY flinging my wailing Vauxhall Nova into a 90 left on my first stage rally when suddenly a huge tree decided to head for my radiator. Thanks to the big cat's sanitary habits I suddenly had no front grip, skating off the road at undiminished speed. I had enough brain cells to straighten the wheel as my co-driver Nicky Grist, for it was he, yelled "Go round it!" and we scrabbled through mud and animal excrement around the ancient oak and back onto hard ground.

Did I mention this was through Longleat Safari Park? I think the animals were on holiday back home in India, or hibernating. Or maybe crouching on the sidelines spectating. Anyway, I didn't see any. Just the years of excrement worked into the bitumen by thousands of tourist tyres. Even proper rally drivers said it was "****ing slippy".

> ***"Funny how elusive reverse is when 100 spectators and a resigned co-driver are watching"***

At the time GM DealerSport ran a Vauxhall Nova Challenge rally series which included a celebrity car on each round. As they couldn't find a celebrity they offered me the seat for Longleat - which I could argue made me, briefly, a works GM driver. Preparing the Group A Nova was Harry Hockly who also contested the Open series with Welshman Nicky Grist in the co-driver's seat, so it was Grist's tough luck to sit in with me. I was used to being the navigator on road rallies so this was a first, and I soon heard myself demonstrating the eternal navigator's complaint: "My driver can't remember anything for 30 seconds!". Yep, that was me yelling "Which

Into the tiger's den: GC loses it at Longleat. Above left: Bentleys abound at William Medcalf

way did you say?" into the intercom over the wail of straight-cut gears and clatter of rose-joints.

Not that it mattered much: my high spot was cresting a fifth-gear brow into hairpin right - where I locked up and bulldozed straight into the hay bales. Funny how elusive reverse is when 100 spectators and a resigned co-driver are watching. And all, it turned out, right in front of the GM DealerSport marquee and commentary post. But Nicky was patient, calm and gracious as I blundered my way to the finish, soundly beating, oh, several cars with my magnificent 109th placing.

GM didn't offer me a drive, whereas Nicky Grist went on to rally greatness piloting Juha Kankkunen and Colin McRae to WRC victories. Clearly this was thanks to what he learned from me - mainly, choose talented, confident, ambitious drivers to ride with, not a timid journalist who drops you in the tiger poo.

AT THE RISK OF BECOMING A KEYLESS-IGNITION BORE... RECENTLY my helper took my Jaguar Mk2 in for an MoT and parked it in among all the data-driven black-box-managed modern hatchbacks.

"This is the starter button," he explained to the young technician, "and this is the ignition key."

"What's the key for?" asked the lad. ◘

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

BOTB

WIN YOUR DREAM CAR

GUARANTEED WEEKLY WINNER - TICKETS FROM JUST 90P AT BOTB.COM

- FIRST GO FREE
- £23 MILLION OF DREAM CARS WON
- AS SEEN IN UK AIRPORTS SINCE 1999
- 1 YEAR FREE SERVICING AND INSURANCE
- OVER 180 CARS TO CHOOSE FROM

SEARCH FOR BOTB AND JOIN US

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

Dan Gurney

I first met Dan at his All-American Racers HQ in Santa Ana when I was introduced by Sue Weaver, a long-standing friend from his racing days. With me being a pilot and motorcyclist, and Dan being what he was, we hit it off immediately and started chatting about engines, cars, aircraft and the like.

The next time we met was at the Goodwood Festival of Speed which he was attending with his wife, Evi. Dan had his superb hand-built Alligator motorcycle on display. Being a keen biker myself, I was much taken by its quality and Dan said he would let me ride it the next time I was in LA. Being the star, Dan was very busy talking to friends and fans alike, so while he was doing so I was given a full briefing on the Alligator by a very smartly dressed man who knew all about it.

"Yes, sir" he enthused, "0 to 60 in one millisecond, contra-rotating props, flame-throwers, machine guns, the lot. Would you like to sit on it?".

How could I refuse? I climbed aboard and imagined myself tearing round the track!

After more talk he moved on to another potential customer, again giving the full briefing about how wonderful it was.

Dan freed himself from the throng and, coming over to me, asked what I thought of the Alligator. I said I loved it and wanted one, especially after the incredible enthusiasm of his sales manager.

Dan looked puzzled, and said "Who do you mean?.

I pointed to the well-dressed man, to which Dan said "Nothing to do with me - I've never seen him before!".

Just another example of the enthusiasm Dan Gurney generated!

Michael Jay, East Sheen, London

Remembering Bette...

I very much enjoyed your editorial on Bette Hill. I had the great pleasure of meeting her at Donington Park in 1991 at the HSCC 3-litre Formula 1 Festival. I found her absolutely delightful to talk to and she kindly signed a photo of herself in my copy of the book entitled *The Cruel Sport*. It is a superb photo which conveys the tension and apprehension on the pit wall.

Graham Bayley, South-west France

... and Graham

I have just received the February issue of *Motor Sport* magazine which is written and presented to its normal very high standard.

I am writing to you with reference to your Matters of Moment column and I must thank you for your moving tribute to the late Bette Hill. What a life, with such a mixture of triumph and tragedy.

The May 2000 letter to the magazine from Bette further highlights what I believe is the underrated record of her husband Graham Hill in the history of our sport. He will always be in my top ten.

Stephen White, Sutton Coldfield

CUT and come again

I read your CUT 7 article with great interest as I sold car no2 to Richard Meins. Sadly, there are inaccuracies in your piece.

Firstly, after the car was damaged in Paul Vestey and Richard Ward's ownership they took the shell to a scrap yard. Fortunately the scrap man did not put the shell in the crusher but it ended up in a car breakers in Stratford on Avon where Dick Soans bought it for a pittance.

Secondly, Richard Meins did not meticulously rebuild Penny's 'ratty' racer; she still has it, albeit re-shelled by me in a deal where she displayed amazing generosity in re-uniting the shell with its progeny, the continuation DHC. Penny is as Jaguar as Blackpool Rock !

Initially, I just wanted the shell out of circulation as at the time there was speculation as to how many CUT 7s there were. I thought of making it into a tree house for my grandchildren.

However, fate intervened again and I was persuaded to make use of it and decided to make the shell into a first-class road car to sit alongside what had been 256 DJU for 30-odd years, the works-backed, FIA Championship-winning race car. We soda-blasted the shell which turned out to be a real horror - it could have been a rallycross car! The rear-end damage was properly repaired, buckets of filler removed, rotten panels replaced and saved, the roof jacked straight and the unique rear light/air ducts re-created from photographs. What Richard Meins purchased from me was an immaculate fully trimmed road car. I guess if you want a first-class racer you strip the shell again, and VMS have done an outstanding job in that regard for Richard Meins, and all credit is due to them.

John B Lewis, Dymock, Gloucs.

Sharing the credit

I enjoyed the rally flavour of the February edition but as so often happens in the media I feel you do the chap in the seat without a steering wheel in front of him a disservice.

Your piece on the African Classic rightly lauds McRae and Burns as victors of the original events and, by association, co-drivers Nicky Grist and Robert Reid as 'the only British winners'. But you seem to have neglected Fred Gallagher who has no fewer than three East African Safari wins to his name guiding Juha Kankkunen and Björn Waldegård...

And that was when it really was a Safari!

Incidentally, it was good to see Doug Nye writing about the Nassau Speed Weeks. I was instrumental in bringing back a Revival in 2011 and the piece of track shown in your photo still exists although somewhat overgrown. Doug also mentions the vibrant social scene back in the day and I still recall that when I first called in on Stirling to ask if he would

1990: Björn Waldegård and co-driver Fred Gallagher head for Safari victory – Fred's third

LAT

grace the Revival with his presence he said, 'In my day I went to race and everyone else went to party; in 2011 I suspect the roles will be reversed!'

Plans are currently afoot to create a more permanent facility

David McLaughlin, Nassau, Bahamas

Second try

Not unduly to prolong the subject, but the great engine designer and Miller/Offenhauser stalwart Leo Goossen should have his surname spelled correctly at last. There is no final 's'.

It is only fair to his reputation to point out that many features of the Scarab engine design were dictated by engine preparers Jim Travers and Frank Coon, neither of whom had ever designed an engine and in fact never would. Thus Leo's immense experience was not fully brought to bear in the project.

Karl Ludvigsen, Hawkedon, Bury St Edmunds

In praise of versatility

Your article on Hugh Dibley was a joy, reminding me of my time as a youth witnessing 'proper racing drivers' who drove all sorts of cars.

It also reminded me that I forgot, in the Christmas melée, to mail you on this rather sore point. When you get to my age jokes about failing memory become a regular thing, but watching the Abu Dhabi Grand Prix coverage, I did wonder if the C4 team of Jones, Webber, Jordan, Wolff and Coulthard, all of whom I like and respect, had prematurely lost theirs. Their universal disdain of Fernando's ambitions outside F1 tempted me to put my ageing foot through the television! Had they forgotten their history, and the Great All-Rounders like Moss, Clark, Andretti and Graham Hill, winner of the 'Triple Crown' - Formula 1, Le Mans and Indy?

"He shouldn't have raced at Indy," proclaimed Eddie. Yeah, right. He only led the bloody thing! Given his frustrating run at McLaren, this was for me *the* story of 2017.

I'm so glad that as a lad I got to witness Jim Clark racing and winning in F1, Saloons, and sports cars, all on the same day. I am therefore delighted to see Alonso successfully reviving that tradition, and following in the wheel tracks of giants. A racer is a racer is a racer.

Maximum respect therefore to his team boss Zak Brown for countering their arguments and supporting his driver, a true star in my humble opinion.

Tim Hain, Lower Kingswood, Surrey

Stirling performance

Having just heard that the great Sir Stirling Moss is withdrawing from public life, I thought I would share my story about meeting him.

I was a 19 and had not long finished a course at the Jim Russell school at Snetterton. It was mid-1974 and I was heading to Silverstone to a race meeting. Driving my 2-litre Cortina (at speeds in excess of the speed limit!) I was about a mile from the circuit when a Porsche 911 came past me as if I were standing still.

Catching up with the Porsche at the gates, I followed it until it parked up. The driver got out and it was Stirling. I plucked up the courage to go and introduce myself and mentioned how he had just blown me away. He replied "You were going fast, my boy, but not fast enough!"

Put me in my place, and now being much older, it makes me realise how he did it and I could not. A great and wonderful man. I wish him all the best.

Norman Beldom, Chipping Camden, Glos

True endurance

I would like to thank you for the great article about the Group C cars. As a kid born in the 1980s I always looked at those cars with respect and admiration, terrific to see, so well-proportioned.

In December I got the great chance to talk with Paolo Barilla, 1985 Le Mans winner as you well know.

I asked him about that win and the Joest team. He said to me that he was a little bit concerned when Joest said to him to go flat out all race. Joest assured him that the 956 would not break.

Paolo was concerned because the Lancia cars he drove before became older lap after lap during the race, but he discovered that Joest's words were true. The 956 was perfect and he pushed to the limit for all the 24 hours.

This is another proof that the 956 was a superbly engineered car in every detail, and it still looks fabulous.

I hope to see Paolo Barilla in your pages in the future. A real gentleman of our sport.

Riccardo Turcato, Italy

SMT racing records

I am writing on behalf of my daughter who for her Media course at college is required to make a documentary on a subject of her choice. She has decided to make a programme based on her grandfather Eddie Gray's involvement with the SMT Racing Team, both as a history piece but also to highlight the effects of dementia as he has been suffering for a few years but can still recall in detail his trips to Ingliston. She wants to make this utilising his memories, photos and any footage we can find. We are looking for anyone who has footage of the SMT Vauxhall racing car driven by Bill Dryden between 1970-1979 and would be willing to let us have a copy. Contact: mikegray1414@gmail.com

Mike Gray, Sutton Coldfield

Further letters and images may appear in our digital edition only. Please include your full name and address when corresponding

J.D Classics®

FINANCE

Please contact us for further information about our new range of financial products.

Monaco Historique Grand Prix Winners 2012, 2014 2016

Le Mans Classic Winners 2010, 2012, 2014, 2016

The Quail - A Motorsport Gathering Winners 2013, 2014

Pebble Beach Concours d'Elegance Winners 2009 to 2017

Salon Privé Concours d'Elegance Best In Show 2015

Goodwood Revival Freddie March Trophy Winners 2012, 2013, 2015

Goodwood Revival RAC TT Celebration Winners 2015, 2016

Goodwood Revival Whitsun Trophy Winners 2017

Spa 6-hour Endurance Winners 2017

Bernina Hillclimb Winners 2017

WYCKE HILL BUSINESS PARK,
WYCKE HILL, MALDON, ESSEX,
CM9 6UZ, U.K.

+44 (0) 1621 879579

MAYFAIR SHOWROOM,
26-28 MOUNT ROW, MAYFAIR,
LONDON, W1K 3SQ.

+44 (0) 207 125 1400

finance@jdclassics.com

www.jdclassics.com

Subject to status, terms and conditions apply. UK Residents and UK limited companies only.
JD Classics Finance Limited is part of the JD Classics Group of Companies.

J.D Classics®

SELECTION FROM OUR CURRENT STOCK

ASTON MARTIN DB4 S2
FULL RESTORATION, ENGINE REBUILD & UPRATING TO 4.7 LITRE
MATCHING NUMBERS

ASTON MARTIN DB4 S4
TOTAL PROFESSIONAL RESTORATION BY MARQUE SPECIALIST
UPGRADED TO FULL VANTAGE ENGINE SPECIFICATION

ASTON MARTIN DB4 S5 SS VANTAGE
1 OF ONLY 70 CONVERTIBLES BUILT
OF WHICH 14 WERE CONSTRUCTED TO VANTAGE SPECIFICATION

ASTON MARTIN DB4 S5 SS VANTAGE
INCREDIBLY RARE RHD CAR
SUBJECT TO A TOTAL PROFESSIONAL RESTORATION

ASTON MARTIN DB5 SALOON LHD
ORIGINAL FACTORY COLOUR SPECIFICATION
FULL HISTORY

FERRARI 250 ZAGATO
DARK BLUE SCURO/ARGENTO GRIGIO/BLACK INTERIOR

FERRARI 275 GTS
BLACK/MID-TAN INTERIOR
MAJOR JD CLASSICS RECOMMISSIONING RECENTLY COMPLETED
1 OF 200 CARS BUILT

FERRARI 275 GTB/4
ALLOY AND STEEL BODIED CARS IN STOCK

FERRARI DINO 246 GT
FULL JD CLASSICS RECOMMISSIONING
FULL MATCHING NUMBERS
ORIGINAL FACTORY COLOUR SPECIFICATION

PORSCHE 911 964 TURBO 3.6
1 OF 13 TURBO 3.6 FACTORY X88 PACK CARS PRODUCED

MERCEDES 300SL
FULL RESTORATION BY MARQUE SPECIALIST
MATCHING NUMBERS

DATSUN 240Z 'BIG SAM'
FULL JD CLASSICS RESTORATION AND DEVELOPMENT
READY TO COMPETE IN HISTORIC RACING EVENTS
HISTORICALLY IMPORTANT PERIOD RACE CAR

JAGUAR SS100
RECENT RESTORATION
COMPREHENSIVE HISTORY FILE

JAGUAR XK120, XK140 & XK150
OVER 20 CARS IN STOCK
INCLUDING PERIOD COMPETITION CARS

JAGUAR E-TYPE S1
9 CARS IN STOCK

LISTER CHEVROLET
ELIGIBLE FOR MANY OF THE WORLD'S MOST PRESTIGIOUS EVENTS
COMPREHENSIVE HISTORY FILE

9 SHOWROOMS, IN HOUSE AWARD WINNING RESTORATION FACILITIES INCLUDING WORKSHOP, BODY SHOP, RACE SHOP, ENGINE REBUILDING & DEVELOPMENT, ENGINE DYNO AND MACHINING FACILITIES

Monaco Historique Grand Prix Winners 2012, 2014 2016

Le Mans Classic Winners 2010, 2012, 2014, 2016

The Quail - A Motorsport Gathering Winners 2013, 2014

Pebble Beach Concours d'Elegance Winners 2009 to 2017

Salon Privé Concours d'Elegance Best In Show 2015

Goodwood Revival Freddie March Trophy Winners 2012, 2013, 2015

Goodwood Revival RAC TT Celebration Winners 2015, 2016

Goodwood Revival Whitsun Trophy Winners 2017

Spa 6-hour Endurance Winners 2017

Bernina Hillclimb Winners 2017

J.D Classics®

JAGUAR E-TYPE SEMI-LIGHTWEIGHT COMPETITION ROADSTER

SUBSTANTIAL RACE WINNING HISTORY INCLUDING TWO OUTRIGHT VICTORIES AT THE GOODWOOD REVIVAL RAC TT CELEBRATION.

JD CLASSICS RACE PREPARED AND DEVELOPED OVER A 5 YEAR PERIOD.

OUR LATEST GENERATION ENGINE, GEARBOX AND SUSPENSION PACKAGE FITTED FOR THE 2018 COMPETITION SEASON.

WYCKE HILL BUSINESS PARK,
WYCKE HILL, MALDON, ESSEX,
CM9 6UZ, U.K.

+44 (0)1621 879579

MAYFAIR SHOWROOM,
26-28 MOUNT ROW, MAYFAIR,
LONDON, W1K 3SQ.

+44 (0) 207 125 1400

CALIFORNIA SHOWROOM
4040 CAMPUS DRIVE,
NEWPORT BEACH, CA, 92660

+1 949 679 4999

jdclassics@jdclassics.com **www.jdclassics.com**

ROGER DUBUIS

I clearly recall the first time I saw a Lamborghini close up. It was an orange Diablo parked on Guildford High Street in the early 1990s. I knew what it was from magazines, but I can't exactly say that I recognised it, because the beast looked very different in real life, parked alongside the assorted Volvos and the VWs of the Home Counties. Judging from the gawps and double-takes it had the same effect on everyone, not just car-fancying teenagers. The crazy proportions of the thing, that vast engine bay, it just didn't fit with the mind's picture of how a vehicle should look.

But Lamborghini has never felt constrained by convention, and you could say exactly the same thing about the watch company Roger Dubuis. At a little over 20 years old, the relative newcomer has already gained the attention of the watch industry's old guard. It was formed as a partnership between the Portuguese designer Carlos Dias and Mr Roger Dubuis, a Swiss master watchmaker.

A lot of audaciously designed watches are just about show, but from the start Roger Dubuis produced highly technical movements, so the designs were more than backed up by their mechanisms. Both Dias and Dubuis have now gone, the designer selling his share to Richemont and the watchmaker passing away last year, but the ethos remains the same - watches that push the boundaries in both how they work and how they look. This doesn't come cheap, with the watches selling for anything from sports car money to supercar money.

Last year Roger Dubuis announced a partnership with Lamborghini and is producing a range of additions to its Excalibur collection with skeletonised dials that take inspiration from the engine of the Aventador S. New for 2018 is a version with details in pink gold, produced in a limited run of 28 pieces. Rarity is guaranteed, and so is the ability to attract gasps from people who have never seen a watch quite like it.

Roger Dubuis Excalibur Aventador S has a hand-wound movement in a multi-layer carbon and titanium case overlaid with rubber, and a pink gold bezel. £194,000. www.rogerdubuis.com

WATCHES

KEEPING AN EYE ON TIME

Powerful players in the watch world

Richard Holt

Overseas Dual Time

VACHERON CONSTANTIN

With a continuous production for 260 years, Vacheron Constantin yields to no-one when it comes to experience. And whilst prices are up with other prestige brands, there is nothing flash about a Vacheron. This year the Overseas line gets a model with a second time zone indicated by an additional, arrow-headed hand. It has an AM/PM indicator and a date subdial, all powered by an in-house automatic movement with 60-hour power reserve.
From £23,100. www.vacheron-constantin.com

Max Bill Limited Edition 2018

JUNGHANS

When the Swiss artist, architect and graphic designer Max Bill died in 1994 aged 85 he left an eclectic legacy of buildings, bridges, paintings and sculptures. Among his most enduring designs are the clocks and watches created in the 1960s with German company Junghans. His spare, simple dials are classics and modern versions are a core of the Junghans range. This 2018 limited edition has a quartz movement, green-stitched strap, and caseback displaying a 1970s design by Max Bill.
£490. www.junghans.de

Inspired by the high-octane thrills and physics-defying engineering of the automotive world, the limited edition **C7 Rapide Chronograph COSC** shares the same values of technical precision and innovative design, coupled with the highest quality materials used throughout. Bold in appearance, and championing a Swiss-made, COSC-certified chronograph movement, this is a watch with horological horsepower.

Christopher Ward

christopherward.co.uk

MOTOR SPORT

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

	15 issues	30 issues
UK	☐ *£55.99*	☐ *£95.99*
Rest of World	☐ *£70*	☐ *£126*
USA	☐ *$94*	☐ *$159*

Print options

	15 issues	30 issues
UK	☐ *£49.99*	☐ *£89.99*
Rest of World	☐ *£64*	☐ *£120*
USA	☐ *$85*	☐ *$150*

Digital Only ☐ 15 issues *£49.99* ☐ 30 issues *£89.99*

Digital Plus ☐ 15 issues *£52.99* ☐ 30 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 1 March 2018. Free gift will be sent to subscription donor. 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 available to new subscribers only. Motor Sport may send you details of our products and services which we think may be of interest to you. Please tick if you do not wish to receive such offers by post or telephone ☐. Please tick if you do not wish to receive such offers by e-mail ☐. Occasionally we may pass your details to selected companies. If you do not wish to receive their products or offers, please tick this box ☐.
QUOTE CODE CPI7

Available in...

Bundle

Save 70%

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 93 years of content.

Print

Save 40%

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

Digital

Save 40%

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


Canon

EXCESS IN THE '80s

It was the best of times, it was the worst of times...

The 1980s will go down in motor sport history as the most power-crazed decade of all time. For that reason it holds a special place in the hearts of many fans who revere its 1000bhp+ F1 qualifying grenades, outrageous bikes or featherweight rally cars with simultaneous supercharging and turbocharging. But the party couldn't go on for ever. Over the next 22 pages our writers celebrate 10 years of glorious excess and ask whether we are still paying the price

GETTY

LAT

Power and glory

A combustible mix of politics and potency turbocharged an unforgettable racing decade

WRITER Maurice Hamilton

If the first Grand Prix of the 1980s in Buenos Aires fought for newspaper space with international darts from Stoke-on-Trent, the last in Adelaide was worthy of headlines before a car had turned a wheel.

It was never going to be any other way in 1989, from the moment title contenders Ayrton Senna and Alain Prost collided at the previous encounter in Japan and the sport's governing body, FISA, waded in with bar-room bully finesse. The only consistency across the 10 seasons had been the inconsistency of FISA's controversial president.

Jean-Marie Balestre had also been present in Argentina in 1980, in the early stages of a crusade to deal with the upstart Formula One Constructors' Association (FOCA); essentially, the British teams led by Bernie Ecclestone. In the years that followed, a bruising series of battles would shake down to Ecclestone taking control of the finance and FISA making the rules. Along the way, F1 would flourish, its popularity rising in accompaniment with TV and media coverage beyond anything imagined at the decade's dawn.

THE 1980 NEW YEAR CELEBRATIONS HAD barely ended when 15 teams prepared for the trip to South America; not that you would have known it. On Saturday January 5, the sports pages of *The Times* (15p) carried a short piece on the hopes of Arrows, but nothing else to mark the start of a new season a week later.

Arrows had been highlighted, not because the fledgling British team was considered to be a contender, but thanks to the Milton Keynes outfit having built a completely new car. Even allowing for a three-month off-season, this was something of a novelty, only Ferrari, Lotus, Shadow and Ensign joining Arrows in having new designs ready.

The rest would rely on modified versions of the previous year's chassis. Significant among them would be Williams and Brabham, the two teams due to dominate the championship – assuming, that is, the title fight would actually be allowed to run unimpeded by politics.

Ecclestone's street-wise nous was complemented by the sharp legal brain of Max Mosley, no longer part of the March team he had founded 10 years before and now relishing the seemingly inevitable fight with Balestre. That confrontation would take many forms.

At the South African GP in March 1980, and noting the president's habit of making himself part of podium ceremonies, Mosley advised a security guard that this man in a blazer was likely to make a nuisance of himself but, regrettably, would prove impossible to stop. The burly official took the bait and proudly rose to the challenge, Balestre's subsequent outrage being multiplied when he was prevented from helping René Arnoux of Renault and Ligier's Jacques Laffite and Didier Pironi celebrate a French whitewash.

The political point-scoring would assume a more literal and serious meaning in Spain when FOCA's resistance to a number of inflammatory moves by Balestre led the GP to be made illegal and victory for Alan Jones and Williams declared null and void. Both sides would win in the end as Williams defeated the FISA-favoured manufacturer teams in the championship and Balestre got rid of skirts, an aerodynamic device that had allowed British entries to take full advantage of ground effect thanks to the narrow profile beneath the ubiquitous Ford-Cosworth V8.

A fight to stop the advance of turbocharged engines (favoured by Renault and Ferrari) had been a significant part of a long-running and messy FOCA v FISA war that was doing racing no favours, crowds having dropped at a third of the 15 circuits used in 1980.

Needs must, of course. Despite their objection to turbos, the FOCA teams had no alternative but reluctantly to abandon natural aspiration. The resulting marriage with chassis barely capable of handling such explosive power resulted in some of the most spectacular F1 cars ever seen. Honda (V6), Alfa Romeo (V8) and TAG (a V6 manufactured by Porsche for McLaren) joined the turbo revolution, but the most potent unit had the fewest cylinders. BMW's M12/13 was based on its four-cylinder production unit. Such a humble source would translate into a racing grenade thanks to special toluene-based fuel and 3.5-bar boost.

Taming this 1200bhp rocket during qualifying at Monaco was terrifying. Drivers had to deal with wheelspin in every gear on the steep climb from Ste Dévote and somehow contain the projectile as it reached 175mph on the approach to Casino Square. Subsequent wide-eyed expressions said everything about the mix of surging adrenaline and relief that qualifying tyres were only good for a single lap. Not that the engine in this state of tune would have lasted much longer. It would be detuned to a 'mere' 900 bhp for the race.

The pursuit of power at the expense of complete reliability meant regular truckloads

Monaco 1986: Ayrton Senna shows customary commitment in his Lotus 98T-Renault

of engines from Munich each race weekend, BMW reportedly building no fewer than 600 units for Brabham in a single season. It was Eighties excess in its most profligate form.

Having originally championed the turbo as a matter of political expediency, Balestre found himself in the tricky position of back-pedalling in order to stop this lethal performance advance with a ban at the end of 1988.

The eventual division of financial and political power to everyone's satisfaction would allow Ecclestone to make the beginning of a personal fortune. Balestre, meanwhile, could strut his stuff, but without unduly interfering with the reshaping of F1's image from a band of grubby racers to a slick show.

The only thing lacking – with the greatest of respect to champions Jones (1980), Piquet ('81 and '83), Keke Rosberg ('82) and Niki Lauda ('84) – was an enigmatic star capable of catching the public imagination. One emerged through the Monaco spray in 1984 at the wheel of a car funded by a transport company and powered by a four-cylinder turbo made in Essex: Ayrton Senna in his Toleman-Hart.

His record book opened with an outstanding win (in the rain) at Estoril in 1985, but the full import of a personal intensity to match this brilliance would not be felt until 1988, when he moved to McLaren. Now he was head-to-head with Alain Prost, arguably the driver of the decade and, by extension, the man Senna most wanted to beat.

Meanwhile, another character had emerged, totally different to Senna in terms of culture and personal circumstance and yet a frequent thorn in the Brazilian's side.

On the day Senna hit the headlines for the first time in Monaco, Nigel Mansell had hit something more substantial when he crashed his Lotus out of the lead. But when Mansell got himself into a Williams-Honda, his innate speed, driven by bloody-minded determination, suddenly had a reliable and competitive outlet. When Mansell won his first GP in late 1985, it added – against all previous odds – the Brummie's name to the title betting for the following year. The world began watching with fascination, the media picking up on this and raising the sport's profile. The acceleration of interest coincided with changing times in the newspaper industry.

RUPERT MURDOCH HAD TAKEN ON UNIONS that could stop a paper run by the callous flick of a coffee cup onto newsprint as it rolled through presses roaring at full chat. By moving *The Times* and *The Sun* from the moribund traditions of Fleet Street to a plant in Wapping, Murdoch introduced computer technology to an archaic process in desperate need of it.

This laid fertile ground for *The Independent*, the first quality daily newspaper to be launched for almost 100 years. The new offices in London's City Road were not only without a thundering printing press in the basement, they also broke free from stuffy values by producing – to quote the prospectus – 'news combined with analysis and entertaining writing'. The final race of the 1986 F1 season in Australia would provide perfect material for such a thrusting initiative.

A year earlier, Adelaide's first world championship race had enticed just one Fleet Street writer. In 1986, Mansell's presence in the three-way title shootout attracted every national newspaper worthy of a credential.

Having largely limited coverage of a GP to highlights late on race night, the BBC went live from Australia in the early hours of Sunday. The dramatic pictures were guaranteed to become classics as Mansell's title went the way of air exploding from a rear tyre at 185mph. With the BBC *Sports Personality of the Year* following a few weeks later, Mansell was a shoo-in to become the first winner from motor sport since Jackie Stewart 13 years previously.

Losing out to his Williams team-mate Piquet in 1987 would be Mansell's last opportunity to take the title for some time as the Senna-Prost-McLaren-Honda combination began to exert its stranglehold. With McLaren winning 15 of the 16 races in 1988, a period of potential disinterest was actually accelerated in the opposite direction by increasing friction between its drivers and a sport that had become more popular than ever.

Leading up to the first race of 1989 in Brazil, the media was awash with coverage. An entry of 39 brought the need for pre-qualifying – the only means of whittling down the field to 30 runners trying to qualify for the 26-car grid.

Meanwhile, Nigel Mansell had joined Ferrari. The new car, with a revolutionary paddle-shift gear selection, had been so troublesome that Mansell didn't expect to finish the first race and booked himself on an early flight home from Brazil. He missed his plane thanks to winning, adding further colour in every sense by cutting his hands – as only Nigel could – on the ornate trophy.

Mansell interfered with the McLaren hegemony later in the year when he overshot his pit in the overcrowded pit lane in Estoril, reversed illegally, failed to see the subsequent black flags, collided with Senna, received a ban from the next race – and immediately threatened to quit.

Balestre was behind the severe punishment, made even more controversial in Jerez a week later when FISA handed down a mere $20,000 fine for Senna's more serious failure of ignoring yellows at the scene of an accident during practice. The inconsistency was no surprise since it had come from a man who had huffed and puffed his way across the track after the start of the British Grand Prix at Silverstone. Balestre had failed to notice that Nicola Larini, having dashed into the pits to attend to a loose mirror, would be steaming through Woodcote in his bid to catch up. The Osella driver lost favour with many by taking urgent avoiding action to miss the president.

If anything, surviving such a moment seemed to embolden Balestre, particularly in Japan when Prost and Senna managed to collide while disputing both the lead and the championship. Confusing the role of the legislature with that of the judiciary, Balestre involved himself in an enquiry that blamed Senna and triggered a massive reaction.

The uproar continued through and beyond that final round in Australia; a race, incidentally, that should never have started in heavy rain and ended after 14 laps when Senna, driving like a man possessed, smashed into a backmarker hidden by spray.

And so ended 10 years brimming with bravado, blatant political intrusion, bad judgment and brilliant racing. The final legacy was a lingering threat that Senna, at loggerheads with the administration, would not turn up for the first race of 1990.

Phil Collins claimed the last number-one single of 1989 with *Another Day in Paradise*. For Formula 1 fans fed by an eager media, the title was an apt metaphor for the best part of a formidable decade. ◘

GOLD & GOOSE

Highsiding into history

Mad Grand Prix machines, outrageous parties and the birth of superbike racing... the 1980s were gloriously unsustainable

WRITER Mat Oxley

That the 1980s was a decade of excess should come as no surprise, because the 1980s was the child of the 1960s and 1970s. During the third decade of The Modern World, excess went fully mainstream, conquering every part of life, from music and business to advertising and motor sport.

In the world of motorcycle racing this appetite for excess created the nastiest Grand Prix bikes of all time and fuelled the last truly wild paddock parties, the entire show bankrolled by the sport's new addiction: tobacco money.

Two-strokes had dominated the premier 500cc class since the mid-1970s. Those early two-stroke 500s produced perhaps 100bhp. By the late 1980s the bikes were making close to 180. Chassis engineering and tyres had also improved, but not nearly enough.

This super-abundance of engine performance took riders into a dark place: the age of the highside. There is no more agonising way to crash a Grand Prix bike than by going over the top - fired over the handlebars like a pebble fired from a catapult.

The dynamics of a highside are straightforward: engine torque exceeds traction, tyre starts to spin and slide, rider closes throttle to reduce torque, tyre regains traction, motorcycle jerks upright, rider is propelled over the top.

Highsides were caused by a number of underdeveloped technologies. The two-stroke V4s made by Honda, Suzuki and Yamaha produced torque in an unusual and unpredictable way, which caught out even the greatest riders of the era. Nowadays frame and swingarm flex is used to damp out some of the forces that contribute to a highside, but little was known of this concept in the 1980s. And tyre design - both compound and construction - could never quite keep up. Traction control, of course, was a long way in the future.

The immediate solution wasn't technological, but human, or perhaps superhuman. The top teams hired former dirt-trackers from the USA and Australia; men who had earned a living by turning tyre-spinning mayhem into a glorious sideways ballet, via judicious use of the throttle. Freddie Spencer, Eddie Lawson, Kevin Schwantz, Wayne Rainey, Mick Doohan and Wayne Gardner all grew rich by transferring these sideways skills from dirt to asphalt.

However, not one of these superheroes got through the 1980s without suffering multiple broken bones from highside crashes.

There was only one Old World rider who regularly took the fight to the New World stars during this age of excess. Frenchman Christian Sarron finished third in the 500cc world championship in 1985 and 1989, but at a high price, breaking 50 bones in his hands alone, most of them through highside accidents.

"It was a nightmare to keep the front wheel down so you could accelerate effectively," Sarron recalls. "We worked out that the only way to keep the front down was to spin the rear. But the two-stroke power was quite brutal; also quite unpredictable, so it was difficult to anticipate. All the power arrived suddenly, the rear tyre went sideways and you were thrown high into the air, maybe two metres above the ground, at 150kph. It wasn't a good feeling. You were thinking, 'What am I going to hit?' Because you knew there was a chance to get really badly injured, especially if the bike landed on top of you - sometimes the bike was also flying. Once I had a slow highside and wasn't injured, but then the bike landed on my hand. I stopped counting after 50 fractures in my wrists, hands and fingers."

The 500s of the 1980s broke many riders, physically and psychologically. Even the most talented world champions had to dig deep within themselves to find the mental strength to survive the onslaught.

Lawson was the most successful rider of the decade, winning the 500 championship in 1984, 1986, 1988 and 1989. The Californian came to Europe after winning two US Superbike crowns, graduating from a pimped-up 1000cc four-stroke streetbike to a 500cc two-stroke Grand Prix racer. "I remember riding a 500 for the first time and thinking, 'I'm not going to be able to do this. Oh man, I've bitten off more than I can chew'."

In 1989 Lawson became good friends with rookie Mick Doohan, also making the switch from superbikes to 500s. "Doohan was sort of the same way," adds Lawson. "I remember him coming into my motorhome, going, 'What do I do?' He was practically in tears."

Doohan suffered terribly in his earliest outings on a 500, starting with his first ride on a Honda NSR, at Suzuka in January 1989.

"I gave it a fistful going through the Esses, and as I shifted my weight from right to left, the rear just lit up," recalls Doohan, who went on to win five consecutive 500 championships in the 1990s. "The thing had me off the side,

LAT

M 80s

Come all ye faithful

Group C was a party and everyone was invited, making it one of the great eras of sports car racing

WRITER Gary Watkins

What is the greatest era of sports car racing? Many would plump for the seasons covered by the short-lived career of the Porsche 917 as a Group 6 racer. Others might go for the Ford versus Ferrari grudge matches of the middle 1960s. And some would look no further than the seasons just gone when Audi, Porsche and Toyota went at it hammer and tongs with their high-tech LMP1 hybrids. But everyone has a soft spot for the Group C years of the 1980s. That's because it has a very strong claim to being the greatest era of them all.

The Group C fuel-formula that came on stream in 1982 gave us one of the greatest competition cars of all time, Porsche's 956/962. It also lured Jaguar and Mercedes back to front-line endurance racing in what turned out to be successful attempts to recapture their former glories at Le Mans.

We have Group C to thank for the succession of V12-engined Jaguar prototypes to race off Tony Southgate's drawing board and the svelte curves of the Sauber-Mercedes C9 and its successor, the Merc C11. Nor should we forget that it brought a line of Japanese manufacturers in Mazda, Toyota and Nissan onto the global motor sport stage, at least as far as circuit racing went.

They weren't the only manufacturers to take the challenge of Group C. Ford, Lancia and, at either end of the 1980s, Aston Martin had cars on the grid. There was even a Lamborghini of sorts, the Countach-engined QVX based on a design of Tiga origins and funded by the marque's British importer.

But the legend of Group C was built on much more than factory machinery. The category spawned an industry. British big gun constructors March and Lola were represented with cars bearing their own names and those of others. Tiga was a significant player for a short period, while Group C and its US derivatives facilitated the launch of a new marque in Spice Engineering, founded by touring car great Gordon Spice. It would go on to build approximately 50 prototypes in just a few short years.

A veritable A-Z of constructors developed cars through the lifespan of Group C, from ADA to Zakspeed. And if you don't want to count the latter on the grounds that its cars were reworked Fords, there are always URD, Veskanda and WM to (almost) complete the set. Group C fostered a diversity of machinery missing in so many other so-called great epochs of sports car racing.

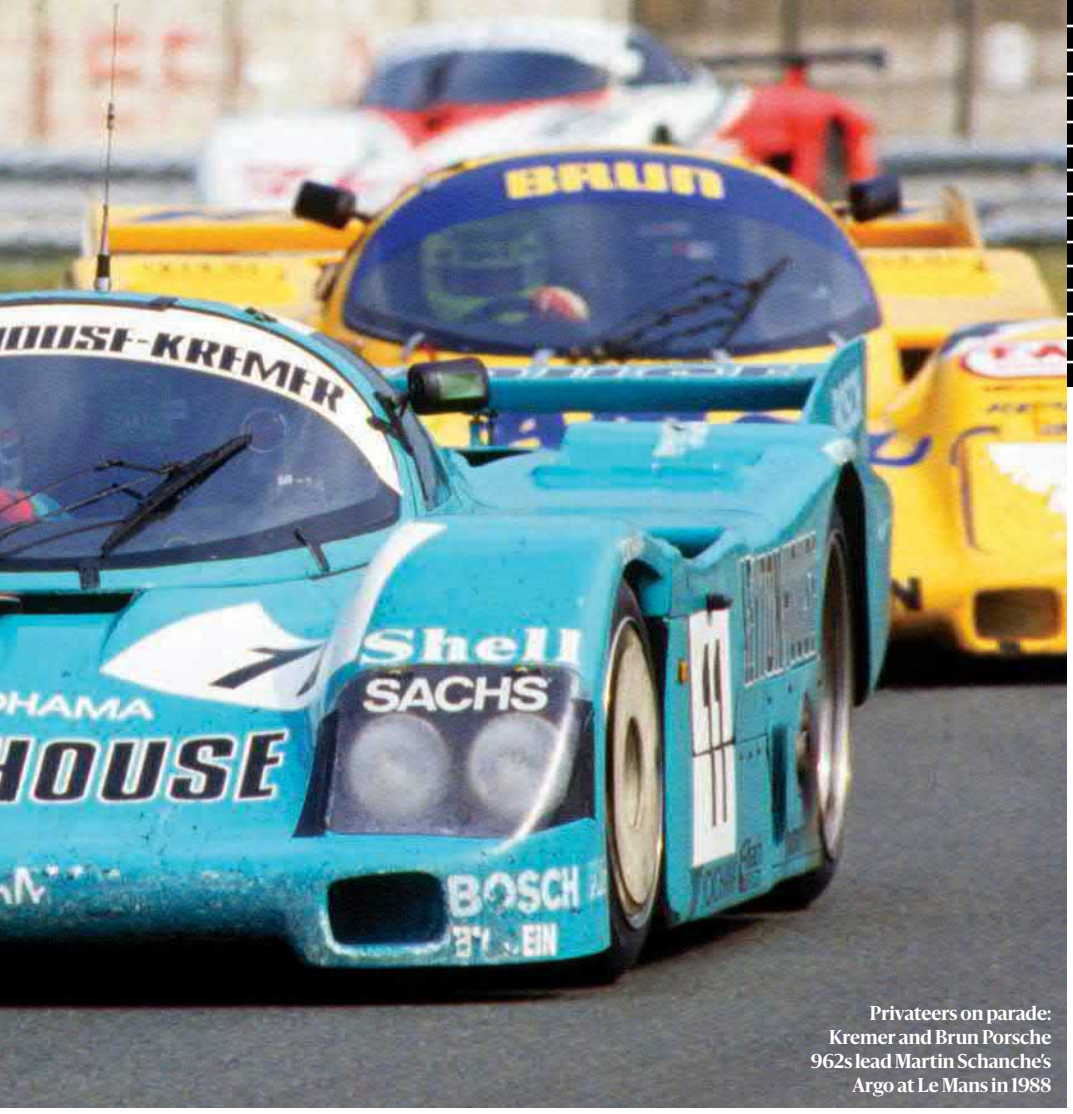
The heroic failures and the underfinanced backyard specials are just as much part of the Group C story as the 956, the Jag XJR-9 and the Sauber C9.

Lancia's charismatic LC2, powered by an engine borrowed from Ferrari and resplendent in Martini stripes, was fast but fragile – and never as frugal as the Porsche. Ford's C100 failed to fulfil its potential, a victim of muddled decision-making and then the corporate axe when everything was in place for the programme to come good.

The minnows that graced the grid have their own place in the rich story of Group C, too. There were French Le Mans perennials like Yves Courage with his Cougars, subsequently renamed after himself, and WM. The latter team was a collection of motor sport part-timers, with Peugeot head of styling Gérard Welter – the 'W' of WM – at the helm. They kept coming back to Le Mans, not in pursuit of victory, but with the target of attaining ever higher top speeds down a Mulsanne Straight yet to be adulterated by chicanes. A WM-Peugeot, driven by team flag-bearer Roger Dorchy, hit 407kph in 1988. That's a mind-blowing 253mph!

And then there was the so-called De Cadenet Lola, a misnomer given that the car was definitely more Lola than De Cadenet. But there was a bit of Porsche in there, too – the windscreen was borrowed from a 906 and mounted upside down. It was built by the British ADA Engineering squad in 1982 for a total of £8000, including the purchase of a Cosworth DFV for five grand. This value-for-money racer, largely assembled out of bits discovered in storage in a railway arch somewhere in south London, would compete at Le Mans on three occasions, the final time in 1984 as the ADA 01.

Group C provided a diversity and also a bulk of cars missing in so many other eras of sports car racing. The grid today at Le Mans, and in the World Endurance Championship, is filled by a mix of prototypes and GT cars split over four classes. Yet back in the 1980s, the French



Privateers on parade: Kremer and Brun Porsche 962s lead Martin Schanche's Argo at Le Mans in 1988

enduro and what we can generically call the world sports car championship (the series had various names during the days of Group C) was all about pure-bred prototypes. There were GT cars in the early years of the category, but they had disappeared entirely by 1988.

That year at Le Mans, 32 of the 52 cars that went into qualifying for the race were cars racing in the higher Group C category, known as C1. Three of the others were Mazdas, running to the North American IMSA GTP rules in a move essentially designed to allow the Japanese manufacturer to trumpet another Le Mans class victory in the Monday morning newspapers in Japan. The rest came from the secondary C2 division so were definitely Group C cars just the same. A total of 49 prototypes went to the grid!

ELEVEN OF THE C1 CARS THAT YEAR WERE Porsches, all but three of them run, not by the factory, but by privateers. Selling racing cars has always been important for Porsche, but back then you could buy a turnkey prototype racer – quite literally because the things started on a key – that was only an evolution or so behind the Rothmans-liveried works cars.

Porsche was proud of the successes of its customers. When seven of its first batch of privateer 956s claimed top-10 finishes at Le Mans in 1983, behind the factory cars in first and second positions, it booked press ads proclaiming the fact. "Nobody's perfect" ran the tagline in reference to the Sauber-BMW in ninth place.

The successes of Porsche's customers with the 956 and then its long-wheelbase cousin, the 962C, are an important part of the narrative of Group C. The German manufacturer sold cars that could compete with its own in-house factory team from Weissach, and compete they undoubtedly did.

Joest Racing, GTi Engineering run by Richard Lloyd, John Fitzpatrick's eponymous team, Kremer Racing and Brun Motorsport all won important Group C races with the 956/962 in the face of factory opposition. Brun even claimed the World Sports-Prototype Championship title for teams in '86, ahead of both the factory and newcomer Jaguar.

There were famous wins for Porsche independents against the works cars through the Group C years. Joest, of course, triumphed over the factory at Le Mans in 1985, thanks in part to the tweaks aimed at improving the basic Porsche design. Engines developed in-house with a higher compression ratio, revised electronics and a new aerodynamic underfloor were among its developments, but some of the customers went further. Lloyd's GTi team, one of the first wave of 956 customers, had its own chassis built in aluminium honeycomb, designed to be stiffer than Porsche's sheet aluminium version, and was constantly on the look-out for aerodynamic improvements.

This British privateer – which took wins at Brands Hatch in '84 (with an ungainly front-mounted wing borrowed from a Formula 3 car) and the Norisring in '87 (with a honeycomb chassis) – started a trend that continued through the lifespan of Porsche's Group C design. A cottage industry grew up around the 956/962.

Group C was an inclusive category because the rules were designed that way. There was no cubic capacity limit on engines, just a cap on how much fuel could be used over the course of a race. The idea was that anyone could compete. There could be no excuse that you didn't have the right outfit (read engine) to go to the party. Flat-sixes, V8s and V12s, turbos and normally-aspirated engines and Mazda's rotaries all competed with effect.

That explains why fuel-formula Group C was a success and what followed was not. When fuel limitations were abandoned for 3.5-litre Formula 1 engines – in a phased introduction through 1989, 1990 and into 1991 – the world championship rapidly withered from a position of immense strength.

The WSPC opened in 1990 at Suzuka with a grid of 34 C1 cars (there was no Group C2 by this stage). Exactly one year later at the same track in Japan, there were just seven of the new 3.5-litre sports cars. Six manufacturers raced factory Group C cars in 1990 prior to Peugeot's arrival with the first iteration of its 3.5-litre 905 at the back end of the season. Only five car makers would make it to the grid with a new generation of Group C machinery over the next two years – and never all at the same time.

The Peugeot, Jaguar's XJR-14, the Mercedes C291, the Toyota TS010 and the Mazda MXR-01 (actually a Judd-engined Jag with a longer wheelbase) were Group C cars in name, but they were certainly not in spirit. The history of the world sports car championship, covering 40 rich seasons, came to an end in October 1992. The blame can be laid at the door of Group C's second iteration, which wasn't an improvement at all. It was as exclusive as the original was inclusive. It wasn't affordable and it wasn't sustainable.

True, Group C had everything the Automobile Club de l'Ouest at Le Mans, promoter of the WEC, is shooting for today as the revived world championship heads into the brave new world of its 2018/19 'superseason' and, beyond that, new LMP1 rules for 2020/21: a big and diverse grid of prototypes, factory teams from some of the world's most important car makers and privateers able to challenge them for outright victory.

McKLEIN

Is that a finger in the air intake?

You can't touch rallying in the 1980s for pure adrenaline, excitement and big-spending teams

WRITER Anthony Peacock

Group B was so synonymous with rallying in the 1980s that if you squint carefully you'll find the front spoiler on an Audi Quattro actually resembles the sort of shoulder pads Joan Collins wore regularly on *Dynasty*. Like pixie boots, the rally cars of the time were all severe angles, unfathomable appendages and a very specific sense of ostentation. They looked like they were flying when standing still: otherworldly modern at the time, yet behind all that cutting-edge modernity was a fundamental fragility. In the case of Group B, this occasionally cost people their lives. That's certainly one over-riding memory of the era.

Sport is only a mirror of the popular culture of the moment. And it's no coincidence that 'greed is good', a thrusting mantra of the 1980s, also sought its outlets in motor sport. And rallying yearned to be part of the 'faster, higher, bigger, better' ethos that was gripping the world at the time.

Yes, there might be danger attached: that much was clear from the outset. But, back then, the prevalent feeling was that humans were invincible. Not quite immortal perhaps, but certainly masters of their own destiny – in an era that was blissfully free of the twin evils of health and safety. The threshold of acceptable risk was much higher, the threat of crippling litigation far lower: this is key to understanding how motor sport operated in the 1980s, and why it could not continue in the same vein.

ALONG WITH POWER, BUDGETS SPIRALLED out of control. But nobody really cared, because the car companies were suddenly making more money than they had ever done. There is no record of Gordon Gekko – the slickly obnoxious hero of *Wall Street* – being in charge of motor sport at that time (although some may see resemblances between him and Bernie Ecclestone), but he might as well have been. The teams tore through money like bankers on a stag night.

Lunch, as Gekko said, was for wimps, while money never sleeps. And to the backdrop of Dire Straits (or, more likely, Zucchero) at the height of the Group B spending war, Lancia used to load up pretty much an entire Boeing 747 to move its stuff (which included a small fleet of helicopters) around the world. Toyota would spend three months at a time practising for the Safari Rally (which was entirely allowed back then). Lancia team principal Cesare Fiorio once admitted that between rallying and endurance racing, they were spending 10 billion lire per year. That's hard to put into modern money, but it equates to tens of millions of pounds – a staggering sum at the time. And they were far from the only ones.

The Safari, unsurprisingly, was one of the deepest money pits for rally teams, requiring specialist cars, equipment and service trucks. Once the rally was over, the top teams would just leave all their stuff there for the following year, when hopefully they would find it again.

If not (and this was also very much an era when things 'disappeared' on a regular basis, sometimes entire cars) they would just buy some more. One of the joys of the 1980s Safari was that it was strictly a cash economy, where a creative solution could be purchased to more or less any problem. One team manager recounts how he always carried a briefcase containing $100,000 in cash. The briefcase always came back considerably lighter. If all this paints a picture of limitless funds and accompanying sleaze and corruption, it's not meant to. Above all, the 1980s were a glorious, untrammeled and optimistic period: to the extent that the latest WRC regulations, introduced last year, seem to be doing their very best to recreate it. Those splitters, diffusers and large wings sported by the latest World Rally Cars have been seen somewhere before. Could it have been on the shoulders of Victoria Principal?

THIS WAS ALSO A PERIOD WHEN manufacturers tasted unprecedented success through motor sport, and realised its effectiveness as a global marketing tool. The Peugeot 205, for example, which was mainly promoted through the World Rally Championship with the mighty T16, was unquestionably the car that saved Peugeot as a company. Lancia already had an illustrious sporting history, but had never tasted the sort of high-profile dominance it enjoyed in the World Rally Championship. And that economic benefit endures: a glance through the classified adverts in this magazine will swiftly demonstrate how the Delta Integrale road car has continued to accumulate value.

And what did anyone in Europe really know of Japanese road cars before they got into rallying? Yes, there were some Honda projects

Spectator discipline used to be in short supply: Michèle Mouton and Fabrizia Pons head for victory on the 1981 Sanremo Rally

from the 1960s in Formula 1, followed a few years later by cheap Datsuns and their ilk, frequently offered in questionable shades of blue and brown, but it took rallying to convince the mass market that these cars were actually any good, rather than just affordable.

That transformation really happened in the 1980s – and a lot of it was down to Toyota, which would dominate the Safari in the mid-1980s before going on to become the first Japanese manufacturer to win WRC titles in the 1990s.

But there was also Mazda, with a much smaller budget, which managed to lead the RAC Rally with the legendary Hannu Mikkola (before the Finn was blinded by the low sun and crashed). Shortly afterwards, in 1989, Pentti Airikkala won the RAC in a Mitsubishi Galant. Although Audi, Lancia and Peugeot will always be the first names to spring to mind when reminiscing about the '80s, the era went way beyond Europe: it marked the true emergence of Japan.

THE OTHER THING 1980s RALLYING GAVE us, of course, was personalities. Every country had its heroes; some more unlikely than others. And it was arguably only thanks to the risk-taking mentality of the 1980s that somebody like Michèle Mouton was able to come to the forefront. In many ways, she is the driver who best represents the decade – and for reasons that went far beyond her modish penchant for big hair and jumpsuits. It was a period when everything was pushed to the extremes and perceptions were challenged. So, it was almost logical that Audi would put a petite Frenchwoman into the most fearsome car the sport has ever known. What started out as an experiment turned into a resounding success: not only was Mouton by far the most successful female rally driver, but you could argue a strong case for her being the most success female driver in motor sport full stop.

In 1982, the year in which she won three rallies, only 12 points separated her from taking what would have been the most remarkable title in the sport's history.

Britain also had its heroes of the Group B era, with drivers such as Tony Pond and Dai Llewellin, but perhaps the most unlikely folk hero – who brought the sport to millions – was William Woollard.

The TV presenter never drove a car but was a prophet to the masses. During the RAC Rally, there used to be a nightly Top Gear TV report, which normally featured a sodden Woollard standing in Harrogate or Chester in the dark, trying to make sense of what was going on. "What I think captured the imagination was the immediacy of it all," says Wollard. "We put out everything live, using whatever information we had available. Sometimes the producer would hand me a slip of paper while I was talking, telling me that the situation had just changed. There was a real feeling of the action unfolding in front of you."

Top Gear's rally report had a time slot just before the BBC 10 o'clock news, which helped it to pull in about three million TV viewers. To those you can add the two million or so who lined the route to watch it live, making the RAC Rally the biggest sporting event in Britain at the time, comfortably outstripping monuments such as Wimbledon and the FA Cup. And in many other countries rallying was even more popular: everyone has seen the photographs of Rally Portugal in its heyday, where spectators used to try and touch the cars as they drove past. There's an urban legend about a Lancia mechanic apparently finding a finger in the air intake of an 037. It might just be true.

The late Rob Arthur, co-driver to Tony Pond in the MG Metro 6R4, commented several years back: "It was easier for me as I always had my head down in the notes. It must have been terrifying for Tony. On the occasions when I did look up, all I remember seeing is this wall of people that parted at the last minute, a bit like Moses parting the Red Sea..."

Watching stages was free back then, which helped the cause, but Arthur's words vividly bring to life the almost unbelievable popularity of rallying at the time: an '80s zeitgeist that, like coloured braces, has never been entirely recaptured.

The sport has since changed beyond recognition – and not always for the worse, despite the assertions of those who like to wallow in nostalgia. Modern rallying is constantly urged to become easier for fans to understand, yet in the prime of its popularity it was fiendishly complex. Servicing took place more or less anywhere, there were time charts and movement schedules that looked like navigation charts of the North Atlantic and the paperwork would have kept even the Politburo busy for decades.

Yet that didn't seem to put anybody off, despite the fact that most spectators had little clue as to what was going on where, or why. Part of the charm of spectating on rallies used to be the game of Chinese whispers that passed through the forest from spectator to spectator; to the extent that 'Vatanen's gone off' might reach you in the form of 'Kankkunen's got a cough'.

The point is, it didn't matter. Because rallying at the time had the ability to fix people in the moment, with the only important reality being the snarling spectacle played out right in front of you. When you look at a battlefield, you don't immediately wonder who's winning the war: instead you're speechless at the sheer savagery of what's going on. It was a bit like that with Group B.

PERHAPS THAT TREND WAS SYMPTOMATIC of the 1980s as a whole: it was pre-digital, so there was none of the information overload we suffer now, and attention spans were longer. Woollard probably shouldn't be entirely surprised that his rally reports were so popular, because back then people only had two other channels to watch as an alternative.

What might help is a bit of objectivity. By modern standards, Group B cars weren't fast: under most circumstances, a current R5-spec rally car would wipe the floor with one. But the 1980s were unquestionably competitive.

There were six different champion drivers throughout the decade, and five winning manufacturers. In the 1990s there were five and four. In the 2000s there were four and three. And so far, in the 2010s, there have only been two champion drivers, both of whom happen to be French and called Sébastien.

It's become fashionable, especially among politicians and others who like to ostentatiously wear a social conscience, to blame the 1980s for pretty much everything from devil worship to Donald Trump.

But in the case of rallying, we should celebrate them. It was a crazy, unrepeatable time when greed was indeed good.

Bo

No other decade matches the 1980s for visceral excitement, but it was a bloated era, a time of excess, and the repercussions continue to resonate today

WRITER Mark Hughes

1980s boom & bust

The turn of the 1980s was nothing like what that decade became, but a much greyer time of restraint and stagnation. The late 1970s economic gloom carried right on through to the new decade with falling GDP, industrial unrest and closing factories. Unemployment continued to rise and, although stricter monetary control had brought inflation under control, it was at the expense of even greater austerity for many. In Britain and America, in particular, the industrial base was crumbling as the centre of industrial gravity migrated to Asia. But then something extraordinary happened in Britain. Rather than solving those problems, it transcended them. Almost by accident, Britain became a commercial/financial economy rather than an industrial one. The 'big bang' of October 1986 led London to be transformed into a global financial powerhouse by deregulation and the concurrent advent of electronic – rather than face-to-face – share trading. And so the good times rolled and the '80s finally got its identity, one of brash and conspicuous consumption, led by the effect on the economy of turbocharging the financial sector.

The 1980s

Pictorial reflections on a colourful decade

1980

Armed with the FW07, Alan Jones leads Williams to its first brace of F1 titles

1980

December 8: the world mourns the loss of a genius, murdered in New York aged 40

1980

Jean-Pierre Jaussaud and Jean Rondeau win Le Mans... in the eponymous Rondeau

1980

Rubik's Cube attains cult status: about 200 million puzzles are sold from 1980-83

An uncannily similar process was unfolding in the F1 of the time – and at the root of it all was the actual turbocharger, the power-multiplying potency of which didn't just apply to combustion chambers. It also had a profound impact upon the very structure of F1 and threatened to bring walls tumbling down. It was an instrument that arrived at the perfect time for the road car manufacturers to pierce the previously impenetrable shell of the specialist constructors. Ever since the late '50s, F1 had been largely the preserve of these small, independent teams scattered around the south of England, buying in engines and components, adapting them to create ever more specialised machines that advanced the art and science of the racing car to a point well beyond the relevance or detailed understanding of the factories that had previously dipped into and out of Grand Prix racing. The lifeblood for these independents was the Cosworth DFV, a masterpiece of packaging and power, F1's best engine available off the shelf, ready to mate up to the similarly ubiquitous Hewland gearbox.

Keith Duckworth's understanding of the requirements of an F1 engine were better than anyone else's (with the possible exception of Ferrari's Mauro Forghieri) and, between 1968 and the late '70s emergence of the turbo, his DFV became a formidable barrier to factory F1 participation. Introduced in 1967, it was available to all from '68, the year that the final major manufacturer team – Honda – left.

> *"Ron Dennis was determined for McLaren not only to win but dominate. He realised the only way to do this was to outspend Ferrari"*

But by the late '70s, the manufacturers were beginning to sniff around F1 once more. Bernie Ecclestone had banded together the British specialists that comprised more than 70 per cent of the grid and had used the power derived from being their representative to electrify the sport commercially through television contracts. The sport's global reach was growing fast and the world's car producers began to wonder if they should not be getting onto the bandwagon. If only there was a way of ensuring success...

ENTER RENAULT AND ITS 1977 LEFT-FIELD gamble with the turbo (despite the regulation halving of the 3-litre permitted capacity for naturally aspirated engines). So revolutionary was the technology, so far divorced from the specialised knowledge that had made the Cosworth so formidable, it was the key that opened F1's door to the manufacturers. The new technology wiped the slate of accumulated knowledge clean – and what's more it demanded the sort of R&D budget that only a road car manufacturer could contemplate.

For the '80s, attracted by the turbo, the factories returned. Joining Renault and Fiat (though Ferrari) in factory-based turbo F1 programmes would be Alfa Romeo, BMW, Honda and Porsche. The template had been fundamentally changed. The very cornerstones of F1 success had been redefined as the turbo whistled into the paddock, laid the old ways to waste and created mayhem. And opportunity. Oh, so much opportunity.

F1 budgets were peanuts to these manufacturers. So long as it could be justified by marketing. Make up a number, throw it to the wall, see if it sticks. McLaren's Ron Dennis was the quickest to understand the full implications. He was the first to grasp that the growth Bernie was providing was only going to continue – and that he could leverage his team's future on that growth.

He'd started doing it by campaigning John Hogan for ever more Marlboro money, but the arrival of the car manufacturers put things on an altogether different scale. "Ron was so determined for McLaren not only to win but dominate," recalled John Hogan in 2015, "and he realised the only way to do this was to outspend Ferrari. That was his simple philosophy and it was very successful. Every couple of years it was time to renegotiate the Marlboro deal and we'd have this long-running argument as he ramped up what he was asking for. I'd say, 'Ron, are you calculating that number based on TV exposure or cost of engineering?' and he'd say, 'Both.' But marketing numbers are not well quantified... with all the money coming in as a result of marketing justification for expansion, they cannot be controlled... But then when Honda joined with McLaren in '88, they were

LAT

Fat tyres, big wings, huge power: Keke Rosberg leads rivals at the start of the 1984 Portuguese GP

1981

A new TV concept launches (with *Video Killed the Radio Star*, by The Buggles)

1981

Brazilian prospect Ayrton da Silva arrives in the UK. He'd soon be known as Senna

1981

A national holiday declared for marriage of Charles and Di. Pubs extend opening hours

1981

Gilles Villeneuve wins Monaco Grand Prix in somewhat unsuitable Ferrari 126CK

1982

Lancia begins campaigning the 037. Best result in the WRC is fourth, in Britain

1982

Michael Jackson releases his sixth studio album, *Thriller*. It sells rather well

1983

Stefan Bellof weaves his 'Ring magic, 6min 11.13sec in a 956, but crashes out of the race

1983

The Austin Metro was Britain's best-selling car. It even came in Vanden Plas trim

1983

Nelson Piquet (Brabham BT52-BMW) – the first turbo-powered F1 champion

1984

Apple introduces its first mass-market personal computer, the Macintosh

1984

Philip Michael Thomas and Don Johnson secure the lead roles in *Miami Vice*

1984

Ferrari introduces the 4.9-litre, 390bhp Testarossa to replace its Berlinetta Boxer

1985

On June 13, Live Aid fund-raising concerts take place in London and Philadelphia

1985

Lead character Michael J Fox heads back in time... to meet his future parents

1986

Rally star Henri Toivonen's death on the Tour de Corse spells the end for GpB

1986

Senna, Prost, Mansell and Piquet win 15 of 16 GPs, the other going to Gerhard Berger

1986

World Cup: Maradona punches the ball into the net and Argentina beat England 2-1

1987

Promising youngster Johnny Herbert wins the British F3 title with Eddie Jordan Racing

Tobacco road: cigarette money fuelled F1 teams to an extent, but car makers invested yet more heavily

LAT

outspending Marlboro three to one."

Manufacturer money unleashed team spending on wind tunnels, materials technology, electronics, fuel, R&D, staff, facilities, all on a scale previously unknown. And there seemed no end to it. It just kept getting more - and more was never enough. In 1980 Williams won the world championship powered by DFVs, with 50 people and a budget of £2.2 million. By 1989 McLaren was employing 400 and spending £50 million to win the same title - and that was car manufacturer money, beyond the scale even of the tobacco companies. The expansion was far from over and would continue for another decade and a half. The value of traded shares in London has increased 1500 per cent since the '86 big bang. F1 budgets have increased by about 15,000 per cent in the same time (from around £2 million to £300 million).

Just as electronics had uncorked the financial potential of the city traders, so they also released the turbo motor's latent monstrous force. Electronic control of fuelling and ignition allowed these volatile beasts to be operated on the margins of detonation - and the power rewards of that were immense. The pre-electronics turbo F1 engine of the early '80s was delivering perhaps 600bhp in race trim, 750 at 3-bar boost for qualifying. But

"By 1985, on more than 4-bar boost, the BMWs were qualifying with maybe 1500bhp (no one was really sure, as the dynos didn't read that far)"

compared to the 500bhp DFV, all the extra was doing was paying for the greater bulk, weight and cooling - and proving unreliable into the bargain. But with electronic control and the concurrent development of special fuels, the potential of the turbo went off the scale. By 1985, on more than 4-bar boost, the Renaults and BMWs were qualifying with something in excess of 1300bhp and maybe as much as 1500 (no one was really sure, as the dynos didn't read that far), and racing with 850-900bhp. No normally aspirated 3-litre - with the contemporary 11,000-12,00rpm limitation of mechanical valve springs - was going to live with that.

It was the turbo era that best summed up the culture of excess, engines thrown away after one sacrificial super-boosted qualifying lap that turned metal molten.

ASIDE FROM MAKING THE MID '80s perhaps the most viscerally exciting F1 era of all time, what these developments also did was take F1 out of the exclusive hands of the independents. These specialists were still there, of course, but now relied upon partnerships with road car manufacturers for competitive motive power. They could be thankful it had even played out that way - for the fear among the teams at the turn of the decade was that other manufacturers would follow Renault's lead in establishing their own genuine factory teams and turbo-boost the specialists out of existence. Instead, most of the car manufacturers preferred just to supply the engines and so BMW partnered Brabham's Nelson Piquet to the first turbo-powered F1 title, Porsche partnered McLaren, Honda's first titles were with Williams and so on.

Even after the turbo had been legislated out of existence (with progressively tighter limits on boost pressure and fuel allowance before being banned outright from '89), the manufacturers stayed around regardless. The turbo had been the instrument that had emboldened them to join in but now that they were here, getting global exposure for what to them was peanut money, they weren't about to leave. Besides, even the enforced return to naturally aspirated engines allowed them to express their new-found racing engine mastery as the Renault innovation of pneumatically controlled valves (introduced on its turbo engine of '86) was applied by them all to take the revs of the new normally-aspirated motors into a different stratosphere to the once-invincible DFV.

For all that F1 offered the manufacturers great value for money, for participants and the sport itself they represented an immense scale of investment and many dynasties were built upon their spend. They thereby brought an intrinsic power and influence to the sport and were courted by all. Initially Jean-Marie Balestre as the governing body's president had enlisted their support in limiting the power of the Ecclestone-led independent teams. Subsequently, after a truce was reached

1988

Enzo Ferrari passes away on August 14, aged 90. The news is kept quiet for two days

1988

NYPD officer John McClane (*né* Bruce Willis) makes his big-screen debut

1988

Wallace, Lammers and Dumfries give Jaguar its first Le Mans win since 1957

1989

The Berlin Wall is breached, allowing free passage between East and West

1989

Nintendo introduces its first GameBoy console. We rather liked F1 Race...

1989

Alain Prost and Ayrton Senna tangle at the Suzuka chicane. Prost becomes champion

LAT

between Balestre and Ecclestone, the teams courted the manufacturers as part of their competitive striving.

Following the plot of *Animal Farm*, Bernie Ecclestone then graduated from being the representative of the teams, keeping them from oppression, to instead representing his own interests in exploiting the vast commercial potential of the new manufacturer-supported F1, helped by his friend and fellow former rebel Max Mosley as Balestre's replacement for FIA president. As this sub-plot developed, certain team owners saw themselves in the role of the oppressed – even though they'd become vastly richer as part of Ecclestone's cast than they'd ever have done left to their own devices. Ron Dennis, Frank Williams and Ken Tyrrell felt that Ecclestone had effectively stolen the sport from the teams. They reached this conclusion in the late '90s when an attempted floatation of the sport required the books to be open to anyone's scrutiny for the first time and they discovered how vast the cake had become and how small their slice of it was.

Those two hard points of reality – the power of the manufacturers and the adversarial relationship between the teams, governing body and commercial rights holder – have defined the sport ever since. They are effectively the hangover from the excess of the '80s, the price that had to be paid for the riches the sport has enjoyed as a result of the turbo-initiated manufacturer investment. Just as banking deregulation in the '80s wider world brought vast riches, so it incubated a virus that would come to have its day of sub-prime loan reckoning. The same was true of the turbo in F1.

SO IN THE LAST TWO DECADES WE'VE HAD an F1 systemically inflexible, locked into a culture of internal dispute, because the interests of the four power groupings (governing body, manufacturers, participants, commercial rights holder) cannot be aligned. It's played out in many ways over the years as alliances and interests have shifted: governing body against manufacturers, teams against governing body, commercial rights holders against teams, team against team, commercial rights holder against governing body.

But regardless of the prevailing dispute, F1 has suffered. It has not been able to simultaneously address its many challenges. Instead, as one group or the other has prevailed, only one issue at a time is ever tackled, invariably mutually exclusive to resolution of the others. So we have had attempts at enlivening the show that have led to a technical and competitive dumbing down, an initiative to first reduce (for safety) then increase (for drama) the speeds of the cars, an attempt at making the cars more overtaking-friendly (by simplifying the bodywork) negated a few seasons later by an initiative to reduce lap times (partly by allowing more bodywork complexity). A hybrid engine formula has been introduced (largely through the political pressure of the manufacturers) that the fans and more than half the teams hate. Technical limitations have been introduced as an attempt at cost control, even as the top budgets have increased regardless because no one has the political power to control the competitively driven spend. The top teams, with a combined chassis/engine deployment of more than 1000 people, have far too big a spend to comply with restrictions appropriate to the smaller teams. The commercial equation has become imbalanced as costs have risen, while income has peaked and begun to fall. Circuit promoters struggle to turn a profit because of the fees F1 imposes to feed both its shareholders and stakeholders. It all costs vastly more than is needed to provide a show that is both entertaining and technically interesting, yet is limited in both those endeavours.

Even as F1 under its new ownership tries to plot a better-managed, less reactive, course it seems already to have accepted compromise in its post-2020 engine formula. The fans are screaming for a return to loud and lairy engines and to the sort of renegade spirit that led them to fall in love with F1, yet instead there is a plan for continuing with the hybrids. Because, in order to more fully control the sport, Liberty Media feels it must present a united front with the FIA (thus avoiding much of the instability arising from constantly shifting allegiances) – and the FIA in turn insists that it must not be out of step with the wishes of the car manufacturers. Even though these wishes are clearly in conflict with those of a sizeable proportion of the sport's fan base.

This all stems from the inflexibility of size and vested interest. Success has made the sport vastly bigger and less manoeuvrable than it was before the turbocharger took on the role of a Trojan horse loaded with dollars. ◘


Shell
MICHELIN
709 EXC 75


Rothmans
PORSCHE
2
DUNLOP


John Player Special
RENAULT
OLYMPUS


TWR JAGUAR
JAGUAR
51
DUNLOP


Rothmans
PORSCHE
vsd OLYMPIA
185
RECARO
DUNLOP

1985 THE GREATEST YEAR

If you had to pick a single year in motor sport as the best ever, what would it be? One man thinks he has the answer

WRITER Colin Goodwin

LAT. WRZ. SUTTON

Here's a question that is guaranteed to cause an argument: what was the greatest year of motor sport ever? I'm not talking just about Formula 1 or sports cars; I'm talking about all forms of motor racing including touring cars, rallying and even motorcycle racing. Was there a year in which all the stars were aligned and whichever form of motor sport was your bag, this was the time? Either because the machinery was particularly exciting, the greatest drivers were around and the best events were being held.

As it happens I have the answer, and it's 1985. My case is strong, as I hope to prove, but to back it up we've enlisted the help of drivers who were not only active themselves in that year, but who have vast experience of years (and in cases decades) either side of it. More importantly, their passion for motor sport has not waned with age. Whose opinion on sports car racing is of more value than Derek Bell's? He raced right through the era of the GT40, the 917 to the Rothmans Porsche decade and on to the McLaren F1 in the mid-90s. Ditto Andy Rouse for touring cars.

As you reach for your back issues of *Motor Sport* and delve into your memories, let's go on a tour through the year 1985 and add a bit of context to our interviewees' thoughts.

Martin Brundle

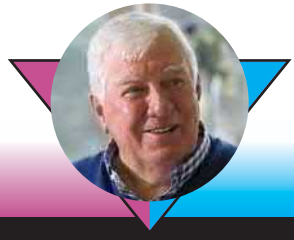
LIFE WILL NEVER BE THE SAME AGAIN because on January 1, 1985, the first mobile telephone call was made in the UK. It would certainly never be the same for motor sport journalists because it marked the point from which it would be virtually impossible to interview a famous driver without him constantly answering or fiddling with his phone.

Communications technology would soon dramatically change the Paris-Dakar rally that in 1985 was only seven years old. Its legendary founder Thierry Sabine was still alive (he was killed the next year in a helicopter accident) and nobody would have guessed that the event would live on in South America. Even today about 80 per cent of the entrants are amateur; the percentage was higher in '85, but what I loved about those early events was the machinery. Look down the entry list and you'll see Land Rover Defenders, Toyota Land Cruisers and on two wheels mostly production bikes modified only by fitting a larger fuel tank. While competitors were battling sand and trying to not get lost, in a Stevenage hospital Mr and Mrs Hamilton were welcoming their son Lewis into the world.

At the end of January Margaret Thatcher becomes the first post-war prime minister to be refused an honorary degree by Oxford University and 4000 striking miners go back to work. Meanwhile, the sports car season is about to kick off on February 3 at Daytona in Florida. Among that year's Daytona 24 Hours list of DNFs you'll find Bob Tullius's Group 44 Jaguar XJR-5. Porsche's 962 took the first four places in the race but by June we'll have some more names to gatecrash Porsche's party.

Meanwhile, over the last weekend of January the world's finest loose-surface drivers are gathered in the South of France for the upcoming Monte Carlo Rally. We are, of course, in the era of the Group B rally car.

"This was before social media but everyone was a household name: Senna, Prost, Mansell, Laffite, Rosberg and more"



Andrew Cowan

In grand prix bike racing, 'Fast Freddie' Spencer became the last person to win both the 500 and 250cc championships in the same year.

GOLD & GOOSE

Derek Bell

Paddy Hopkirk winning the Monte in a Mini-Cooper was a wonderful and romantic occasion but it doesn't quite compare with the ferocity of a 650bhp four-wheel-drive flame-spitting Gp B car. Ari Vatanen won the '85 Monte in a Peugeot 205 T16.

It's back across the pond to Florida for the Daytona 500 on February 17. Just look at the roll call of names in the event: Bill Elliot won in a Ford but all down the list are such as Yarborough, Foyt, Petty (Richard and Kyle) and Allison. And how could you not love an event in which drivers with names such as Lake Speed and Slick Johnson took part?

The racing in today's British Touring Car Championship is undeniably exciting, especially for panel beaters, but the cars themselves are a bit tame. Back in '85 we had a wonderful variety of machines, many rear-wheel drive, making up the grid at the opening round of the series at Silverstone on March 23. The week before Mohamed Al-Fayed bought Harrods department store. Frank Sytner had his only win of the season (in a BMW 635CSi) in a year dominated by Andy Rouse in a Ford Sierra XR4Ti. The cars were exciting and so were the drivers. Tom Walkinshaw was behind the wheel of one of his Rover SD1 Vitesses and Barry Sheene, in his first year of retirement, was driving a Toyota Celica.

The wait for Formula 1 fans ended with the start of the new season in Brazil on April 7. Michele Alboreto won the race in his Ferrari 156/85. H-pattern gearbox, 1.5-litre turbocharged V6 engine, no safety-net electronics. But nobody remembers that victory because a fortnight later Ayrton Senna, at a rain-soaked Estoril in Portugal, won his first Grand Prix in a Lotus-Renault and at the same time fired a warning shot to all the other competitors.

Nigel Mansell scored his breakthrough F1 success in the 1985 GP of Europe at Brands Hatch. Left: Le Mans-winning 956 of Barilla, Ludwig and 'Winter'

LAT

On May 16 scientists at the British Antarctic Survey discovered that there was a hole in the ozone layer. This news probably had little impact on the motor sport community in Indianapolis, as they were working through the complicated and virtually month-long preparation for the Indy 500 that took place on May 26. It was a notable year for it featured Danny Sullivan's famous 'spin and win' moment during which he did a 360 right in front of Mario Andretti. Sullivan raced on to victory and put the mighty save down to 50 per cent skill and 50 per cent dumb luck. Earlier in the month tragedy had struck at the Tour de Corse as Italian rally driver Attilio Betega was killed when his Lancia 037 hit a tree. A year later Henri Toivenen was to die on the same event and the writing was on the wall for Group B rally cars.

In mid-June Jacky Ickx is digging his overalls out for his last-ever outing to Le Mans. He'd finish 10th, low down for this six-time winner. The results are dominated by Porsche 956s and 962s but new names such as Mazda, Toyota and Jaguar are on the entry list. Perhaps not a vintage year for sports car racing, but it certainly previewed what was about to be a magic era. Derek Bell explains more on this page.

The Isle of Man TT is in my opinion the only arena of motor sport that has continued to get

"The technology in Group B was not particularly impressive but the power was absolutely amazing"

better and better. It is still outrageous, the machines are faster, the challenge even greater and the riders as heroic as ever. Nothing gets in the way of my annual pilgrimage to the island. In '85 the late and very great Joey Dunlop completed his first hat-trick of victories. Our own Matt Oxley, as much of a hero to me as the big names, won the 250cc production TT race that year.

Grand Prix bike racing was also getting better and better. It was the year of Freddie Spencer, who saw out the end of an era by being the last person to win both the 500 and 250cc championships in the same year. In June, Spencer won the Yugoslavian GP in the days before the wall came down.

WHERE WERE YOU ON JULY 13? WATCHING Live Aid on telly or perhaps even at Wembley? I was working in an iron foundry in Toowoomba, Queensland, Australia. I might have missed a legendary musical event but I was ideally placed for a motor sport happening a few months later...

Not only did I miss Sir Bob Geldof in action, I also missed Keke Rosberg's ballistic 160mph qualifying lap at the British GP at Silverstone a week later. But as the racing comes to a close in Europe it's just kicking off in the Southern Hemisphere. Kicking off with a bang at the famous Mount Panorama circuit in Bathurst, New South Wales. It was the James Hardie 1000 and, as mentioned, I was up the road in Queensland. And what a race it was for Poms. Scotsman Tom Walkinshaw was flying the flag for Britain with his TWR team's Jaguar XJ-S race cars. Walkinshaw and Win Percy put their Jag on pole, but the race was won by John Goss and Armin Hahne in another XJ-S.

Stig Blomqvist

Andy Rouse

This was a great year for rising British talent: Damon Hill leads Mark Blundell (1) with Johnny Herbert (5) in their wake. Right: FF Festival winner Herbert

SUTTON

Mario Andretti

Steve Parrish

You'll find footage of one of Walkinshaw's laps on You Tube that not only shows how dramatic Mt Panorama is, but how wonderful the Jag's V12 sounded.

WE HADN'T QUITE PACKED UP AT HOME because one hugely important event, now diluted but still on the calendar, had still to be run. It would prove to be an epic year for the legendary Formula Ford Festival held annually at Brands Hatch. The overall winner was Johnny Herbert, but the style in which he won it has gone down in Formula Ford folklore. Herbert took the back of his Quest off in qualifying, had it fixed and was allowed to qualify and started his first heat from the back of the grid with a 10-second penalty. He finished sixth, then fourth in the quarter final, second in the semi-final and then led the final from start to finish.

It was a great year for domestic racing. I don't remember if the term Brit Pack had been invented back then, but it applied to our squad of talent in 1985. Herbert was joined in Formula Ford by Mark Blundell, Damon Hill and the legendary Perry McCarthy. Over in Formula 3 we had Andy Wallace - later to play such a pivotal role in sports car racing but in '85 well on his way to stardom in single-seater racing with a second place in the F3 championship.

There'll be arguments about the choice of 1985. There have already been a few around the bar at *Motor Sport's* local. We all have our biases. A sports car fanatic would demure over 1985 because the field hadn't reached its prime. F1 one fans might choose the years of the great Senna/Prost or Schumacher/Hill battles. For me, I rest my case.

SilverstoneClassic
20|21|22 JULY 2018

Be part of the ***world's biggest*** *classic motor racing festival*




2018 highlights include:

- *An incredible array of iconic Formula 1 cars marking 70 years since Silverstone's first British Grand Prix in 1948*
- *A special spotlight on more than 60 years of epic endurance racing history featuring the new Masters Endurance Legends grid*
- *Tin Top Sunday celebrating the 60th anniversary of BTCC with no less than 4 touring car grids racing*

All-inclusive tickets are fantastic value, providing:

- *A packed schedule of the best historic motor racing on the famous GP Circuit*
- *Full paddock access and viewing from all open grandstands*
- *Live music on Friday and Saturday evening - UB40 have been announced as Saturday's live act*
- *Plus driving experiences, live demonstrations, a vintage funfair & much more!*

... all included in the ticket price

"We just couldn't believe the access. It changed it from being an event we went to watch to one we felt like we were part of"
2017 visitor

/silverstoneclassic @silverclassic @silverstoneclassic /silverstoneclassictv

Book before 31 March to take advantage of Early Bird prices at

www.silverstoneclassic.com

Official Partners

SILVERSTONE AUCTIONS · JET · ADRIAN FLUX · GALLET PRO TIMEKEEPING • SINCE 1466

Official Charity

PROSTATE CANCER UK

COLOGNE *Ranger*

For one glorious year a manufacturer arms race brought two rivals to perfect pitch. We let loose in Ford's secret weapon, and ask what made it great

WRITER Dickie Meaden

WOUTER MELISSEN

For many - myself included - the battle for supremacy between BMW and Ford in the European Touring Car Championship is every bit the equal of the Blue Oval's earlier feud with Ferrari at Le Mans.

True, the ETCC might not have provided a stage with the theatrical grandeur of the most famous endurance race of them all, but there's no doubt that the competition between the Cologne Capris and Munich's Batmobiles during the first half of the 1970s was so intense that these Group 2 monsters still represent the zenith for production-based tin-tops.

These were full-house factory efforts with big budgets fuelling extensive development and paying for some of the biggest in the sport to drive them. Jochen Mass, Niki Lauda and Klaus Ludwig all drove for Ford, with BMW fielding an equally impressive roster of big-name drivers.

As ever with homologation-based racing, intelligent and at times creative interpretation of the rules was paramount. Initially BMW stole the initiative from Ford by increasing the capacity of its 3.0 CSL engine from a fraction under 3000cc to a fraction over, the sole purpose of which was to exploit the engine capacity regulations and enable the CSL to run in the over 3-litre class - one up from Ford's RS2600 Capris.

Peeved at being out-manoeuvred Ford Advanced Vehicle Operations committed to the creating RS3100 Capri road car, of which 248 were eventually built. Thus equipped with an over-3000cc engine the Capri could now be developed to race on equal terms with BMW. Except where's the fun in racing on equal terms when you can attempt to steal a march on your opponents? This was Ford's ruthless logic in preparing for the '74 ETCC season, with the Blue Oval going all-out to create a car to beat the Batmobiles.

THAT'S WHY EVEN TODAY THE COLOGNE Capri is one of those cars that possesses true magnetism. Roll up the door of the pit garage and people are drawn towards it from all around the paddock. They come for how it looks and sounds, but mostly because it is the rarest of rare beasts. The factory built just a handful of works cars for the '74 season, only ever fielding two in ETCC (though Broadspeed would build a further few GAA-powered cars using engines supplied by Ford) before withdrawing its works effort from the ETCC in 1975, this ensuring that the big-banger Capri's scarcity has always been in direct contrast to its legendary and larger-than-life reputation.

Two of the factory Cologne Capris survived and both have occasional competitive outings in historic meetings, but with values now comfortably exceeding £1m owners are understandably reluctant to risk their cars in the cut and thrust of modern-day historic touring car racing.

So what are we looking at here? Well, to all intents and purposes it's a continuation (albeit an unofficial one) of those factory cars. Built by acknowledged Capri expert Ric Wood this replica is a faithful reproduction of the factory ETCC machines built for the 1974 season.

Starting with a sound original Capri 3.0 GXL bodyshell, Wood completed the entire build back in 2013/14. The extent of the beneath-the-skin modifications from a standard road car is remarkable. Radiators are repositioned into the rear wheel arches, dry sump oil system tucked in the boot. The rear end is effectively 'tubbed' like a Pro-Mod dragster to accommodate the colossal rear wheels, which put 15in of tyre on the Tarmac. Huge ATE brakes and cleverly re-worked suspension (see Nigel Rees's accompanying technical analysis for details) complete a suitably extreme Group 2 makeover to the Capri's stopping power and cornering ability.

The wild wide-arched bodywork does its best to contain the super-wide rubber, while the crude but wonderful front splitter, side skirts and upswept tail generate some useful downforce. It's a cartoon Capri, but a deadly

Cosworth had a free hand to turn a plain V6 into a quad-cam bomb, while Ford made homologation hay with the base car

serious one with a price tag to match: expect to pay upwards of £250,000 for a freshly-built car.

It speaks volumes for what lurks beneath the bonnet that in spite of all the drama of its cartoonish exterior, the main event is the specially developed engine. And no wonder, for few touring cars from any era can boast anything quite so impressive. An extreme development of the 'Essex' 3.0 V6, the GAA was commissioned by Ford in the spring of 1972. The firm entrusted the work to Cosworth, who handed the project to Mike Hall - a talented in-house engineer who previously had a hand in designing the DFV and BDA engines. He endowed the GAA with a mouth-watering specification, one that could finally play BMW at its own game by fully exploiting the freedoms written into Group 2 regulations.

First and foremost, the capacity was bored out to 3412cc. The top end of the engine was where Cosworth really went to town, with each aluminium cylinder head featuring twin overhead belt-drive cams and four valves per cylinder. With a dry-sump oil system and fuel injection (initially Lucas, then Kugelfischer), the resulting engine was an absolute powerhouse. Ford had originally set Cosworth a target of no less than 400bhp - a figure the new engine exceeded by 20bhp on its first dyno run. With development the engine would ultimately produce a shade more than 460bhp at a screaming 9000rpm.

Ford was required to make 100 engine kits to satisfy homologation regs, though whether the full number were ever made is open to conjecture. What we do know is that beyond the ETCC the GAA found favour amongst the F5000 fraternity, which tells you something of its ferocity.

Due to the age, scarcity and value of GAA engines, Ric Wood has invested heavily in re-manufacturing the blocks and heads. In deference to running costs and season-long reliability this car revs to 8200rpm, though Wood is happy for it to run to 8600rpm.

When it was last opened-up for a refresh - with 15 hours logged - it was pristine, so despite being highly-strung they're tough motors. But then they should be for £55k...

The ultimate antidote to the modern disease for shrouding modern engines in plastic and carbon-fibre covers, this quad-cam V6 is magnificent in all its naked, be-trumpeted glory. With cylinder banks splayed at 60 degrees and a thrashing tangle of belts and pulleys waiting to snag a stray finger, it fills the Capri's engine bay with anger and urgency. It's a grumpy old cuss of a thing to start, and needs plenty of time to warm its vital fluids, but once limbered up it responds to throttle blips instantaneously, revs snapping up and down with almost zero inertia. If you're unlucky or foolish enough to be standing next to its twin side-exit exhausts you will have your eardrums scoured by a remarkable and unmistakable wall of noise. Nothing sounds like a GAA.

Wood has now built a number of these authentic, honest and fully HTP-compliant replicas. This car was his first and follows the aerokit design of the factory cars. Another of his creations - painted in white and green - uses the subtly different Broadspeed-built cars as its blueprint. All can be seen actively racing in top-flight European historic touring car series such as Peter Auto's Heritage Touring Cup (HTC) and Motor Racing Legends' Historic Touring Car Challenge championship.

I FIRST GOT ACQUAINTED WITH THIS car in 2016, when I shared it with Grant Tromans and enjoyed considerable success in the aforementioned HTC Championship. The car subsequently changed hands last season, but I claimed squatter's rights and continued to race it with the new owner, Gérard Lopez, once again in the HTC series. With any luck I'll remain in it this season - a thought that brings me great joy as it is one of the most exciting and rewarding cars I've ever raced.

Like any big, noisy car from the Seventies, the Cologne Capri is an intimidating beast. At least until you really get to know it. When this car was acquired from Wood it had an electric power steering system fitted - something certain race series allow, but not HTC. We first took the He-Man specification Capri to Dijon, one of the twistiest circuits on the historic racing calendar. I can honestly say I've never experienced a car with heavier steering. I'd expected it to be weighty, but with Wood's aggressive castor settings (facilitated by the power steering) it was all I could do to get the car turned in. Long corners were like engaging in a tug-of-war with Dwayne 'The Rock'

Johnson, while the tight uphill hairpin and rapid direction changes turned my arms to wet spaghetti in 15 minutes. It's the only time I've decided to retire a serviceable car.

With the help of Nigel Rees we've since been able to reduce the steering effort to a more manageable level. It remains a truly physical machine, but we can now get the car through the one-hour HTC races with the appropriate level of feel and control to really push hard.

HTC RACES ARE A FASCINATING environment in which to race the Cologne Capri, for not only does the grid feature many of its period protagonists - including one of the rare 24v Batmobile CSLs - but thanks to the span from 1966 to 1984 you also get to mix it with everything from Lotus Cortinas and Alfa GTAs to early Group A cars. As a lover of tin-tops it's absolute nirvana for me, though I must confess to being regularly distracted by the sight of a 635CSi battling with a Volvo 240T, or a Batmobile trying to fend off a Zakspeed Escort.

It may be one of the older cars on the grid, but in terms of outright pace the Cologne Capri is an absolute front-runner. To be honest, compared to the wonderful but much closer to showroom standard Group A cars it's a bit of a thug - musclebound body and loudmouth exhaust signalling its intent way before you leave the assembly area. Stealthy it ain't, but I absolutely love it.

Even after reducing the excessive steering weight the Cologne Capri isn't a car you can immediately get on terms with. Once you've navigated your way through the roll cage and dropped into the low-set seat you begin to get a sense of what's to come as soon as you rest your feet on the pedals, depress the clutch and do a dry run through the gearbox. Every point of contact with the Capri requires muscle. And I'm talking effort way beyond even the most recalcitrant Italian supercar of the same era. The ZF gearbox is a five-speed, with dog-leg first. The gate is tight and sharply defined, with a short throw and considerable spring bias to overcome. It might only weigh a ton, but thanks to the effort required to steer, shift gears and pump the Capri's clutch pedal, every lap is muscle-burning reminder why racing drivers of this era always said they stayed fit by driving the cars, not going to the gym.

After flicking the ignition and fuel pump toggles all that remains is to push your left forefinger into the squishy black rubber starter. You don't need to pump the throttle as the GAA has Lucas fuel injection, and having been pre-warmed by the mechanics it catches quickly. Once strapped in with helmet on and adrenaline gland squirting away merrily I defy anyone not to give the throttle a few rhythmic crowd-pleasing stabs.

With so much rubber on the track - slicks,

COLOGNE CAPRI

Under the skin

Our technical analysis tracks down which compromises are due to the architecture and which come down to set-up

WRITER Nigel Rees

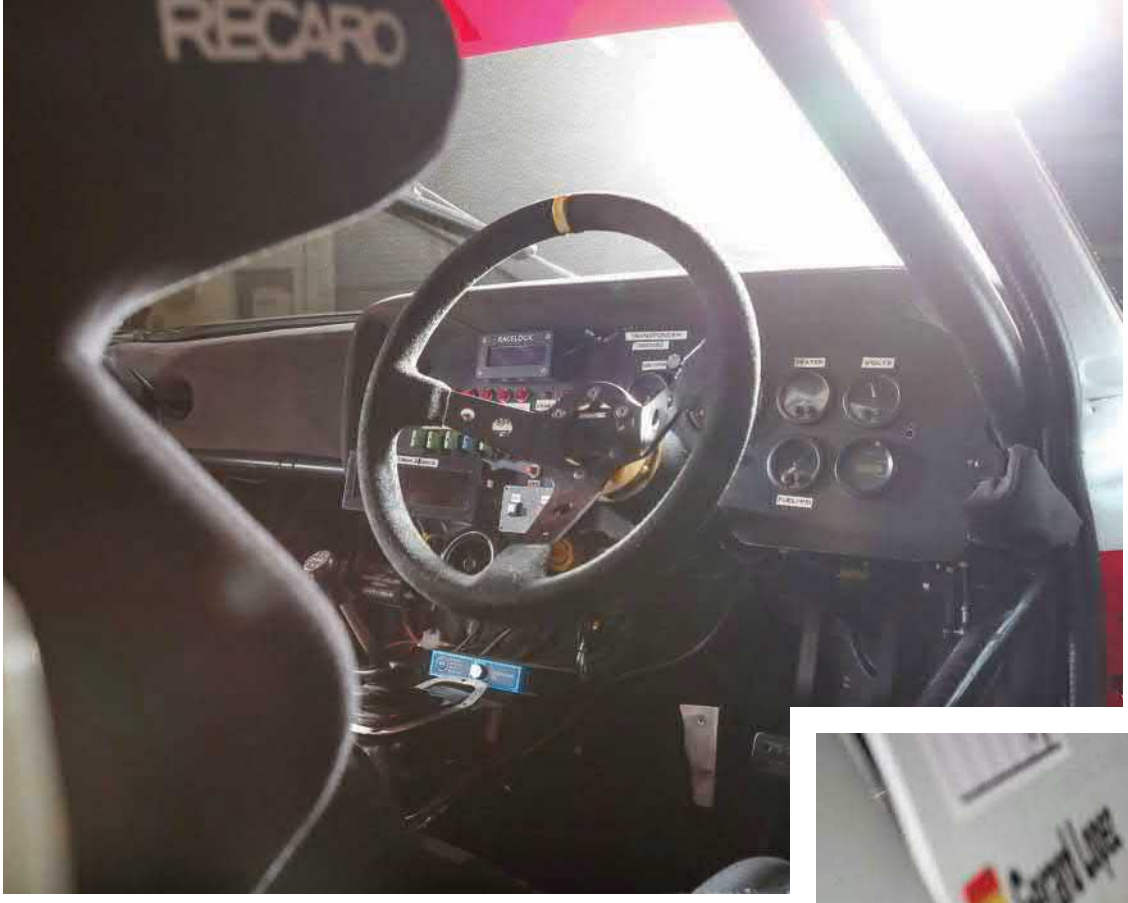
Subtle they were not - bewinged saloon cars with wheel arches on steroids, big fat slicks, 450bhp and a galaxy of F1 stars at the helm. A no-holds-barred BMW versus Ford contest set the European Touring Car Championship alight in the early 1970s.

Dickie Meaden has set the context and given us a vivid insight into the challenges involved in driving these cars on the limit.

When historic racer Grant Tromans asked GSD RaceDyn to look at his GAA Capri in late 2015, we were delighted - we had long wanted to get our hands on a Cologne Capri or a BMW 'Batmobile'.

So let's take a detailed look at the Cologne Capri and assess how its theoretical behaviour compares with Dickie's driving impressions.

The pressed-steel chassis is seam-welded and reinforced (where regulations permit) at the key load-bearing points. A full roll cage adds significantly to torsional and beam stiffness, in addition to primary safety. However, the chassis must deal with loads generated by the wide slick tyres



Steering gives driver a good work-out; live rear axle tied down by trailing links and Watts linkage; rear coolers gulp air through arches

and powerful engine – fatigue cracks are going to be inevitable over the course of a tough season.

The 460bhp 24-valve V6 drives through a five-speed ZF syncromesh gearbox to a live rear axle located by four trailing radius rods and a Watts linkage. A ramp-and-plate LSD is used. Light, largely ineffective glassfibre leaf springs meet the regulatory requirement to retain the existing springing medium – but the real work is done by concentric coil spring/damper units. Front suspension is by McPherson strut, using lightweight factory=developed track control arms, compression struts and hub carriers.

Current tyres are 11.0/23.5/16 front, 12.5/25.0/16 rear.

The car is very much a homologation special and this shows clearly in the wind tunnel-developed bodywork and aerodynamic package, which includes a large front air dam/splitter, a large rear spoiler and sill skirts. Huge wheel arches cover the wide slicks. Water radiators and engine, gearbox and axle oil coolers are rear-mounted (for aerodynamic and weight distribution reasons), fed by large forward-facing ducts in the rear wheel arches. We don't have wind tunnel data and we have not been able to undertake measurements, but we estimate that the car generates 360-370kg of drag and 80-90kg of downforce at 150mph.

Front suspension geometry and kinematics are generally good. Roll camber correction is less than ideal at 34 per cent – for every degree of chassis roll, 0.66deg positive camber is applied to the outside front wheel. Castor was high at eight degrees – this causes higher steering loads, but applies beneficial negative camber with steering lock. At this point we were not concerned with the high steering loads, because the car had electrically operated power steering. This would come back to haunt us...

Analysis showed that the key inherent problems with the car were its 55 per cent forward weight distribution, high centre of gravity, a very high rear roll centre at 304mm plus the torque reaction and high unsprung mass caused by the live rear axle.

"That X-rated body language and paddock presence is amplified tenfold when mixing it with traffic"

don't forget - it takes a lap for the Capri to wake up the compounds and really find its feet, but from then on it truly comes to life. You can sense the engine is quite heavy, not to mention relatively high and over rather than behind the front axle, so while it initially turns in enthusiastically, if you simply rotate the car and squeeze on the power it will push wide of your chosen line.

One look at the rear tyres suggests the tail should be unstickable, even with more than 450bhp on tap. Initially this proves to be the case, rear end gripping resolutely as you pour on the power from apex to exit. Of course this tends to push the front end more, especially once you feel the limited-slip differential hook up. All of which leaves you in a quandary as to how you make the Capri feel less flat-footed.

The trick - and I was as surprised to find this as I suspect you'll be reading it - is to hustle the car as you would an older, less grippy touring car. I hesitate to say chuck it around like a Lotus Cortina, but the principle of working the tail harder than the front-end is remarkably effective. So long as you agitate it just enough on the way in then pick the throttle up with sufficient confidence you can neatly divide the directional labour between front and rear axles.

Once this penny has dropped nothing has the one-lap pace of the Capri. At least nothing in HTC. With fresh tyres under you and the added focus of a qualifying session ahead of you it's a hugely exciting car to drive to its limits. You go for it from the first flier of the session, headlights blazing, exhausts blaring. That X-rated body language and paddock presence is amplified tenfold when mixing it with other traffic, and because the car is known for its raw pace people tend to give you a wide berth.

The car might have speed to spare, but extracting it isn't easy. There's so much to do, so many fine balances to strike in order to keep the engine on song (the fireworks aren't

As delivered, key set-up issues were: front springs 23 per cent stiffer than we considered ideal, rear springs 18 per cent stiffer than ideal, a front anti-roll bar that was far too soft and an unnecessary rear anti-roll bar.

Stability analysis suggested that the car, as delivered, would be unstable over bumps and would oversteer excessively under power in the corner-exit phase. When cornering on the limit, the Capri's high centre of gravity causes weight transfer such that over 83 per cent of the car's weight is on the outside wheels. Even a slight touch on an inside kerb will push the car onto two wheels.

The car was briefly tested as delivered – and both drivers confirmed the instability over bumps and excessive power oversteer.

The car was then equipped with softer springs, a much stiffer front anti-roll bar, revised differential ramps and re-valved dampers. The rear anti-roll bar was removed.

Stability analysis showed that this should give a precise, stable turn-in and good balance under power, the inevitable penalty being moderate mid-corner understeer. A test at Silverstone in early May 2016 was curtailed after only eight laps due to gearbox failure, but Dickie reported that the handling was much improved. Steering was good in fast corners, but a little heavy in slow corners – this with power steering.

With limited testing, the first race event exposed a number of problems. Scrutineers determined that power-assisted steering was not permitted – and with assistance removed, the steering was impossibly heavy. In addition, the brakes overheated and failed after only a few laps and throttle response was unacceptably sharp.

Mike Purse, Pete Johnson and the RaceWorks team improved the throttle response and solved the braking problem with improved cooling and ceramic barriers behind the pads to reduce heat transfer to the caliper pistons and fluid.

The steering issue was more difficult. Several factors contribute to

WOUTER MELISSEN

lit until around 6000rpm) and hold the chassis in its sweet spot that you're fully absorbed by the process. A process that's intensely physical, yet requires precision and finesse to execute well.

Strangely, when you're absolutely on the limit a certain calm seems to descend over the car. Yes it's incredibly noisy and hot as hell, but once you've formed that all-important bond the Capri can be beautifully poised and almost playful in the way you can work it into a corner on the brakes, then shimmy it through on the power and leave two big fat black lines in your wake.

Of all the circuits we visit with HTC, Spa is by far the best for the Capri. It devours the long straights and slices through the fast corners such as Pouhon and Blanchimont, while Eau Rouge is a chance for the spectators to hear the GAA at full cry, its ear-splitting shriek ricocheting off the pine trees all the way down the Kemmel Straight and into to Les Combes. That said, after my ignominious arm-related retirement at Dijon in 2016 it was especially sweet to return last year with Lopez and prove the big Capri also works on tighter circuits by bagging pole, the win and fastest lap.

In a race situation the Capri fills you with confidence. You have the firepower in a straight line, you have the corner speed and you have the stopping power. What you don't have - at least compared to the smaller, lighter and more nimble BDA Escorts - is their ability to change direction and adjust their cornering line. This leaves you vulnerable through some of the more technical sections, but what's ahead of you doesn't tend to stay there for long, while what's behind you only ever tends to get smaller.

Over longer distances - the kind that characterised the ETCC - I can see how the Escorts would have been harder to keep at bay. The Capri will hang together for an hour being driven flat out, but HTC's race formats belie the fact the Capri is right at the limit on reliability. Hardly surprising when you consider it runs the same ZF gearbox, 'Atlas' rear axle and crown wheel and pinion as the Mk2 Escorts, despite weighing 200kg more and transmitting an additional 200bhp through 5in-wider rear slicks. No wonder they could be blisteringly fast, but frustratingly fragile. Ironically, although the RS3100 Capri had the wherewithal to dominate the factory-built 24v Batmobiles, the '74 ETCC title would go to a Zakspeed Escort...

DESPITE FALLING SHORT OF ITS championship-winning objective the Capris were rightly revered. In the years since, the original factory-built Colognes have rarely come out to play, further cementing their unicorn status. To now have the opportunity to see and hear such magnificent cars in anger is one of the many reasons why historic racing is a modern motor sport success story.

And to have the opportunity to race one? Well, that's a dream. One that brings immense pleasure and an even greater respect for these extreme Group 2 machines - some of the most exciting and charismatic racing cars ever built. Not everyone agrees with race-legal replicas such as this, but when they serve to keep such a fabled car's mythical reputation alive for future generations to enjoy, what's not to love? M

steering 'weight' - tyre self-aligning torque, castor, steering axis inclination, scrub radius, steering ratio and steering wheel diameter. Analysing these showed that force at the steering wheel rim when cornering on the limit was 33kg. Research shows that the maximum force a fit person can exert at the steering wheel rim is 35kg. So the steering really was much too heavy.

Theory suggested that by reducing castor and scrub radius and chipping away at the other factors, we could reduce force at the steering wheel rim to 21kg - still heavy, but viable over a one-hour HTC race. The longer ETCC races would have been tough... With these changes implemented, the car has been consistently competitive and is a regular winner.

It is interesting to compare the Capri with the 24-valve BMW 3.5 CSL. In many ways, the cars are remarkably similar, using a front-mounted 24-valve six-cylinder delivering similar power. Both used McPherson strut front suspension, but the BMW's semi-trailing arm rear is superior, giving a lower roll centre, less unsprung weight and avoiding torque reaction at the tyres. Published data shows the Capri to be 30-40kg lighter than the BMW at 1040kg. However, we have measured and analysed several Capris and BMWs - and on average, the BMW is 105kg heavier. In theory and in practice, the cars deliver similar performance.

Finally, both initially suffered from heavy steering - neither could run power steering. BMW's solution was to move the stub axle centre line ahead of the steering axis - termed negative trail. This means that high levels of castor can be used, giving camber gain without making the steering heavy. The downside is that it is harder for the driver to sense the limit of adhesion. If insufficient castor is used, self-centring may be entirely eliminated.

It would seem that BMW drivers were given a - perhaps imperfect - technical solution to the heavy steering problem, but Ford drivers just needed to head for the gym... M

A night with the stars

Legendary designers Adrian Newey and Gordon Murray will attend the *Motor Sport* Hall of Fame. The pair will be joined by 1970 Le Mans 24 Hours winner Richard Attwood.

Broadcaster Suzi Perry – a mainstay of both MotoGP and Formula 1 paddocks – will host the star-studded event, which will be attended by the great and the good of the motor sport world.

"All the *Motor Sport* Hall of Fame nominees tick the boxes for me," said Perry. "It's a list of the greatest racers ever, the Who's Who of motor sport, and it's an honour to host the awards."

Voting is still open for the various categories. This year will include a new Racing Car Award, offering the opportunity to recognise some of the finest machinery from rallying, sports car racing, touring cars and Formula 1. The fearsome Porsche 917 is joined by the all-conquering Williams FW14B and McLaren MP4/4, as well as a Group C icon that in 1988 returned Jaguar to the Le Mans winner's circle after a gap of more than 30 years – the XJR-9. The fire-breathing Ford Sierra Cosworth RS500 and revolutionary four-wheel-drive Audi Quattro – the car that changed the face of rallying – complete the short list.

The other categories are Formula 1, Sports Cars, Motorcycles and US Racing, with the likes of Gilles Villeneuve, Jochen Rindt, Pedro Rodriguez, Joey Dunlop, AJ Foyt and Phil Hill all vying for the public's vote. And this year there will also be the chance to nominate a wildcard, from any realm of the sport – someone whom you think has been unfairly overlooked.

Everyone who casts a vote is entered into a prize draw to win a trip for two to the 2018 Le Mans Classic, which takes place from July 6-8. The winner will also receive a C7 Rapide Chronograph COSC Limited Edition watch courtesy of Christopher Ward.

Tickets for the Hall for Fame Awards are available so that enthusiasts can join their heroes at the elegant country estate for this unforgettable evening of champagne and a gourmet three-course dinner. Previous stars to have enjoyed its unique atmosphere include Sir Jackie Stewart, Nigel Mansell, Alain Prost, Niki Lauda and Damon Hill.

To take your place alongside the greats at the glittering ceremony, and to vote for your favourite in each of the five categories, visit ***www.motorsportmagazine.com/hof2018***

Hall of Fame announces 2018 charity partner, Mission Motorsport

The *Motor Sport* Hall of Fame has teamed up with official charity partner Mission Motorsport to celebrate the greatest names in motor racing and raise awareness of the charity's efforts to use motor sport to aid the recovery and rehabilitation of those affected by military operations. CEO and founder of Mission Motorsport James Cameron explains the initiative's work: "Mission Motorsport, The Forces' motor sport charity, is honoured to be recognised as the Hall of Fame's supported charity. Two of our patrons – Sir Stirling Moss and Derek Bell – are distinguished members, and for us it reflects the recognition of our work using motor sport to heal and unlock the potential of a group who have given their all for their country.

"The pinnacle of motor sport implies qualities of excellence that are reflected in our service personnel, and while sport can be restorative and healing it can also provide a vocation, as well as a reason to get out of bed in the morning for some of those who have lost their way."

Editor Nick Trott added, "I have seen Mission Motorsport's work first hand, having raced with two of the charity's beneficiaries at the Race of Remembrance in 2017 – one of them had lost a leg and the other found himself homeless after returning from military service. The race, and the company of these great people, was a moving and ultimately life-affirming experience.

"Mission Motorsport transforms the lives of service personnel who find themselves lost or wounded after conflict.A focus on cars and racing is the conduit to recovery, and its healing power cannot be underestimated. I am very proud that Mission Motorsport and the *Motor Sport* Hall of Fame are partners in 2018 and look forward to telling their story."

Mission Motorsport is the Forces' motor sport charity, charged with running an engaging branch of the Recovery Sport programme. Its motto is Race | Retrain | Recover.
www.missionmotorsport.org

Hall of Fame partner Christopher Ward announces winners of 'Need for Speed' competition, supporting British grass-roots motor sport contenders

Christopher Ward, the *Motor Sport* Hall of Fame's official timing partner, announced British racing drivers Jody Fannin and Paige Bellerby as the winners of its 'Need for Speed' competition, inducting the pair into its Challenger Programme. We look forward to welcoming these talents of the future to the Hall of Fame in June.

The Christopher Ward Challenger Programme was established in 2013 to provide support for grass-roots sportspersons without the resources to compete. In 2017 the firm introduced its Rapide Collection – and last September launched Need for Speed in honour of the new range.

The initial C7 Rapide Collection comprises six new timepieces, four of which will be permanent fixtures in the range: the Quartz; Chronograph Quartz; Automatic, and Chronograph Automatic; plus two limited editions, the Day Date COSC and Chronograph COSC. Prices will range from £395 to £1,560, reflecting the specification and movements contained within. There's a reliable, robust Swiss-made Ronda quartz movement in the entry level piece, for instance, and the celebrated ETA Valjoux 7750 mechanical chronograph movement in the C7 Rapide Chronograph Automatic.

Launched in September 2017, the 'Need for Speed' competition was open to grass-roots motor sport entrants from the UK, and although it set out to recruit one motor sport star, Christopher Ward co-founder Mike France offered both Fannin and Bellerby a place in the Challenger Programme. "We established this programme to ensure that up-and-coming sportsmen and women have the support they deserve, and it's clear to see that they both possess a real talent in their sports," said France.

"I'm delighted to become a Christopher Ward Challenger," said 24-year-old Fannin, winner of the 2012 British GT4 Championship and the 2017 European Le Mans Series (GTE). "What really attracted me to the programme is the brand's ethos for helping individuals who have had to overcome challenges to get to where they are today."

British rallycross driver Bellerby, 21, added: "I'm one of very few women competing and, while I'm proud of my achievements to date, there is still a long way to go to break down stereotypes and achieve my dreams. I believe support from the Challenger Programme will help me on this journey."

www.christopherward.co.uk/challengerprogramme

Hall of Fame Voting
Vote to win a limited edition Christopher Ward watch
www.motorsportmagazine.com/vote2018

For more information about the Hall of Fame visit ***www.motorsportmagazine.com/hof2018***

Farewell to an American Hero

Driver, constructor, innovator, winner... and he even played cricket. A man of rare versatility and charm, Dan Gurney passed away recently at the age of 86

WRITER Paul Fearnley

The Ferrari flashed its lights and the Ford slowed, then slowed some more before parking on the verge at Arnage. The Ferrari stopped directly behind it. Mike Parkes, desperate to hassle the runaway leader into an intemperate dice, was gambling on Dan Gurney's win-or-bust reputation. The latter had indeed bust a time or three during his career, but he'd won plenty, too, and was by now a maker as well as breaker of cars. (The following Sunday he would win the Belgian Grand Prix in one of his own.) Acutely aware, therefore, of how much had been invested in kicking Enzo where it would hurt most - Le Mans - Gurney watched his mirrors and waited.

His victory at Spa-Francorchamps would be of a different order. At Le Mans he had been a warhead of a hi-tech campaign waged by an industrial superpower: "When a global company like Ford blows its horn, everyone gets to hear about it." Now he was the figurehead - owner/engineer/driver - of a tight-knit unit attempting "three miracles a week". Its Eagle was handsome, from raptor nose to titanium tailpipes, and Dan made it fly at the world's fastest road circuit.

ALL IMAGES: LAT

Speed was rarely a problem for the natural who caused even Jim Clark to pause - and buckle under pressure at the 1965 Brands Hatch Race of Champions. Having required fewer than 50 races to advance from a Triumph TR2 at Torrey Pines, an abandoned military base near San Diego, in 1955 to a works Ferrari Dino at Reims in 1959, Gurney finished second, third and fourth in his second, third and fourth GPs. If a cockpit fitted his 6ft 3in - a tailored chassis here, a roof 'bump' there, plus a knack for appearing comfortable even when cramped - usually he was head and shoulders above. Given room to flex those linebacker's shoulders he could be untouchable, impossible to resist, as evinced by his five NASCAR Riverside victories for Ford in six seasons. He won in a 'Birdcage' Maserati - as co-driver to Stirling Moss at a foggy Nürburgring - Cobra and Cougar, in Lotus and Lola, and for BRM - once his car, stolen during the night by revellers, had been found - for Ferrari and for a McLaren team grieving its founder.

Fifty years after the fact, no American has matched his achievement of winning a GP in an American car. And only Mario Andretti and Juan Pablo Montoya have equalled his winning in Formula 1, Indycar, the world sports car championship and NASCAR. Gurney won in the British Saloon Car Championship, Can-Am and Trans-Am, too.

Yet luck didn't always ride with him: his Porsche was beaten by a shark's nose by Ferrari's Giancarlo Baghetti - a three-hit wonder - at Reims in 1961; his Brabham drained its tanks too early at Spa in 1964; his Ford blew its engine on the last lap at Sebring in 1966; and his Eagle broke a driveshaft at the Nürburgring in 1967.

On the other hand he survived 312 starts - 51 wins (including category successes) and 42 pole positions - during motor racing's most lethal era. Triggered by brake failure, an accident at Zandvoort in 1960 caused his only significant injury, a fractured forearm, and also tragically killed a teenager standing in a prohibited area. The low point of a disastrous season, it coalesced and clarified Gurney's thoughts. Underwhelmed by BRM's inability to master new trends - having been dismayed by Ferrari's choosing stubbornly to ignore them - he was sure he could do better.

Two seasons with Porsche provided reassuring reliability, plus a maiden - for driver and manufacturer - world championship GP victory, at Rouen in 1962. Three more with Brabham included GP wins in France - the marque's first, also secured at Rouen - and Mexico in 1964; they also showed him how a new team should go about its business. Had he stayed for a fourth, probably he would have become world champion.

Not that he expressed regret. Gurney's style and method were distinctive.


SIMPSON
Plymouth
GOODYEAR

His family's 1948 relocation to California from Long Island – father John had been an opera singer at the Met – created within Gurney a blend of East Coast manners and West Coast smarts. Though he'd gunned a hot rod through orange groves and run 138mph at Bonneville, local dirt ovals held little appeal; whereas he was fascinated by the shapes carved by 'dozers in the sand that would become Riverside International Raceway. Like his mentor Phil Hill, Gurney, an unabashed romantic, was in thrall to stories of continental racing. (When in 1965 backer Goodyear suggested All American Racers as the name for his new team, Gurney, fretting about perceived jingoism, called its F1 arm Anglo American Racers.)

Europe in turn would thrill to Gurney's astronaut's crew cut – latterly groovily grown out – and screen-idol smile. Those closer to him, however, could be driven to distraction by his obsessive tinkering. The wiser among them recognised those infinitesimal set-up suggestions for what they were: a stoking of the competitive fire. Those unwise enough to issue rebuttals would be met by "Donchawannawin?" mystification. Politely implacable, confident without being cocky, Gurney was never along purely for the ride. His need ran deeper than speed and his (inevitable) founding of a team amplified this.

Even before the first Eagle had turned a wheel in anger, been topped with fluids even, Gurney suggested a spring change. Designer Len Terry, not the easiest to work with by his own admission, was seriously annoyed and would not stay long. Yet Gurney's spicing of an unquenchable thirst for innovation with a joyful flamboyance – midfield mediocrity or, worse, anonymity were anathemas – created a like-minded and deeply loyal workforce. Ace fabricator Phil Remington was an everyday fixture at AAR for more than 40 years and only 'retired' at 91.

Rubbing against the grain and proving doubters wrong – perhaps Gurney's biggest thrill – and caring how as well as how often his team won were strengths and weaknesses. The ambitious V12 that he commissioned for F1 from Aubrey Woods, via Weslake Engineering, was hampered by shortcomings beyond budgetary rectification. But, my God, it looked magnificent and sounded fantastic. Important factors for the enquiring mind that would (along with son Justin) reimagine the motorcycle, build the radical needle-nosed DeltaWing and supply the legs for Elon Musk's rocket. Although commercial pressure – defeating Firestone at Indianapolis was Goodyear's priority – kept Gurney Stateside after 1968, it's difficult to imagine him a willing foot soldier in F1's 'kit car' ranks.

AAR might have won Indy at the first time of asking but for an oil leak for 'Hard Luck Lloyd' Ruby in 1966.

In their own words....

The motor sport fraternity pays tribute to Dan Gurney

Dario Franchitti
Triple Indianapolis 500 winner

"Rest in peace, Dan. We'll never see your like again. With humility, grace, charm and humour, you did it all."

AJ Foyt
Shared winning Ford with Gurney at Le Mans; four-time Indy500 winner

"Dan was not only a great innovator, he was a great driver and it didn't matter if it was a road course or an oval, an Indycar or a stock car. I never use the word 'legend' but in the case of Dan, he was a true legend of our sport.

"We became close friends at Le Mans in '67 and winning it brought us closer together. He was a super guy. Even though we were competitors in Indycars, we always respected each other highly. It's hard to believe he's gone and I'm really going to miss him."

Pierre Fillon
ACO president

"A motor sporting legend has left us. Dan Gurney was not only a talented driver and a charming man, but also a successful team boss, creator and inventive spirit."

Two years later a customer car driven by Bobby Unser did win – the first turbo to do so – as Eagles came within two laps and a puncture for Denny Hulme of a 1-2-3 finish. Gurney the driver had yet to win it – he finished second twice and third once from 1968-70 – when, still fresh-faced at 39, he hung up his Bell full-face and bought out team partner Carroll Shelby. He had, however, already helped turn America's greatest race front-to-back.

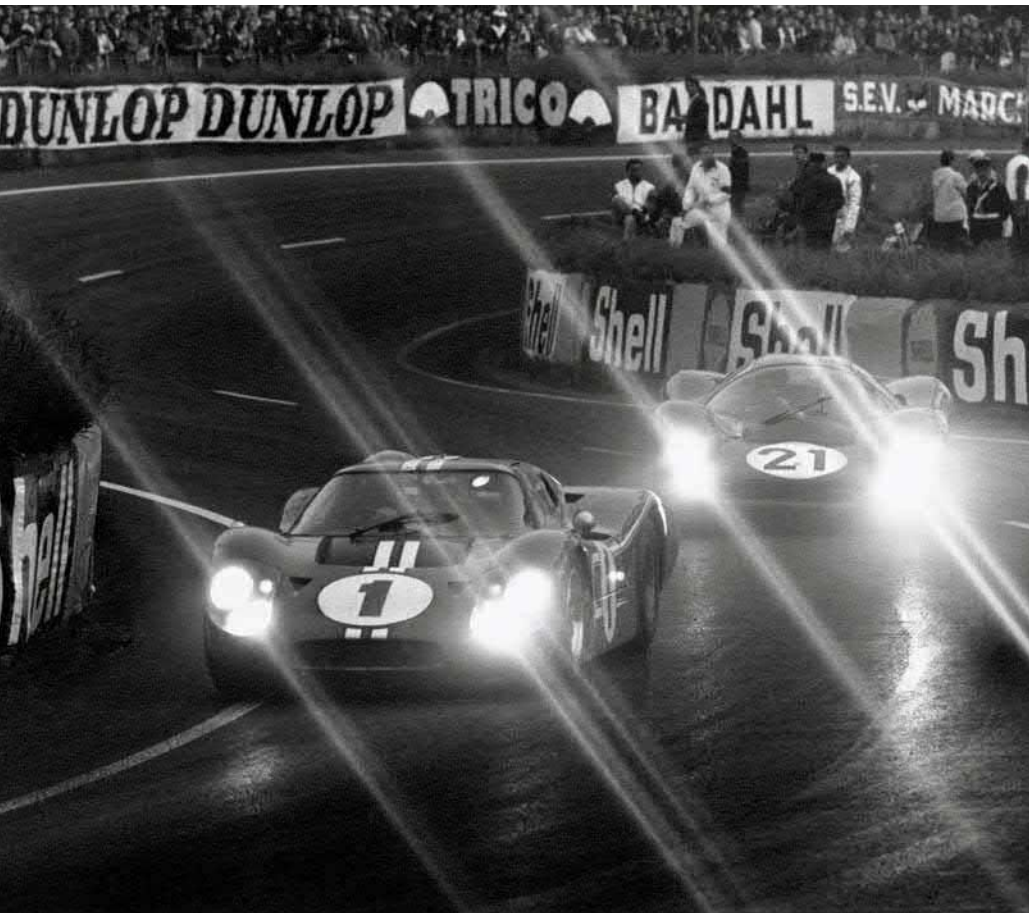
Having driven and rejected its first turbine – John Zink's Trackburner – he switched to drag star Mickey Thompson's Buick V8-powered car, America's first rear-engine contender of note. Between qualifying it eighth and being classified 20th in 1962, he witnessed the Dutch GP debut of the 'bathtub' Lotus 25, put two and two together – and made 500. It was Gurney who persuaded designer Colin Chapman to visit Indy, sat him at Ford's top table and smoothed transatlantic waters.

During the early 1970s – a period of spiralling oval speeds due to a spike in power and the sprouting of wings – customers flocked to AAR's Santa Ana HQ. Roman Slobodynskyj's low-profile design of 1972 was uncluttered and sturdy, and Gurney, always more interested in the front row than the bottom line, was selling them cheaply.

Eagles packed the grids and, steadied by that most effective of aero addenda, the Gurney Flap, raised the bar to 200mph, winning Indy twice more: the rain-hit 500s of 1973 (Gordon Johncock for Pat Patrick) and 1975 (Unser for Gurney).

The arrival in 1975 of Cosworth's turbocharged DFX, however, was not to Gurney's taste. He'd been here before. Homogenisation beckoned. Seriously cheesed that the venerable Offy, its construction capable of withstanding high boost pressures, had been legislated against, he defied convention by continuing a stock-block theme he'd begun with a reworking – aluminium heads and improved breathing – of Ford's pushrod V8. This Gurney-Weslake gave the Blue Oval its only Can-Am victory – Dan victorious aboard a Lola T70 at Bridgehampton in 1966 – and back-to-back Le Mans wins from 1968 in Gulf GT40s. It also took Gurney to seven Indycar wins from 1967-70, all on road courses. The first of them, the Rex Mays 300 at his beloved Riverside, was arguably his greatest drive, recovering from a puncture to take the lead from Unser's Eagle on the last lap.

But when CART – the Indycar breakaway based on Gurney's 'White Paper' blueprint – banned the remarkable Boundary Layer Adhesion Theory Eagle of 1981 – another handsome machine with just one memorable victory – Gurney muttered "too many bureaucrats" and looked elsewhere for his gizmo mojo. It took him 10 years to find it.



The Gurney/Foyt Ford leads the Scarfiotti/Parkes 330 P4 at Le Mans in 1967. Dan would later commence the tradition of spraying champagne

"Always more interested in the front row than the bottom line, Gurney was selling them cheaply. Eagles packed the grids"

When Toyota gave the green light for an IMSA prototype – reward for AAR's successes with increasingly wild GTU and GTO iterations of its Celica – Nissan, Jaguar and Porsche were battling for supremacy. The first GTP Eagle won races but had a narrow operating window. Its replacement, designed by John Ward on his third tour of duty with the team, and shaped by loyal aerodynamicist Hiro Fujimori, kicked the door down. Balanced by an integral front diffuser, MkIII won 21 times – twice at Sebring, once at Daytona and 17 consecutively – from its late-1991 debut. Gurney was in the thick throughout: boardroom and workshop, garage and pit wall. His suggested 'flip-flopping' of coolers, tidying and shortening pipe runs to improve throttle response, was a watershed. By the time Toyota and Juan Fangio II had scored their consecutive titles, in 1993, the opposition had gone to earth.

Simon Arron
Motor Sport *features editor*

"To claim I 'knew' Dan Gurney would be wrong, but I did interview him. Once when I sought his counsel, Gurney's PA Kathy Weida sent me an apologetic reply: he was away on a skiing trip, but she'd try to pass on a message. Five minutes later, another email: 'Dan's at his chalet. Here's the number, he's awaiting your call…' His grace and courtesy came as no surprise.

"When I'd spoken to him previously, about his Le Mans win, he was as engaging as anyone I'd interviewed. And then, a fortnight later, I received some unexpected mail: a 1967 Le Mans poster, signed by Dan, thanking me for having written the feature.

"I've always felt gratitude was due only in the other direction."

Doug Nye
Friend, historian and* Motor Sport *contributor

"Dan was certainly a great driver, but above all a fine man. He was a most patriotic American but he was also an Anglophile with real interest in military history ever since he first began racing in Europe. There's that lovely story of him at Silverstone in '78 for the CART race when he recognised a 'plane circling overhead, rushed out of the garage bawling 'Spitfire! Spitfire!' – and triggered a panic as teams heard someone shouting 'Pit fire! Pit fire!'

"At Goodwood one year my young son and I sat with him and wife Evi – lovely lady – under the giant cedar tree on the back lawn, to talk about the Lotus-Ford Indy saga that he'd fathered. In between describing the problems he'd experienced on his car, and in showering moist-eyed praise upon his old team-mate – and much-missed friend – Jim Clark, he spent as long asking me about the Goodwood Estate and the Duke's family history.

"At the Festival of Speed, when he found the throttle sticking on his Belgian GP Eagle sent over by the Collier Collection, my pal the curator Scott George opened up the slide-cases and found the rollers inside caked with white mag corrosion powder. Dan worked with Scott as they painstakingly cleaned it all out, oiled the assembly and zipped it back together again – and then dear old Dan – who never, ever, got the racing bug out of his system – blasted up the hill for the rest of the weekend.

"But the larrikin college boy survived just below the surface. One time after testing at Donington he drove me back down the M1, reminiscing about his very quick Texan driver friend Lloyd Ruby. 'He'd never think twice about passing traffic on the freeway verge – see these guys ahead? He'd just do this…' and he flicked the steering left and we hurtled up the motorway's grassy bank at about 80mph, bounded along for 50 yards or so, then back down to the tarmac – with Dan aping the frenzied driver. He was a great innovator, incredibly versatile and just a thoroughly good guy. I regarded him as a complete hero…"

Bobby Rahal
Indycar team owner and Road Racing Drivers Club president

"Not only was he an outrageously talented racing car driver and an influential businessman, team owner and car constructor, Daniel Sexton Gurney was a gentleman, in every definition of that word. His magnetic smile, his sense of humour and absolute love of all things motor racing is unsurpassed.

"He was an international star, yet a humble celebrity. His devotion to his family was evident in the support he provided his sons to follow in his footsteps, on the racetrack and in the boardroom.

"With his wife Evi by his side, Dan could conquer the world. He conquered our hearts."


10

Sadly this could not be repeated on AAR's return to Indycars in 1996, even though Gurney swallowed his pride and ran Reynards instead of Eagles.

After four troubled seasons, to which its engine's shortcomings had 'contributed', Toyota ended the 17-year relationship. A heavy blow that caused a team that had won 78 times – from F1 to Formula Ford via Formula 5000 – to be dissolved at the end of 2000. Chatter in late 2002 of a Formula 1 comeback was just that.

Yet Gurney never lost his sense of excitement and wonder. Happy to reminisce about how his Impala had scattered the Jaguar 'establishment' at Silverstone in 1961, or how "we never exceeded 175mph" while winning the 1971 coast-to-coast Cannonball Run in a Ferrari Daytona, conversation would usually swing towards the current racing scene, or AAR's projects – those he was allowed to speak of at least – or warbirds, or, at a push, cricket, for which he'd acquired a taste at Goodwood. And if you wrote something that caused him to bridle – that baritone could turn stentorian – he would let you know. There hangs in my wardrobe a tie patterned with Indy Eagles, gifted as a reminder of a published glibness on my part. Luckily, though he would not forget, firm but fair Dan was inclined to forgive.

In a glittering era that bestowed upon us AJ, 'Feel Heel', Mario, Parnelli and 'The King' Richard, the selection by *Car and Driver* magazine in May 1964 of 'Dan the Man' as its presidential candidate chimes still. 'Big Eagle' for Maison Blanche?

"We sat for about 15 seconds. Finally he [Parkes] gave up and pulled back onto the track. About four laps later I caught him and drove on by."

Drove on by. Farewell, Daniel Sexton.

Darrell Waltrip

Three-time NASCAR Winston Cup champion

"I've known and competed against the greatest drivers of all time. Dan Gurney was a hero of mine, not just because he was a great racer but because he was a great person."

Sir Jackie Stewart

Period rival, triple F1 champion

"Dan was a wonderful friend – I feel privileged and proud to have had him as a friend, and for him to consider me a friend. He was one of the greatest gentlemen in Formula 1, in a class with Fangio and Moss. His manners, deportment – his sheer presence were almost without match.

"He was also fast, and the cleanest driver you could race against. He had the intuition and mind-management that meant you could race in the closest proximity. We all had a respect for each other that's beyond the comprehension of today's generation, but Dan could have expressed that without insulting anyone today. He had terrific charm, humour and integrity. Those posters saying 'Gurney for President' weren't out of order – he had a logic and a manner of delivery that were very convincing, and he had huge common sense.

"It was because he was so well respected that he was able to take on the challenge of creating a new team. I know how hard it was creating Stewart Racing – but he was still racing when he did it! It must have been very, very stressful, yet he always had that big smile.
He was modest too – he was very touched when Charles March had that big celebration for him at Goodwood. He really appreciated that."
I had the greatest admiration for him as a driver and as a friend. It's a great loss."

The last words go to the man himself in a letter from 2000.

Sir,

Our copy of Motor Sport in February arrived a few days ago and it was with great pleasure and pride that I saw the Eagle on the cover next to the Lotus 49. I certainly enjoyed the article and the nice compliments on the car and my performance. Some of my recollections differed a little bit from yours in some instances, but of course the events you described happened a very long time ago.

I have fond memories of that time in England and on the Continent and of the people who were involved in the project. Looking back now from the vantage point of 'almost' old age, I marvel about what young, ambitious and passionate men can accomplish. The Eagle, while campaigned by Anglo American Racers on the Grand Prix circuit, was actually built here in the States by All American Racers in Santa Ana. I feel that Michael Daniels, Harry Weslake's stepson, certainly deserves a mention since he was the main driving force behind all the many miracles achieved by the very small force of dedicated and talented people at Weslake's in Rye during our all too brief Eagle effort in F1.

Our winning Spa Eagle was acquired by Miles Collier about ten years ago. It is in his museum in Florida and every once in a while it shows up at some historic event. Last time I saw it was at the Festival of Speed at Goodwood in June 1995. (I drove the sister car).

Thank you so much for devoting so much space to the Eagle. It is quite a beautiful bird and evokes an era in motorsport history which was glorious, tragic and wonderful.

I am, yours, etc.,

Dan Gurney, All American Racers, Inc., Santa Ana, California, USA

Familiar face, unusual place: Jenson Button with banger pit crew, karting against Will Stevens, meeting fans and driving a Radical during the Barbados Festival of Speed

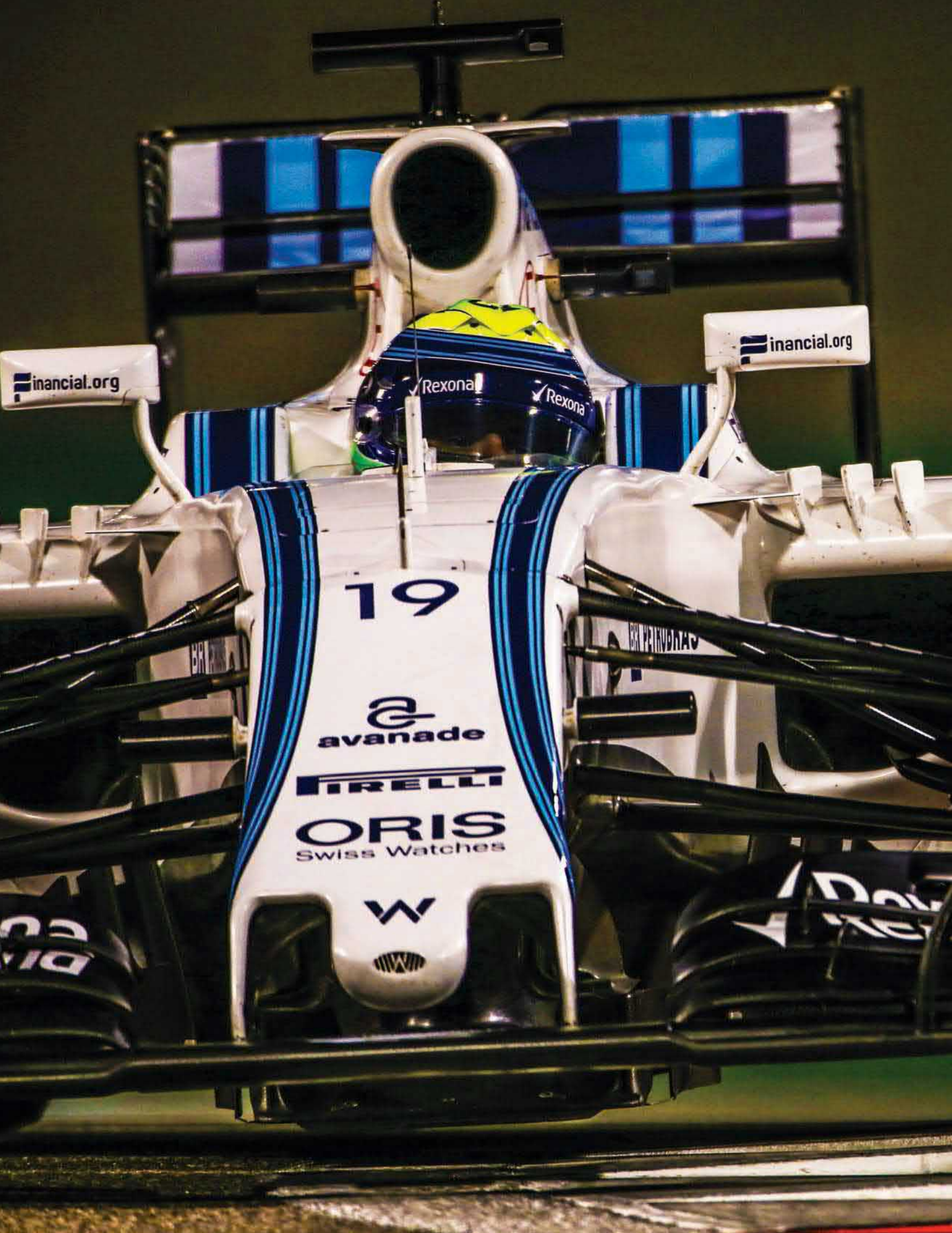
A postcard from Barbados

Located in the eastern Caribbean, this popular holiday island is evolving its own distinctively themed Festival of Speed

PHOTOGRAPHER Lyndon McNeil

The recipe was unusual: a blend of air displays, a Force India show car, races conducted between locally prepared rally cars and a series of race challenges involving Jenson Button and former Formula 1 driver Will Stevens, now a regular in the World Endurance Championship. GP3 champion George Russell and endurance racer Oli Webb also took part.

The second Barbados Festival of Speed took place, like the first, at Bushy Park, a 1.25-mile track built on the site of an old dirt-racing venue first used in the 1970s. As well as the main circuit, the site also incorporates a rallycross course and a drag strip. The event was hailed a success and is expected to be repeated later this year, though a date has still to be confirmed. *Our thanks to Ocean Two Resort (oceantwobarbados.com) & the Barbados Tourist Board (visitbarbados.org). For more information see bushyparkbarbados.com/festival-of-speed-2017*


inancial.org
inancial.org
Rexona
Rexona
19
avanade
PIRELLI
ORIS
Swiss Watches

LUNCH WITH

Felipe Massa

After 15 seasons in Formula 1, 11 GP wins and a close encounter with the world title, the popular Brazilian is poised to ply his trade in a different arena

WRITER Simon Arron

Its streets are notoriously congested during Grand Prix weekends, but are little different at any other time of the year. Everyone seems to own an AMG Mercedes but opportunities to extend them beyond second gear are limited. The pace of everyday life in Monaco is inversely proportional to that of its biggest tourist attraction.

To the south-west of the city state, the Fontvielle district – developed about 50 years ago on reclaimed bits of the Mediterranean – is slightly less hectic. Many Formula 1 drivers have made their homes here and Felipe Massa suggests we meet at the BeefBar, located on the harbour front in the shadow of the Stade Louis II, home to Monaco FC.

The Brazilian arrives with wife Raffaela, orders himself two salads – salmon for his main course, fruit to follow – and signs off with a coffee. We're talking a couple of weeks before he confirms his retirement from F1 for the second time in as many seasons. "As far as I'm concerned," he says, "I did enough in 2017 to justify my place in F1 and given the choice I'd like to stay with Williams for another season. I'm aware that might not be possible, though, in which case I'll look for options elsewhere in the sport. I definitely want to carry on racing."

It's what he has done from a very early age.

"IT ALL STARTED BECAUSE OF MY DAD," HE SAYS. "HIS NAME IS LUIZ ANTONIO, though everybody calls him 'Titonio'. He raced touring cars for fun in Brazil and I used to watch him as a small kid. He also took me to watch F1 practice at Interlagos in 1986 or '87. When I was about six he bought me a 50cc motocross bike and that was it – I fell completely in love with the sport and decided I wanted to be a motocross rider. After a couple of years, though, I was starting to become a bit too crazy with the bike and that was a worry for him, so he took me to a kart school in São Paulo – and as soon as I drove one I fell in love all over again: now I wanted to be a racing driver. He then bought me a kart, with which I practised for a few months before starting to race at the age of eight.

LAT

"My father was my biggest inspiration. Like everyone else I was a fan of Ayrton Senna, but I didn't want to start racing because of Senna. I wanted to race because of my dad."

He raced karts at national level into his teens and was then given a choice. "It was never easy to attract sponsors," he says. "That was always the hardest part for us, but my dad used to do a few deals here and there. In 1996 he gave me two options: he said we could carry on karting with a low budget, or we could set aside the money for three tests in Formula Chevrolet [the local equivalent of Formula Vauxhall Lotus] and I decided to do that, so I drove a single-seater for the first time when I was 15."

He returned to karting in 1997, then undertook half a season in Formula Chevrolet the following year and did well enough to take fifth in the final standings. That led to the offer of a drive with RC Motorsport, a team that had never previously won the title, but Massa proved to be a catalyst for its first such success.

"Afterwards I started looking at Europe and everybody was telling me I should go to England for the sake of my career," he says, "but people were asking less money for a season in Italy so, purely for financial reasons, I went there instead. The going rate for a year in Formula Renault was $160,000. My father managed to find $100,000 through friends and contacts. That wasn't enough for the season, so I signed with Cram Competition for six Italian races - plus two rounds of the European Championship, which took place on the same weekends. If I didn't find the rest of the money, my career would probably be finished.

"My team-mate was Augusto Farfus and we shared a small house the team owned in Caslino d'Erba. I did three tests with the previous year's car during the winter and broke two track records. Then at the start of the season I won the first Italian race and also the first European round I contested, so I found myself fighting for both titles even though I didn't have the budget to challenge properly for either of them. At that stage the team started to help me. I gave them any prize money I earned and we picked up bits of help here and there, so ultimately I was able to complete both championships - and I won them. At the end of the year I received two new cars - a Renault Clio Sport for winning the Italian championship and a Laguna for the Eurocup. I gave both to the team, to cover some of what I owed.

"At that stage I also began to receive interest from F1 teams - Flavio Briatore, Toyota and also Pedro Diniz, who had a stake in Prost at that time. They all wanted me to sign a contract, but Toyota was still building up its F1 operation and was offering me a deal through Prema, with whom I'd have been racing in F3 alongside Ryan Briscoe. I said, 'Listen, if you want to sign me I want to deal directly with Toyota, not Prema.' So that didn't happen and they recruited Franck Perera instead. Briatore was keen for me to race for him in German F3, but at that point I had two managers - and one of them was Adriano Morini, from Draco Racing. He wanted me to drive in the Euro F3000 series - so it was in his interest that I didn't agree to an F3 deal - and I decided to stick with him. The reason I didn't sign for Diniz? He wanted too big a stake in my future earnings!

"I began racing in F3000 with Draco, won the first race at Vallelunga and Morini then took me to meet a Ferrari sponsor, somebody who knew Jean Todt very well. He subsequently arranged for me to meet Jean, who asked lots of questions. He said, 'I have no interest in you at the moment, but win the championship and I'll talk to you again'."

Run for chassis previously pensioned off by the FIA F3000 series, and based largely in Italy, Euro F3000 had nothing like the strength in depth of its more cosmopolitan namesake, but Massa did as Todt had asked, winning six of the eight races and accumulating almost twice as many points as his closest rival. "Jean subsequently signed me to a young-driver contract - the first one Ferrari had done, I believe, and at the time it was all kept a big secret. I agreed to an eight-year deal. It didn't mean I was going to race for Ferrari, but then McLaren signed Kimi Räikkönen, Peter Sauber was looking for another young driver to replace him and through my Ferrari connection I was invited to test at the end of the season."

THAT WENT WELL AND, TWO YEARS AFTER ARRIVING IN EUROPE with enough money to do a partial Formula Renault campaign, Massa had landed his first F1 race seat without having ventured anywhere near F3 or the mainstream F3000 series. Was he ready for F1?

"Definitely not!" he says. "I was quick enough, but made too many mistakes. I was 20 and didn't have enough experience - I was definitely better prepared when I returned in 2004, after a year of testing with Ferrari. Even so, I scored some good points early in 2002 - and that's when they were 'proper' points, awarded only to the first six...

"In the first half of the year I was really quick, but I crashed a lot and Peter Sauber hated that. In the middle of the season he made up his mind to hire Heinz-Harald Frentzen, just because of my accidents. In the second part of the year I drove much better, although by then the car wasn't as competitive as it had been. I managed to get a couple of seventh places and gradually became a bit quicker than [team-mate] Nick Heidfeld. At the end of the year Peter said, 'I don't know if I'm doing the right thing by replacing you, but the decision was taken in August.'

"I thought maybe my career was finished - having one chance to race in F1 is already very difficult, so getting a second... It's almost impossible."

Fortunately he had his long-term Ferrari deal, which led to him taking up a third-driver role with the Scuderia in 2003. "That benefited me a lot," he says. "I was out in the car almost every week, working with and learning from Michael Schumacher and Rubens Barrichello. It was a very important year for me, in terms of gaining experience and becoming a proper Formula 1 driver - not in terms of speed, but in

Felipe Massa

A career in pictures

2001

For his second year in Europe, Massa drove for Draco in the Italy-based Euro F3000 series. He won six of eight races and took the title

2001

Massa appeared twice for Alfa Romeo in the European Super Touring Car Championship, finishing sixth at Jarama on his debut

2002

After winning three junior titles in two seasons, Massa joined Sauber – replacing the McLaren-bound Kimi Räikkönen alongside Nick Heidfeld

LAT

my Ferrari career would be if Michael stopped - and it wasn't until mid-season that I knew he'd be doing that. It had been a bit of a risky decision, but whatever happened I would at least come away having been a Ferrari driver for a season."

And he was also a winner before the campaign was through. While Schumacher scored seven victories and duelled with Fernando Alonso for the world title, Massa finished consistently in the top five, recorded a number of podium finishes, took his first Grand Prix win in Turkey and signed off with a dominant victory on home soil, at Interlagos. In that race, his last with Ferrari, Schumacher pitted out of sequence after sustaining front wing damage and then charged back through the field to finish fourth - a memorable sign-off.

"In a way I had mixed feelings about him stopping," Massa says, "because he's such a great champion. But he'd also had a long career, even then, and had achieved so much. It was perfect, just amazing, and he was always going to have more to lose by coming back when he did. His decision was also a great boost for me - I'm confident I could have found another drive, and there was interest from other teams, but my primary hope was being able to stay with Ferrari. And I ended up doing that for another seven seasons...

"Michael was great for me because it was a bit like having a teacher in the other car. Sometimes he didn't want to show me things - he was similar in that way to Fernando Alonso - but I was a relative unknown, at the beginning of my career, and regarded him as the master. He was very kind to me. I'd often say to him, 'Listen, I just want to learn from you' - but he could sometimes be a bit awkward if I was quicker than him! That's just Michael.

"Overall, working with him was very important for me and I learned a lot. I struggled a bit in the first half of 2006, but after that our times were usually quite similar and sometimes I was quicker. It was a great experience."

"I was quick, but crashed a lot and Peter Sauber hated that. He made up his mind to hire Frentzen, just because of my accidents"

terms of understanding the technical side, set-ups that suited my driving style, how to pace myself in races and so on."

For 2004, he was back on board at Sauber.

"I felt like a different driver when I rejoined," he says, "and I think that showed in my performances. Peter was happy with me, so I stayed for two years and late in 2005 he offered me a three-year deal to race for BMW, which was about to take over his team. It was a good contract, but there was also the option of replacing Rubens at Ferrari. I accepted a one-year deal there for far less money than I'd have received from BMW, but Ferrari paid good bonuses and eventually my results helped me earn more than I would have done at BMW. I knew when I signed that it might only be a one-year thing, because I'd been told that Kimi Räikkönen would be joining in 2007, so the only chance of prolonging

The dynamic changed significantly with the arrival of Räikkönen as Schumacher's replacement.

"That made life better for me," Massa says, "because Michael had more or less owned the team! Ferrari's first interest had always related to Michael, irrespective of whether it was the right or wrong thing to do. The team always focused on Michael, 100 per cent. When Kimi arrived, I think the mentality was that he'd be the guy - but I actually had a better first half of the championship than he did and was leading him by a point after the Turkish Grand Prix. Then we went to Monza, where he finished third and I retired with a broken damper while I was running ahead of him. The team had decided that it would put its weight behind whichever of us was ahead in the championship after Spa, where Kimi did a better job than me - he won and I was second, which put him

2006

With Ferrari team-mate Michael Schumacher at Istanbul Park, Turkey, scene of his maiden Grand Prix victory

2008

Pictured with rival Lewis Hamilton ahead of their Interlagos showdown. Massa won the race, but Hamilton's fifth place secured him the title

2014

With wife Raffaela and son Felipinho at the Austrian Grand Prix, where Massa upset the dominant Mercedes team by taking pole for Williams

2017

Waving goodbye – leastways to F1 – at Abu Dhabi in 2017. The Brazilian started 269 Grands Prix, winning 11 and taking 16 pole positions

a few points clear. After that I let him win in Brazil, to clinch the title.

"The following season was great for me - I was usually quicker than him and it was the same in 2009 up until my accident in Hungary [he'd gone to Budapest with 22 points, more than twice as many as the Finn]. Even though he won the championship while we raced together, my statistics against him at Ferrari look good."

And for a moment at Interlagos in 2008, many believed that Massa had likewise taken the title. He'd recorded the victory he needed in a chaotic, rain-affected race - and rival Lewis Hamilton had started the final lap in sixth, one position lower than he needed to be. But at Junçao, effectively the final corner of the season, Hamilton had more purchase than Timo Glock's still dry-tyred Toyota and was able to nip ahead to gain the extra point he needed [level scores were no use to him, as Massa would have taken the title on a countback by dint of six victories to five].

The Brazilian - for whom this would be an 11th, and final, Grand Prix success - was already a popular figure within the sport, but his post-race dignity earned him worldwide admiration.

"I didn't feel I had anything to be sorry about," he says. "I'd won the race, so there was nothing more I could have done. It wasn't my fault that I'd lost the title and that gave me a great deal of... not happiness, but satisfaction. I was measured about it because the title was lost as a result of various things that had happened beforehand - an engine

A win in Brazil was not enough to take the 2008 title. His post-race dignity was absolute

"Fernando is the strongest team-mate I've had. In a race he was always at the maximum on every lap"

failure during the closing stages in Hungary, a pit mix-up in Singapore – both of them when I was leading. I did a perfect job that weekend in Brazil – pole, fastest lap, a race win. I certainly didn't lose the championship because of what happened there.

"Do I have any regrets? Definitely not. I mean, I realise that it would have been an amazing thing to win the championship at home, in São Paulo, an extraordinary thing for me and the whole country, but it clearly wasn't meant to be."

Another memorable element of that season was the look of utter bewilderment on Massa's face when he appeared in the post-qualifying press conference at Monaco, having just taken pole. Was he genuinely as surprised as he looked?

"Absolutely!" he says. "I really couldn't believe it. I had always struggled there in the past, with Sauber and in my first two years at Ferrari. Even though I finished on the podium in 2007, I wasn't really happy with my performance. In 2008 I finally learned how to drive the track, finally understood what it took to do a good lap of Monaco. It was a result of Rob [Smedley, his race engineer] and I poring over the data, chatting about the best way to tackle each corner. It did take a few years to get my head around it, but after that – boom, I was always competitive."

His final year as Räikkönen's team-mate ended prematurely, when a damper spring parted company with Rubens Barrichello's Brawn during qualifying in Hungary and struck Massa on the crash helmet. A couple of centimetres one way and it would have missed him, a couple the other and it might have killed him: the impact left him with a fractured skull.

"I remember Rubens disrupting my rhythm a bit," he says. "I was coming towards the end of a flying lap and he was building up to one. I caught him in the final sector and lost a couple of tenths. I don't remember anything beyond that, nothing about the accident and not a great deal about being in hospital. I was under very heavy sedation and it takes time to recover from that. Raffaela can probably tell you more about that time than I can..."

She is happy to fill in the gaps. "From time to time he would wake up in hospital and start talking to me, but I'm not sure he was really aware of his surroundings because all of a sudden he would fall asleep again. He was like that for quite a while."

Massa nods. "I can recall doing an interview in the hospital – and I had to do it in three languages, Portuguese, Italian and English. That was a bit tricky, given how I was feeling. I also remember becoming aware of Raffaela and my family being there, and seeing my face in the mirror for the first time...

"Gradually I began to feel OK, even though my head was completely blue. But I understood what had happened and felt that everything would normalise in due course, that I'd be able to get back to doing what I'd being doing before – but until I got back in the car there was always a little bit of doubt about whether I'd be able to drive at the same level. I was constantly asking myself questions.

"My next experience was in the simulator, when everything felt OK, then by mid-October [little more than two months after the initial incident] I was back in a car at Fiorano. My doctor was there, keeping an eye on me, but things were OK. Everything felt normal as soon as I was back behind the wheel."

Raffaela: "I think it probably helped his recovery that he had no idea the spring was coming: he didn't realise it was there, that he was going to have an accident, so he was relaxed rather than tensed up. It was as though somebody had come up from behind and hit him over the head when he wasn't expecting it."

Massa still has the helmet he wore that day – complete with blood-stained lining. "It's part of my life," he says. "I keep it at my apartment in São Paulo and it's like a trophy in some ways because it represents a victory of sorts: my survival."

HE RETURNED TO ACTION AT THE START OF 2010 – and qualified second for the Bahrain Grand Prix, the best part of four tenths quicker than new team-mate Fernando Alonso. The Spaniard passed him at the first corner, however, a foretaste of where the balance of power would lie during their time together at the Scuderia.

"Outside the car Fernando and I got on very well and worked effectively together," he says. "My biggest problem was that there are two Fernandos with completely different personalities – one is Fernando the driver, the other Fernando away from the car. He was always trying to work things to his advantage and he has a very strong personality, which helped him to do that. We have quite different characters – to beat him you have to be absolutely on top of your game. He's the strongest team-mate I've had. I could beat him sometimes in qualifying, but in a race he was always at the maximum on every lap."

And then there was Hockenheim 2010, when he moved over to allow Alonso through following an unsubtly 'coded' radio message [which earned Ferrari a $100,000 fine for breaching a team orders ban that was in place at the time].

"It wasn't exactly the first time that kind of thing had happened to me at Ferrari," he says. "I knew the score, but it was barely mid-season and the title race was still completely open. I'd made a great start, was driving a really strong race *and* it was one year to the day since my accident, so I really wasn't expecting an instruction like that. But then I got the call, definitely the saddest moment of my career.

"And at the end of 2010, Ferrari lost the championship for a silly reason, by making the wrong strategy call in Abu Dhabi – pitting Fernando to cover Mark Webber, when they needed to cover Sebastian Vettel. As a result, Ferrari still hasn't won the title since I let Kimi through at Interlagos. I absolutely didn't want to see the team lose the championship that year, but I did wonder whether it was some kind of karma. What comes around...

"Despite everything, though, I was happy to stay. It was the best option available to me. I know there have always been political struggles within the team, but the bottom line is that it's still a Ferrari drive – and that's not an easy thing to give up if you don't have to."

He finally moved on after the 2013 season.

"That was out of my hands," he says. "Fernando had been fighting with the team – he wanted to leave, but couldn't because of his contract. He'd been talking to Red Bull, but just after Spa they

confirmed that Daniel Ricciardo would be joining in 2014 and I don't think Fernando knew. He had little choice but to stay with Ferrari – and the team then decided to try and put a bit of pressure on him by re-signing another champion, in Kimi, which made absolutely no difference to my mind because Fernando is much the better driver. But it left no seat for me.

"I enjoyed much of my time with Ferrari and it was a great, unforgettable experience. I was always a big Ferrari fan and I still am. We still have a strong bond – there is plenty of mutual respect. I love the team and I love Italy – my grandfather was Italian, too, so the connection is very strong."

FOR THE FIRST TIME IN HIS CAREER, MASSA MOVED INTO A British racing environment when Williams recruited him to partner Valtteri Bottas.

"I signed for Williams because the team was in the process of rebuilding and wanted an experienced F1 campaigner – but I joined without having a clue that the car would be as good as it was in 2014. I had a few doubts, because I knew things would probably not be as good as they'd been with Ferrari. OK, Ferrari hadn't won anything for a few years but you always knew that you'd at least have a chance of fighting for the podium. But 2014 proved to be a great season – we finished third in the championship for constructors, which felt like a victory, I came close to winning in Abu Dhabi and scored a few podium finishes. We were third again in 2015, so things worked really well – and I'd probably needed a change to get myself properly remotivated, to rediscover the joy of driving. In my time with Williams I believe it has always finished the championship for constructors in the highest position that the car could achieve."

Initially, of course, Massa announced that he'd be retiring from F1 at the end of 2016, because Williams had signed Lance Stroll to partner Bottas. The reception he received at Interlagos that season underlined the affection in which he is held by both his compatriots and his sport. Walking back from his crumpled Williams after sliding off the track, he received standing ovations from the grandstands and team personnel as he was accompanied down the pit lane by Raffaela and their young son Felipinho.

"When I crashed I was so disappointed," he says, "because I wanted to finish as high as possible, maybe do a lap with a Brazilian flag at the end to say thanks to all the fans. I had everything planned, but rain made conditions extremely difficult and then I had a stupid accident. My first thought was, 'F***ing hell, that's it, I can't do any of the things I wanted to do.' I felt so disappointed, jumped out of the car, took off my helmet and started to head towards the pits – which wasn't too far. As I was walking I was thinking about my shunt and started to notice the way the people in the grandstands were behaving towards me. That stopped me thinking about what had just happened and made me start focusing on all the other aspects of my career. I began to cry as it all sank in and when I got to the pits I could see all the teams coming out to applaud me. It's impossible to describe how that felt. It was amazing, a feeling I'd never previously experienced – something I'll never forget."

He was swiftly recalled by Williams, when Mercedes poached Bottas to replace the unexpectedly retired Nico Rosberg ("I'm not sure any driver will ever beat my record for the shortest retirement") and over the year outscored young team-mate Stroll – despite losing a number of potentially decent results, for instance in Spain where a puncture deprived him of a likely fourth. He signed off with a couple of strong drives, notably in Brazil where he narrowly defeated Alonso to take seventh. "I've enjoyed being the senior partner and passing on advice," he says. "I don't like speaking about myself, but I'm sure that my input has been important for Lance. He had a very difficult start to the year but then made a big step and I'd like to think I played a part in that. I've never tried to shield any technical secrets, I've always been a team player and I think that's how it should be.

"Whatever happens after my time in F1, I want to carry on racing because I still love it. Towards the end of 2016 I started looking around. I planned to find a championship I could enjoy. I looked at DTM, WEC and Formula E. DTM is perhaps a bit too political – and I'd had enough of that in F1, so I wanted to find something more relaxed. The best WEC category is LMP1, but I've never felt sure about its long-term sustainability. Le Mans? You should never say 'never', but I'm not thinking along those lines at the moment and feel most drawn towards Formula E. It's an evolving championship, there are some very good drivers already involved, a growing number of races, an interesting calendar... I think it would suit me."

Felipe Massa career in brief

Born 25/4/81, São Paulo, Brazil **1990-95 & 1997-98 Karting, Brazilian championship 1998-99 Formula Chevrolet, champion in '99 2000 Formula Renault, European & Italian champion 2001 Winner of Italy-based Euro F3000 series 2002 F1, Sauber 2003 F1, Ferrari test driver 2004-05 F1, Sauber 2006-13 F1, Ferrari; 11 wins (the first at Istanbul, 2006); 2nd in 2008 world championship 2014-16 F1, Williams; retires from Grand Prix racing at the season's end 2017 F1, Williams; recalled after probably the shortest retirement of all time; retires again 2018 TBC**

You were there

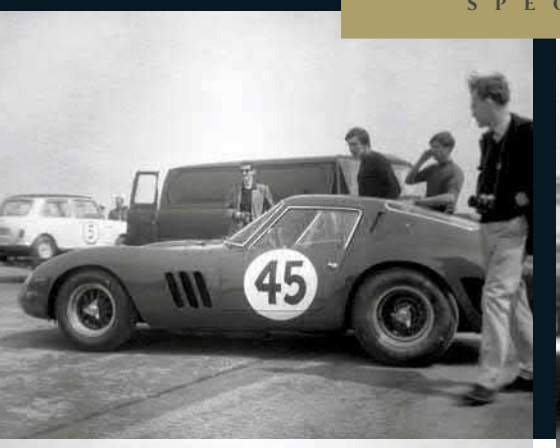
SPECIAL

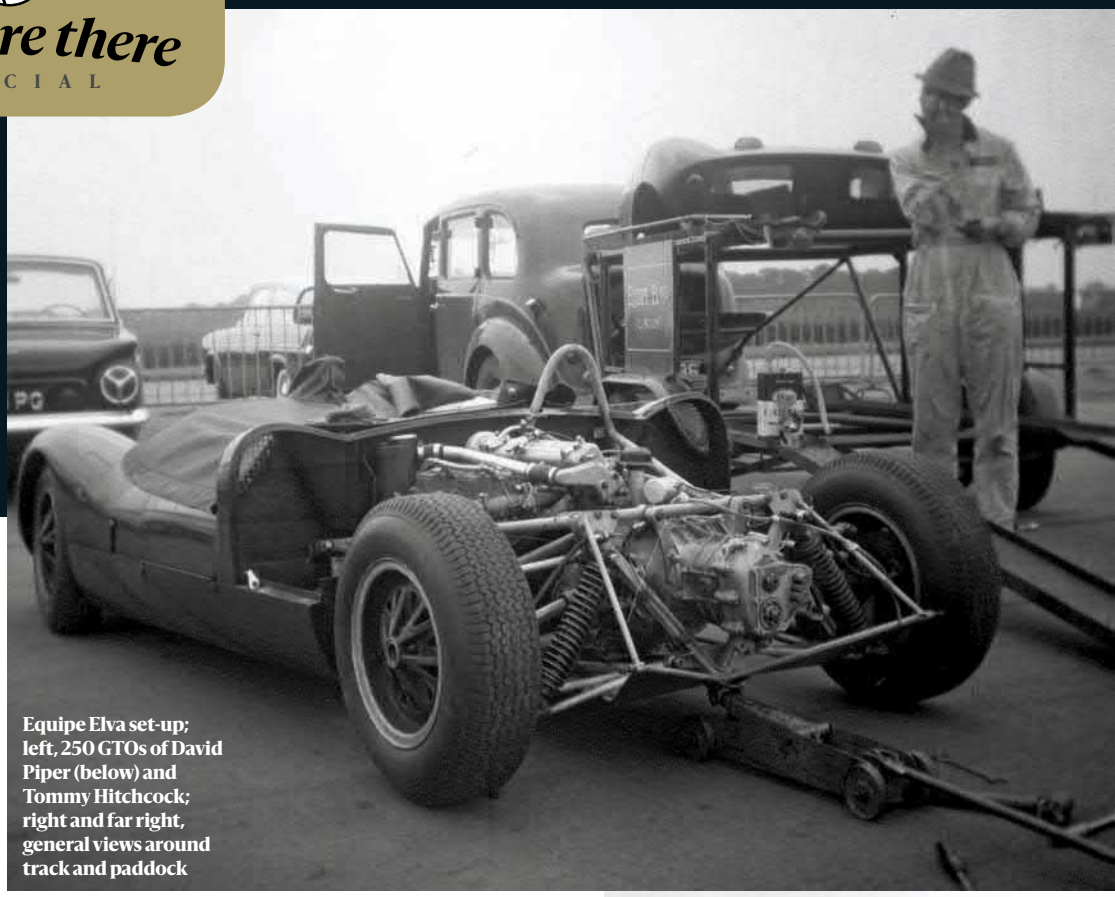
Richard Jones went to the 1963 British Grand Prix to work, but he found some free time...

In theory *Motor Sport* reader Richard Jones was supposed to be helping his father, who worked for a major catering company. "In those days," he says, "corporate hospitality consisted of a marquee that sloshed out bucket loads of fizz and fresh salmon salad to invited guests - but not a lot else. The staff, including me, slept in the marquee for the duration of the meeting. I'd have been about 14 - and was there to earn a bit of pocket money."

At quiet moments, though, he was able to get away with the family's Halina camera. "It was all so open," he adds. "Nobody stopped you going anywhere and I was even able to wander into the pits. I'd love to know what Team Lotus was filming - do any *Motor Sport* readers know? If memory serves, Jim Clark went out with a camera attached to team-mate Trevor Taylor's car. All shots are from the same roll of 120 film, but one or two might be from a different meeting."

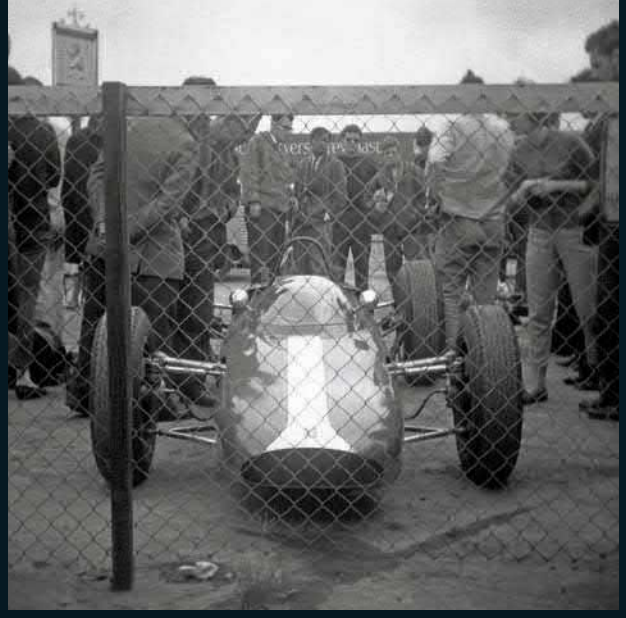
Clockwise from left: Team Lotus fits a camera to Clark-helmed Lotus 25 for Esso promo; Denny Hulme's FJ Brabham BT6; Sunbeam Rapier cabrio and Ford Cortina amid paddock clutter; William Bradley retired his Lotus 23 from the sports car race





Equipe Elva set-up; left, 250 GTOs of David Piper (below) and Tommy Hitchcock; right and far right, general views around track and paddock

Richard Attwood finished second in FJ race at wheel of Midland Racing Partnership Lola; left, Mike Beckwith also took second in Normand Lotus 23B



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

Racing's artist ***in residence***

Meet the man who has been painting crash helmets for 40 years, servicing more than 60 Grand Prix drivers and thousands of other racers

WRITER Simon Arron **PHOTOGRAPHER** Lyndon McNeil

Artistry on a racetrack. Traditionally it's associated with such as Juan Manuel Fangio (the Nürburgring 1957, perhaps), Stirling Moss (Monaco 1961), Jim Clark (Monza 1967) or Ronnie Peterson (any time he negotiated the original Woodcote), but the concept has a more literal aspect.

It's sometimes easy to forget, in an age when drivers' personal trademarks lie buried beneath corporate logos, but crash helmets were once every bit as individual as the human within. Remember Innes Ireland's chequered strip? Jackie Stewart's similarly straightforward tartan? Those white-and-orange bands with a large JODY stamped below? The simple colour schemes that defined Hulme, Amon or Cevert, easily sketched on a school exercise book? Ayrton Senna's dominant yellow?

Nowadays Formula 1 drivers are wont to make wholesale design changes from season to season, to tie in with team liveries, and the results are in any case harder to define from trackside thanks to steeply raked cockpit sides. Can anybody out there provide detailed descriptions of what Max Verstappen or Esteban Ocon wore in 2017, other than that one was mostly orange, the other pink - and that both differed significantly from what either had used the previous season?

RAISED IN NOTTINGHAM, AND ARMED with a graphic design degree from Trent Polytechnic, Mike Fairholme has been creating and painting helmet designs since simpler times, adapted to the corporate invasion and continues his craft to this day, though he's no longer as involved in F1 as once he was.

"I've loved cars since I was young," he says, "though I was always a bit frustrated that Dinky Toys didn't look quite like the models they were supposed to represent. I used to wonder how they could be improved. I guess it was an early sign of attention to detail - wanting to make sure things looked correct.

"I was taken to an Oulton Park clubbie in 1967 and then to the '68 Gold Cup - three works Ferraris, Jackie Stewart's Matra, Pedro Rodríguez in a BRM, two Gold Leaf Lotus 49s... That kind of left its mark on me, plus the fact I could stand in the middle of it all, with no fences around the cars.


Marlboro
Nigel Mansell
Marlboro


Nigel Mansell

"I have very clear memories of listening to Le Mans on the radio in 1966, then started to watch whatever was on shown on TV. I saw the 1967 Italian GP in black and white, Jim Clark recovering his lost lap, retaking the lead and then having to slow up before the finish. I was hooked. I subsequently started reading *Motor Sport* and *Motoring News*, absorbing all the details."

As a 12-year-old, while staying with an aunt in Dorking, he also popped in to Rob Walker's Pippbrook Garage to compliment the team owner on his victory with Jo Siffert in the 1968 British GP. "It was an ordinary filling station at the front, but with a racing workshop at the back. Rob came out, shook my hand, thanked me and gave me a signed photograph, which I still have. That cemented my enthusiasm."

He admits to falling out of love with the sport for a short while, following the losses of Clark, Siffert and Pedro Rodríguez - heroes all - and in the early '70s he also discovered motorbikes. "When crash helmets became mandatory in 1974," he says, "lots of my mates complained about having to wear them, but I saw it as a graphic opportunity: 'Great - just think what I can do with that.'

"I'd become very aware of the significance of helmet designs, with Siffert's red and white for Switzerland and so on. I thought it beautifully simple, ditto Jackie Stewart with his tartan band and Graham Hill with the London Rowing Club's colours. I was starting to pick up on all these things, partly through seeing the small colour section in the centre of *Motor Sport*. In one issue there was a special feature on drivers' helmets, which really sowed the seeds, and then in 1974 I went to the Isle of Man TT. I was a teenager with a crash helmet that I wanted to paint. As I rode a Norton, and he raced one, I created a Peter Williams replica. My friends would say, 'Here's Mike with a 'W' on his helmet. What's that for? W***ker?'"

Soon afterwards, he was introduced to a local motorcycle dealer and invited to create an official logo. "That was the start of my professional connection with bikes and cars, but I'm not sure I was ever paid. I was ever so proud, though, because one of the stickers I'd designed went on the side of every new Kawasaki sold in Nottingham...

"Bike racer Steve Henshaw later took over the business. He became a good friend and I started travelling with him to race meetings as a gofer. As he became more successful, we attended bigger events and he eventually began competing in major internationals, rubbing shoulders with established stars. He asked me to paint his helmet, which made him my first racing customer, and I ended up doing the graphics for his helmet, bike, leathers and transporter. This put me in an arena where I'd meet people - and when people asked Steve who had done the work, he'd simply point at me. I kept coming back from meetings with other riders' helmets and gradually business increased."

He describes his next few years as those of a "self-employed jobbing graphic designer", supplementing his work for bike racers by producing posters and artwork for assorted clients. And then, in 1984, he travelled to Donington Park to deliver a helmet to British rider Niall Mackenzie. "That's where I met Ferry Brouwer, who had founded Arai Europe in Holland. He was tasked with developing and promoting the brand in Europe. He had a racing background - as a former bike mechanic he'd worked with Jarno Saarinen and Phil Read - and wanted to talk to me.

"The Arai factory in Japan was working hard to produce helmets for drivers and riders and its paint department couldn't keep up. He felt that we might be able to collaborate. It started slowly at first - one of my first car clients was Damon Hill, for whom I'd previously painted a helmet when he was racing bikes - and through Arai I soon got to know Damon, Mark Blundell, Gerrit van Kouwen, Steve Robertson and other guys from that generation. All of a sudden I had lots of customers on the junior stepladder."

IN 1985 HE ALSO PAINTED A HELMET FOR Martin Brundle - his first F1 contractee - and Fairholme retains it today, complete with battle scars, as a signed memento. As Arai increased the number of deals it did with rising and established stars, so he became busier. "In 1987 I went to a racing car show and took a part-share in a stand, to see if I could attract a few more customers. While I was there I received a message from Ferry, asking what the hell I was doing. Arai had just agreed to cover the cost of my painting as many helmets as he could provide - and he already had 220 lined up. It was for a mixture of disciplines - bikes, motocross, powerboats, F3000, F1... A few years earlier I'd been wondering how to get a deal with a star driver, or perhaps a genuinely promising youngster, and now it was all here, delivered to me. I thought, 'What? How did that happen?'"

"I'd been wondering how to get a deal with a star driver, and now it was all here, delivered to me. I thought, 'What? How did that happen?'"

Back then the process was rigorously manual. "I'd cut masking tape to recreate any sponsors' logos and paint pretty much all of them by hand. It's hard to quantify how

Mike sticks to traditional materials. He also retains his early sketches of drivers' helmet designs

long it takes to do each helmet because they're all different. I apply one colour at a time, a single layer, add a few coats of lacquer, flat it back, then finish with three or four more layers of lacquer before doing a few hours of polishing by hand.

"Once, when I was working with McLaren, they needed a Gerhard Berger helmet at short notice. I pointed out that there was insufficient time to get the job done, so they asked whether I'd be able to do it if they increased my fee. I still had to say 'no', because extra cash wouldn't have made the days any longer. Things did become quicker during the early 1990s, though, with the advent of computer-aided cutting machines. It's not my field of expertise, but I could pay somebody to create logo templates on my behalf so that I no longer had to sit there and do it all with a scalpel. That made a massive difference, but you still have to be very precise." He points to the Canon logo on a Williams-era Nigel Mansell helmet. "To the naked eye it looks straight," he says, "which is what you want, but you have to factor in the curvature of the helmet during the design process."

SOME CLIENTS HAVE COME TO HIM WITH established colour schemes that simply need to be painted, some with blank sheets of paper and others with a few ideas. He produces a charming, simplistic sketch from one of his files. "Juan Pablo Montoya brought this to me in 1996, when he was driving for Fortec in British F3," he says. "Two-dimensional drawings don't always translate directly to a 3D shape, but this one didn't require much work.

"I've never troubled myself to do drawings that look pretty. A driver will come along with an open mind and I'll start making notes, then maybe start to doodle on a rough helmet shape. I'll then sketch out a few more and am into a three- or four-hour marathon, during which you hope for a light-bulb moment.

"I chat to drivers and introduce them to ideas they hadn't considered. What colours do they want? What kind of person are they in everyday life? If they are an extrovert, they can get away with some fluorescent yellow because they don't mind people looking at them. If they are of a quieter disposition, metallic blue might be more suitable.

"When a young Mark Blundell turned up with a plain white helmet, I asked whether there were any designs he liked and he said 'Roberto Moreno'. In my head, however, I was thinking 'Roberto Guerrero'... I'd seen pictures of him in magazines and his helmet was dark blue and yellow - and you'll see the bands on

Mark's helmet are similarly yellow. At the time he was racing a light blue car and had three sets of overalls, red, yellow and dark blue, so that determined the colours of the other helmet details. If he'd been a Marlboro driver it would have been an irrelevant question because his suit would have been bright red, but that's how the design evolved and he stuck with it - a bit like the 1970s, when drivers had a helmet that helped to create an image."

It was during the late 1970s that branding first began to appear on helmets - and the process intensified during the 1980s. "Ron Dennis was meticulous about how and where logos should be placed - and, once you'd finished, the helmets had to be taken to McLaren's commercial department to be signed off and approved for use.

"When I started working with Williams, our first meeting took place around a table at a racing show - as informal as informal could be. Later on, I met one of their commercial guys at a Little Chef and we sat there surrounded by crash helmets to finalise a few details. I think the staff were a little bewildered..."

FAIRHOLME'S CAREER TOOK OFF AT A fruitful time, with more than 30 cars in F1, full F3000 and F3 grids and Arai committing to supply drivers across the board. "I loved the racing environment back then," he says. "It was a good time to be involved and gave me some fantastic opportunities. It wasn't like it is now, with a smaller number of F1 teams and thus fewer openings for young wannabes.

"There have been a couple of significant changes. One is the reduced number of drivers competing at the higher levels, the second the arrival of carbon helmets - which were three times as expensive as those made from glassfibre. It was inevitable that manufacturers could no longer afford to be as generous and Arai cut back its supply. I began to do less and less work in F1 and effectively stepped away at the end of 2008, when David Coulthard retired.

"The arrival of carbon meant that even top-level drivers - Le Mans winners, for instance - were suddenly obliged to buy their own helmets. Rather than 'needing' two or more a year, as they had during a time of free supply, some were suddenly able to make one last five seasons!"

For all that the landscape has changed, one thing has remained a constant. "I remain incredibly passionate about what I do," Fairholme says - a point rather reinforced by the line of primer husks that nestles nearby, awaiting a first coat. ◘

ANDREW FRANKEL GETS BEHIND THE WHEEL OF THIS MONTH'S BEST NEW CARS

ROAD TESTS

THIS MONTH *ALPINE A110 • ASTON MARTIN DB11 • AUDI A8*

Alpine rescue

A moribund marque comes triumphantly back to life to kick-start a French halo brand

You have to be so careful in this game. Four years ago I travelled to Italy to drive the new Alfa-Romeo 4C. We knew the car was beautiful, light and with its carbon tub, likely to be exceptionally rigid too. Clearly it was going to be quick. It seemed to be a sporting Alfa able finally to deliver on the promise of its badge. And then I drove it and was confused. I'd not had much time in the car but that's what I'm paid for: any idiot can reach a reliable conclusion after a week and a 1000 miles - my job is to do so in only a couple of hours. Even so it felt promising but under-developed so I wrote saying how good it was but how much better it should have been. But I still gave it the benefit of the doubt. The truth was the 4C was not good enough, but it took me a long drive on more difficult British roads months later before I knew for sure. In short, I got it wrong.

Visual cues to Alpine's original rear-engined A110 abound inside and out, including quilted black door trim

Which is why I determined to approach this new Alpine A110 with the hardest of hearts. The formula seemed to be that of the 4C all over again but realised in aluminium rather than carbon. A small, conspicuously lightweight mid-engined coupé powered by a 1.8-litre turbo four driving through a double-clutch paddle-shift gearbox to the rear wheels alone. What could possibly go wrong? Well, as I'd discovered previously, plenty.

Not least because there is so much riding on its success. You will know Alpine and the fact that despite having created some brilliant cars in the past, none more so than the original A110, as a car constructor it has been defunct for 22 years. The cars were too expensive to buy and too niche in appeal. And you'd be forgiven for thinking the same of the A110: however good such cars might be, they are not volume sellers, as not only the 4C but even the Lotus Elise bear stark witness.

But they are brand builders and while no one at Alpine or its Renault parent is prepared to say as much, this is what we have here: a stalking horse for an Alpine brand that one day could have full ranges of cars and exist as a Mini to BMW, an Alfa to Fiat or, dare I say it, a Porsche to VW. Which is why the A110 has to be right from the off.

So it's sad to say I think it's got one of the most important things wrong. I don't like retro styling at the best of times and while the

modern A110 is perfectly pleasant to look at, park one next to that little jewel that is the original - as did Alpine at the launch - and you're saying 'here's one we did earlier, just rather better.' It sends the wrong message, too: a new company looking over its shoulder rather than to its future.

Encouragingly, however, it's sensibly proportioned and far more spacious than you might expect - I'm 6ft 4in and could drive in complete comfort even with a helmet on. The interior is simple, adequately stylish and probably more functional than you might expect of such a car. The engine is also sweeter at idle than I'd expected and with a pull of a paddle and touch on the throttle, we're rolling.

Even before I've asked for another gear sensations start flooding in. The first is that the ride quality is other-worldly for this kind of car. It has unequal length double wishbones at each corner but they seem suspended by feather-weight springs. The steering seems delightfully accurate and positive too.

With just a few turns under the wheels, I could feel the excitement start to built. It just felt right, more so in less than five minutes than the 4C has in all the hours I've now spent driving them. The engine is so much more than the working tool we've come to expect from such cars: it fizzes when you're hard on the gas and crackles when you're not. It's always smooth and always good to listen to, which I'd really not expected given its humdrum specification. And yes, of course, I'd rather have manual gears and believe Alpine has missed a trick in not providing them, but the DSG it uses instead is every bit a match for the engine to which it is attached. Given that it has forced induction and four cylinders, this is a class powertrain.

But it is outshone by the chassis. The key to

FACTFILE

Alpine A110

Price **£50,000 approx** ***Engine*** **1.8 litres, 4 cylinders, turbocharged** ***Power*** **249bhp@6500rpm** ***Torque*** **239lb ft@2000rpm** ***Weight*** **1103kg** ***Power to weight*** **226bhp per tonne** ***Transmission*** **seven-speed dual clutch, rear-wheel drive** ***0-60mph*** **4.5sec** ***Top speed*** **155mph** ***Economy*** **46.3mpg** ***CO_2*** **138g/km**

its success is to punt the search for grip miles down the list of priorities. With little weight to carry, a mid-engined configuration and properly designed, securely located suspension, it was always going to corner fast enough for public roads, so Alpine's engineers decided instead of seeking even more adhesion that could rarely be used, it would go for poise and response instead which could be enjoyed every time the wheel is turned. So they kept the springs springy and the tyres narrow. And they have triumphed.

Indeed the A110 is so extraordinarily involving, exciting and intimate on the public road that I just assumed it would fall over on the race track, because that's what cars whose set up has been so focused on one environment tend to do. But not this one. Out on the circuit it was almost equally impressive, happy to be driven quickly and accurately, but simply delighted to be flung about and slid from one opposite lock the other. I didn't even mind its lack of a limited-slip differential because I'd not trade its deliciously neutral balance for the extra grip. One health warning however: the track we used was tight, narrow and wet, factors that all play to the light, compact and softly sprung Alpine's strengths.

"It is a brilliant car, conceived for all the right reasons. It's probably the best car I drove last year"

How it would be amid the wide open spaces of, say, the Silverstone Grand Prix circuit on a dry summer's day I cannot tell you, but it would be naïve to presume its talents were indefinitely extendable.

Then again, I don't see the A110 predominately as a track car and that's perhaps its greatest strength of all. The single greatest limiting factor of cars configured like the 4C and Lotus Elise is that you need to be in the right mood and with the right scenery around you to enjoy driving them. In the Alpine you don't. Although there is barely any stowage space on board and the boot is small, as a thing to just get in and drive it requires almost no compromise at all. It is quiet, it is comfortable. Ergonomically it's not going to scare BMW much but nor is it going to drive you to distraction. The driving position is excellent, the electronic dash simple and clear and the touchscreen nav system intuitive enough to be understood and operated almost at once.

In many ways indeed, this is the car I've been waiting for, one that really does offer a credible middle ground between the purely recreational class of cars like the Alfa and Lotus and massively heavier, more mainstream machines like the Porsche Cayman. It has that feel only cars weighing a little over a tonne or less can provide, yet it imposes startlingly few compromises for those who'll use theirs every day. In short this is a car that's better to drive even than a Cayman yet laughably more easy to live with than a Lotus.

Sadly this in no way guarantees success. Alpine has created some superb products in the past, none more notably than the brilliant 1990s A610, and even that could not ensure the brand's survival. And the uncomfortable fact is that, at around £50,000, the A110 is more expensive than an entry-level Cayman and, well, it's not a Porsche. And at this price point that is a crucial consideration. Indeed and time and again in all parts of the market, we see customers walk straight past the best car in the class in order to get to the best badge in the class. Not only that, but with the A110 many prospective owners are going to have to accept they're going to have to explain to their friends and family not merely what kind of car they have bought, but even where its name comes from.

I hope more than I routinely hope for most things in this business that the A110 works, and that as a result Alpine is able to deliver an entire range of lightweight, engineering-led products that can appeal to real drivers from across the spectrum. It is a brilliant car, clearly conceived for all the right reasons and expertly engineered. It was probably the best car I drove last year. That it deserves to do well is not the issue: whether it will or not remains to be seen.

Three-pointed start

First Mercedes-powered Aston offers a taste of the future

Since the war, how many engines has Aston Martin designed from scratch by itself? I count two. The sixes used up until 1959 were created by Lagonda, after which came Tadek Marek's straight six and V8 motors that served in many different forms from 1959 to the turn of the century. Everything since the DB7 has had its origins in other people's designs, specifically those of Ford, Jaguar and, lest we forget the Cygnet, Toyota.

Well, we can now add Mercedes-Benz to their number.

Deciding to slip Mercedes' 4-litre V8 in the space under the DB11's bonnet designed for Aston's 5.2-litre V12 must have been easy indeed.

The engine has a superb reputation and was already heading for the new Vantage whose platform the DB11 shares, so it was simple to fit. And it would provide a chance to bridge the gap between the Vantage and V12 DB11 not just in terms of money, but conceptually too.

The V8 engine is far lighter, more sporting in nature than the languid V12 and provides a more rearward weight distribution, so a sharper yet scarcely slower DB11 should be the result.

And so it proves. To look at this car as simply a more affordable DB11 is to miss its point entirely. In the way it offers Grand Touring ability but with a real dynamic edge, to me it is the very embodiment of a modern DB4.

Indeed this is the most broadly capable Aston Martin I have yet driven, the V12 included. Because it is 115kg lighter and comes with sharper suspension and steering whose development has moved on even from where it was with the V12 DB11, it has an edge its bigger-engined brother lacks.

I spent a considerable amount of time flinging it around a soaking wet Castle Combe - a difficult enough circuit even when dry - and it kept me amazed and amused in equal measure throughout. On the road it is poised, responsive and comes with a soundtrack almost as enticing as that of the yowling V12. Make no mistake - Mercedes engine or not, this is a car full of the Aston spirit.

And yet were it me, I think I'd probably still try to find the extra and buy the V12.

It sounds perverse - particularly as the V8 is probably more true to the Aston Martin philosophy - but if you're going to buy a long-distance Aston, why not the one with the quietest cabin, the softest ride and, you bet, the biggest engine?

There is something unique in the smoothness and voice of a 12-cylinder motor that simply cannot be expressed on paper, but which is no less important for that; it is why almost all the blue-bloods from Ferrari to Rolls-Royce and Aston Martin to Bentley still use them.

So while the V8 is probably the better Aston Martin, the V12 is the even greater GT. The good news is that it's an enviable choice with no wrong answer, though one I am sadly in no position to make.

FACTFILE

Aston Martin DB11 V8

Price **£144,900** ***Engine*** **4.0 litres, 8 cylinders, turbocharged** ***Power*** **502bhp@6000rpm** ***Torque*** **497lb ft@2000rpm** ***Weight*** **1760kg** ***Power to weight*** **285bhp per tonne** ***Transmission*** **eight-speed automatic, rear-wheel drive** ***0-62mph*** **4.0sec** ***Top speed*** **187mph** ***Economy*** **28.5mpg** ***CO_2*** **230g/km**

INITIALS

NEW
90 K
TEV I
I AVM
6 FLW
54 RPL
JHR 66
I2 GMS
VCA 70
82 KAD
I KDC
4 EAJ
I KLD
7I MEE
68 CTP
45 JGP
JNL I
RSJ 9
HFB 48
EJE I
65 DY
I RJO

AAD I 85 ABD ABF 4 6 ABW 754 AD 4I ADF 700 AE 3 AEA 7 AEJ I AER 6 AFG I AFL AFP 6 AG I 55 AGR AHC II 6 AHG I8 AJE 9 AJO 93 ALW AMD I AN I APJ I 76 APM ARF I I6 ARJ ASE 70 ASL 96 II ATL 25 AU 4 AVP 6 AVR AVS I AWC I I AWM BAE I I5 BAP BC 6 5 BCP 9II BD I0 BDB 4 BDG I BDS 80 BE

I BEF BEJ 93 I BFH I BFM BG 72 77 BGC II BGM BGR I 6 BHS 8 BJA BJK I II BJL 74 BJM 8 BJN BJT I 96 BL 3 BLB I BMC BME 6 BMF I 77 BMS I8 BPP 5 BPR BPW I II BRD 6 BRJ BSW 5 BT 25 III BV BW 2 I0I CA 52 CAF CCJ 2 99 CDJ CE 8 CEB 2 3 CEJ I CEK CFH 93 3 CFP CG 8I7 CGC 4I CGS 9 55 CHR

5 CL 7 CLE CMK 77 333 CO 8 CPR I0 CRN CS I I2 CSA CSD 96 3 CSE CSJ 9 II CTL 68 CTP 88 CTW 95 CV CVH I 58 CWC I CWM CY I D 5 I2 DAK I0 DBA 4 DBD DBG I DBH I II DBT 3 DCA I DCN I DCR DDD I4 30 DFH 6 DGR I6 DGS 7 DHD DHG I 7 DHJ I0 DKS DL I2 DLB I I4 DLJ DMM I I DMP 52 DPB 6 DRD

DRE 24 I2 DRG 8 DSA 5 DSF DSH 43 DSJ 88 9 DSL DTJ II 2 DVS 6 DWE E 2 90 EA 9 EAA 4 EAJ 9 EAK 6 EAP I EAS 32I EB EBB 32 I0 EBC I ECA I ECD ECH I II ECJ I ECL I EDC I EDP I EDR I EEB I EEC I EEF I EEG 9 EEL EEM 4 5 EEP I EF 9 EFW EGD 48 I EHB I EHH 45 EJ 5 EJA EJM 36 3 EJN

I EJO EK 3 77 EKM EL 9 EMC I I EMT EN 7 9II EP EPD I 6 EPM 2 EPW 444 ER 6 ERJ 786 ES 2 ESB 6 ESH EST I I ET I EV I FAC 70 FAD I FAW 3 FCB 6 FCM 6 FCS 64 FD I FEC II FEH I FEM 3 FGM II FJA II FJC 7 FJD FJP I I FJT 29 FK 90 FL FLH 43 FMJ I0 8 FMT 3 FMW 46 FP 75 FR 93 FRM

6 FS FU 424 60 FY GA I 9 GAD GAE 78 I GAJ 5 GAK 57 GAN GAO I I GAP I GCA I GCD 6 GCP II GDB 6 GDR GE I 2 GEK II GEP GF 6 8 GFC 3 GFP I GFW GGM I0 5 GHD 54 GHR 300 GJ II GJA 5 GJD 7 GJF 444 GK I GKS GL I 56 GLA I GLD 4 GLE 85 GLM GM 6 93 GMA GMW 3I GNM I 3 GPA 9I GPB GPD 38

I4 GPR GRC 77 8 GRG 4 GRJ 6 GSJ II GSP I GTP 50 GU 25 GV II GWA GWD I 6 GWT 3 HAP I HAW HC 4 I HCB 6 HCD HCT I HDS 5 HE 6 3 HEG 9 HEH 6 HEJ HF 586 59 HG HJC 35 5 HJE HJR I I HJW 902 HK HL 3 HLB I HLH I 36 HN 4 HPM 5 HPS 96 HR 4 HRG HRW I HSW 5 90 HT 9 HV I00 HY IY I

800 JA 63 JAE 30 JBM JCF I I JCN 9II JD II JDD I JDO I6 JDP JDT I 84 JEC 8 JFJ I JFO 66 JFR 68 JGA JGK 54 JGM I9 45 JGP JHN 80 I JJR JKW I 7 JLJ 83 JLM

5 JMO JN I 6 JNA 8 JND I JNH JNL I 64 JOM 82 JPF I JPK JPS 23 9 JRJ I JRK JS 6 8 JSE I JTK JTP 46 JTR 59 I JTT 60 JU I JVG JVL 83 I JVS JWA 74

48 JWD JWG I 82 KAD KAE 22 364 KB KBB I KBS I 5 KCP I KCW 5 KDA I KDB I KDC I KDJ KDP 74 KE I KEA 9I KEC I 8 KF KG 44 I KGM I KGS I KHC 94 KJ

KJC 93 KJE 52 I KJF KJG I I KJK I KJN 5 KKK I KLD I KLE I KLJ 24 KM KML 65 KN I KNM 6I KNS I KP I 9 KRL KSJ 9 I KU 4 KV KWB 66 KWC 3 66 KWL

KY I 90 LAS 6 LBS LCA I8 8 LCJ 5 LCR 3 LDD LDL 7 LDS 9 94 LE 2 LEF LFS 64 LGR I4 LGS I I LGW I LHB I LHH 85 LJC 33 LJD 32 LJE LJG 2I I LJR I LJV

LK I 7 LKP I LKR LLS I 2 LMO LN I LO I LPD I6 9 LPR 2 LRD 3 LRJ I LRT LS I LSD 73 LSR I I LSW I LVB I LVS 900 LW LZ I 87 MAK MBD 88 II MBW 97 MC I0 MCF 6 MCJ MDA I I MDF 98 ME MEC I 7I MEE MEJ I MEO I6 MES 94 MF 6 MGE I I MGG MHF 7I I MHK 90 MHR I MJK I3 MLD I MLO MMB 58

MMG 78 MMR 75 I MND MO I 78 MPA MPC I I2 MPM I6 MRJ MTJ I MTK 30 I00 MU 837 MW MWD I5 4 MWJ MWR 26 60 NAE I6 NAJ NCA 66 II NCP 94 ND I NDG 3 NDP I NEG 6 NF I NGC NGM 89 6 NJJ I NJN 2 NLA 8 NLB I NLP I NLT I NLW 89 NMD I NMR 8 NMS I NPD 6 NPM I NPR 86 NR I NRD NRL I I NRM NRS 83

I NSP NTB I NV 9 I OAA I4 OW OY I 94 PAJ 9 PCA II PCM PCT 8I PDA 3I PDL I I0 PDR 3 PEF PEK 7 I PES PFH I 4 PFR 9 PGM I0 PGR PGW 30 PHR I 64 PHW 68 PJF 9I PJW 3 PKH 9 PKM I PLB I PLC 3 PLJ I0 PLM 9 PLP 5 PLR I5 PMR PMT I PNB I I0 PNM I PNS PPC I II PPM PPS 5 6 PSA PSD I 5 PSJ

3 PSK 6 PST 79 PT PTD I PTS 88 9 PV I PWP PWW I RA 5 I RAA RAO 73 RBG I7 RBH I RBS I2 55 RBT RCE I RDJ 22 I RDK I RDT 93 RE REK 8 I REO 2 RFH RFP 6 3 RGG RGL 7 3 RGP 9 RHC RHF I I RHP I RHR 80 RHT 300 RJ 99 RJJ RJP I 5 RKC RKM I 5 RLA 98 RLB I RLD I SLN 78 SLR 96 SLT 44 SMJ 59 SML

6 RMJ 3 RN I RNC RNS 3 RPM 39 90 RRB I RRC I RRT RSJ 9 I RTJ 6 RTP I RWH RWK I RWR I RY 9 SAG 96 SBW I SCA 8 SCD 29 SCE I0 9 SDA SDL 95 SDP I SHB I2 SHG I SHH 55 SJ 2 I SJJ 99 SJV 86 SKL SKT I I9 SLK I SLN 78 SLR 96 SLT 44 SMJ 59 SML

I SNH SNK II II SRJ 2 SSF SSR 90 I STG STK 5 I SVH SWJ I 82 TAL 3 TDD TDS 6 68 TE I TEB TEP I TEW 47 7 TGD THW I TLA I 3 TLG I TLJ I TLW 2 TMO TO 3 TP I TPS I I05 TR 2 TRD 8 TRP 9 TS TY 4 I UL 2 VAD I VAF VAJ I I VCS VE I I VEW VG 2 34 VJ 2 VJF I VJL I I VJT I VK

I VLL I VMC I VML VMR I0 II VMS VP I VU I 78 VV 444 WA WAA 87 I WAF WC I WDB 40 WE 2 WEP I 48 WH I WHM WJ I49 I WJE I WJG WJL I3 WJP I I WJT 7 WM I WMC WMG 6 WMR 87 I WMT WN 6 WPS 4 WR I WRH I I WRM WS 83 I XZ YB 39 I YD YE I YG I I YL I YR YS 34 YW 4 YZ I

NAMES WORDS NAMES WORDS NAMES

3 EAD
ME5I EXY
W33 WEE
M3II ORS
WA5I SAL
CHA 93L
MER 6IA
C24 FTY
SI0 UGH
DOW IIS
Y3 LLS
STO 88S
C474 LAN
60I DEN
CHA 73R
GEA 2R
BI2I DES
RI0 UGH
MAW I3Y
THI2 USH
DUS 7Y
B34 RDS

ABB 333Y XAB I ABII ARD ABI2 AMS A82 AMS ACK 207D AAD 3L ADE 3IE FAD I4N AKT 42R ALD 32R ALU IIN ALV 35S AMB 8I3R DAM 3S I AMY ANII GEL ANN I84L ANS 73Y A26 HER AR63 NEL A26 ENT ARL 3IIE ARR 24N ASA 2E ASH 88Y ASH II6Y ASH II0K A578 URY ATT 23E AUS 773N BAII TWO BAL I4D BAII MER B4I0 GUN B428 OUR B4I2 ROW BAI2 RRY B4I2 TLE B42 TON BAT 3S B4 TEY BAU 6H 3 EAD

BEA 4N B34 RDS BEI4 TON BEE 3S BEN II7A 83 NN B3II SON BEI2 GER B3 RTH BE57 BED BE5I ONE 83 VAN BEW I6K BI6 PEA BI46 KER BLA IID BLO 473R BLU IIE BLY 7IIE BOG I0 BON II7A BOII SER B00 606K BOR IIIS BOR 220W BO5I TON BOT II4M BOT 770M BOII RKE BOW 32S BOW 73R 824I D BRA 2I3R BI23 NDA 820 GAN BR66 KER B2 USH B27 SON BUII ART BUD 6I3S BUF 70N BUG 6I3R BUN 74N BUR 2R

BUR 220W BUS 5E BUS 777Y BUS 73R BUS 7Y BUT 70N BUX 770N BYI2 NES CAII ELS C4II ADA CAII HAM CAN 7T CI4 PON CAR 2D CAR 6IIL C42I YLE C422 MEN CAR 22IE CAT 72IN CAII SER CEC IIIL CEL IIIA CHA IIG CHE 3N CHE 227L CLA I2A CLA 42K CII4 UDE CI34 NER CI34 VER CLII NCH CIII NGE C0B 80ID COL II3Y COM 8S COM 905E COII DON ROY 600K COO 7E COP I3Y 6 ORK COS 57A COS 73R COU I7ON

COU 9E COII PON COU 5IIN 60 YLE C24 FTY CRA IIIK CRE 3W C2I PPS CRO IIE CI20 SSY CRU IIIP CUI2 NOW CUR 7IN CUI2 WEN CUI2 ZON CUT 73R DAC 6K DAF 70D DAII NTY D444 REN DAR I4N DAR 2I3Y DAR I24N DAR 2IN D422 OCH DAW IIID DEII UCE DEII YTH DES I2E D8 BLO DOI2 MER DOT 7Y DO5I BAG D2I VER D2 OWN DUII HAM DUI2 ANT DWA 7IIE EAG 6I3S EAM 3S E420 LEY EAR 2L EA5I TCR ECC I3S

EDN 3Y EDW 420S ELL I77S ELS 44A FEII DER E6 ROS EI2 ROL EII9 ENE EVE 235T EXE 73R FAI2 EST FAL 660N FAN 770M FAR I4A FAR 2R F42 ROW FAT 773R FAW 637T FEA I2N FEG 4N FEII CEZ FER 2N A6I2 FER FER I2Y FI66 GHT FIII NCH FFII TCH FI4 XEN FIII OOD FLO 2IN FOW II3R FRA 73R F128 NCH FI2 OUD FUR 83R FUS 555Y GAB 80R G4 LES G4I LON GAM 8I3S GI4 MES 642 DEN GAR 242D GAR 20D

GAI2 THS G45 SON G473 NBY GAT 3R G44 ULT GEII DER GEII EVA GEO 266E GER 242D GER I2Y GHA 57IY GHA 24IA GII BEY 6I NN GLII YNN GIO BEY GIO DLY GIO OLD GOII DER G60 LDS GON 6G GOR IIIG GOU 2I3Y GOW 32S G28 EME GI2 APE PGR 33D G23 ENE GI2 EER GRE 7Y GRII EFF G2I MES GI20 GAN GII ARD GGU 35T GUII MOW GUII NER GUN 73R GUR 2R GWII YMS HAB 600D H46 KER HAF 54S H4I RUP

HAL 3S HAL IIIL HAM 3S HAN 63R H428 OUR HAI2 DEN H42I AND H4I2 MER H4I2 PER HAR 220D H42 ROP HAI2 ROW HAT I6E HAY 7I3Y HEA 27Y H34 TER HEN IIIA HOG I33N HOII TON II OOK HOU 9H HOW 24T HUG 9H HUN IIT HU6I LER HYS 5I0P JAC 6K JAS 94L JAV I3R JEI4 NNE JES IIIE FJE 57 JES 73R JOS 53F JOY II3R K4II NAN KAR 2IIN KAY II3A KAY II3Y K34 LEY KEE 93R KEI7 THS KEII SEY KEM 950N

K3II NEY K325 HAW K357 REL KII4 NOM KII2 WAN KII7 SON KNO 6K KYT 7E LAM 832T LAN 44A LAN 670N I42 GE LAR 635T L42I SSA L42 SEN L47I MER I4 WES L423 NBY L3I4 NNE L3 ARY I34 VER LEN 2 L3II NON LEII SES LEII TON L35I EYS L35 TER LES 23K LEV I55S II EEK LOD 9E LON 666Y LOP 3S LOU I56E LOII THY DIO VER LOV 37T LUC 6IA L7II DON L7II SAY MAG 90T M490 WAN MAH 6R MAJ 357Y

MAL I42D MAL II3Y MAII OYS M8I0 NEY MAM IIA M42 RCO MAR 33E MAR 623T MAR I33E M42I AND MAI2 ROW MAR 250N MAR 7IIA M427 ANN MAS 546E M455 SON M444 TES MAII LDA MAU 2A MAY 606K MCA 20IE MCC II0Y M662 ORY MCC IIE MCE I20Y M63 WEN MC6I ONE M662 ADY M662 ATH MCK IIM M6I EAN MCL I30D MCN 33E MEA 4D MEA 4H MED 4IS MEE 2A MEG II4N MEH II3T M3I LOR M3II ORS MEII DES M3II SAH MEP II4M

MER 6Y MER 2I7T M333 RRY M32 VYN MET 64IF MII0 RED MOR 370N MOR 2I6E JMO 5S MOT 724M MOU IIID MOU I7T MOW 47T MUII LER MUII ROE MUII SON MUS I64L MUT 6H MYL 355S NAN 5 NAP I32R NAR 6IIS NCU 8E NEE 3D NEI3 DLE NER 7S NEV IIIN NEW 832Y NEW 80ID N333 WBY NI ALL NII6 HOL NI TEH NOE IIIL NOL 44N NOO IIE NOO I2R NOR 27H I NYE ODD 80Y OGL IE OLD 207D OLI VVE ONI2 ONS

OPE 2A ORA II6E ORG I85 ORM 320D MR05 HEA OSM I4N OVE 270N OWA 4IIN OXL 3Y PAD I3Y P4I NEY PAI5 LEY P44 NSY PAI2 DOE PAR 2K PAR 20T P45 TOR P346 OCK PEA 4K P342 SON PEA I2T PEE 3K PER 3I2A PHO 3I3E PII ONO PII3 RRE PI4 GUE PLA IIK PLE 4T POII DER P00 I3Y PI00 RCH POR 2T SPO 73 POT 77Y PRA 7I3Y P23 TTY P206 TER PRO IIT PRY 9E PUD 5IE PUM 4A RAD I3Y RAM 8IE

R4II ONA RAII DLE R47 HOD RAU IIF RAU IIL R342 DON 2 EED REII DER 2 EO REP 7IIE RES II4M REU 883N RHO I7A RHO II0A RI02 DAN 2I VER ROA 55T 2 OBB ROB IIIA RI0 BOT ROC IIA 20 CHE ROE I ROL 4I7D RON 4ID 20 PER 2 OSE ROS 720N RI0 UGH ROW 33R ROII YAL RUB IIIA RUC 6K RUD 63E RUII SEY RII9 ERT SAB 444H SAL 6H SAL IIIH S9II MON SAII OON S4II EER S4 MMY S4II UEL

SAY 32S SCA IIIY S34 NCE SEL IIF SES 4Y SEV 32N ME5I EXY SHII GGY SHE 42D SHE I70N SHE 233N SHE 22IE SHO I2E SKA 73S SI ACK SLI6 HTY SLO 4IIE SLO 64N SLII RRY CUE IX 5 NUF SOF 7I4D SOP 3R SOU 54A SOU 77H SPE 4I2S SPI2 AGG 574 CK S74 CYS S74I NER STA IE 57 AND S74 PLE STA I2K STA I2T STE IIIN S7I LTS S706 KER SI7 ORK S777 OUT STR 44Y S77 UMP SUE 4 SU54 NNA

TAII ORX TAII EST T4II ARA TAN IIG T422 ANT TAR 2Y TAI2 TAN T4 UNT TEE 5S T324 NCE T323 NCE TER I2IE 73 SSA TEX 7 THA 76H THE 235E TIII CKY THO 2N THI2 USH TI32 NAN TON IIIA TOO I3Y TOII CAN 70 VEY 724 CY T24I NER TRA 7T T234 NOR T2 OUP T22 OUT TUN IIE TUR 2K TUI2 TLE TU5I CON T7 NAN T72 ONE T722 ELL URE 3N VAL I VAL 32IE VAS 3Y VEG I5 VER 2I7Y VER 50S

VI3 ENA VIII RGO VOII CEZ W8 GNR WAK 3IIN W8 LKY WAII GUY WAII ETS WAII YSX GWA I5H WAL I70N WAN I35S WAI2 NER WAS 5S WAT 333R WAT 750N W33 MAD W38 LTH W34I THY W33 WEE W33 DON W3I8 URN WEL II3R WEL 555H WEL I70N WES 770N WET I WH08 DAY WHY 77E WI35 LAW WIII NES WOII BLE WON IIG WOI2 LEY WOR 5I3Y WOI2 TON WRA 46G Y420 LEY YAS IIIR YEB 804H YE5I EAT YOR I2K YOII UNG YOU IIG

Automatic for the people

...but you can't yet make full use of Audi's latest technology

Did you know there are five levels of automotive autonomy? Bear with me because these days this stuff is important. In the most basic terms Level One is where the car regulates a function without driver input, like active cruise control. Level Two requires cars to be able to look around and autonomously act and react to their environment, for example being able to change lanes with no more driver input than flicking an indicator. Level Three reduces the driver to a safety net, where the car essentially drives itself, but requires a driver to take over if necessary. Level Four is full autonomy in autonomous-enabled environments such as in cities or on motorways. Level Five doesn't need a steering wheel.

Where are we today? Thanks to this new Audi A8, hovering around Level Three. In the right circumstances (in heavy traffic, where speeds are below 37mph) it really will look after itself while the driver - and this is the critical distinction - gets on with something else. Not only do you not have to be in control of the car, you don't even need to be aware of what it's doing.

There is, of course, a catch, hence the careful use of the word 'hovering' in the previous paragraph. The car may say it can, but the law most definitely says it cannot, at least for the moment. So here is a potentially game-changing technology, a genuine USP for Audi's latest luxury limo - and no one can use it. Hopefully within a year or two at the most, that will change.

Otherwise this is by far the best of the four generations of A8 seen to date, the first that has seemed more than an engaging also-ran from the moment of introduction.
More impressive still is the fact that the opposition in the form of the heavily revised Mercedes-Benz S-class, the still very new BMW 7-series and an all new Lexus LS500h has never been stronger.

Key to its appeal is its sumptuous, spacious yet still essentially simple interior. Almost all functions save the pedals, wheel and steering wheel stalks are now controlled by touch-sensitive screens of crystal-clear resolution and wondrously intuitive function. For such a mind-wiltingly complex car, it is staggeringly simple to operate.

At launch there's a choice of 3-litre six-cylinder engines, a diesel and a petrol/electric hybrid. I drove the diesel and marvelled at its performance - clock that sub six-second 0-62mph time - and fuel consumption, providing a real world 45mpg from a two-tonne car.

There are flaws: the ride quality is excellent at speed, less so around town, the engine is a little hoarse at high revs and it's not a car you'd choose to hustle through some corners as you might the fine-handling S-class Mercedes. But judged in the environment most will use it, driven the way most will drive it, this is a fine effort and one that, at the fourth time of asking (fifth if you count the Audi V8), at last cements its creator's place at the top table of luxury car manufacturers.

FACTFILE

Audi A8 50 TDi

Price **£69,100** ***Engine*** **3.0 litres, 6 cylinders, turbocharged** ***Power*** **282bhp@3750rpm** ***Torque*** **442lb ft@1850rpm** ***Weight*** **1975kg** ***Power to weight*** **143bhp per tonne** ***Transmission*** **eight-speed automatic, four-wheel drive** ***0-62mph*** **5.9sec** ***Top speed*** **155mph** ***Economy*** **50.4mpg** ***CO_2*** **145g/km**

GTC

1965 ISO A3C #BO232

One of the most beautiful car ever designed.
Delivered new in Germany; original German KFZ Brief dating from 1965
Five owners from new. 24,300 Kms on the clock.
Excellent condition. US Title. European taxes paid

1967 LOLA T70 MKIII GT Coupe #SL73/130
One of the 9 Lola T70 MKIII Coupe.
Ordered new by the Fuji Company Ltd / Taki Racing team in Japan.
Raced in Japan in 1968 and 1969.
Ready to race.

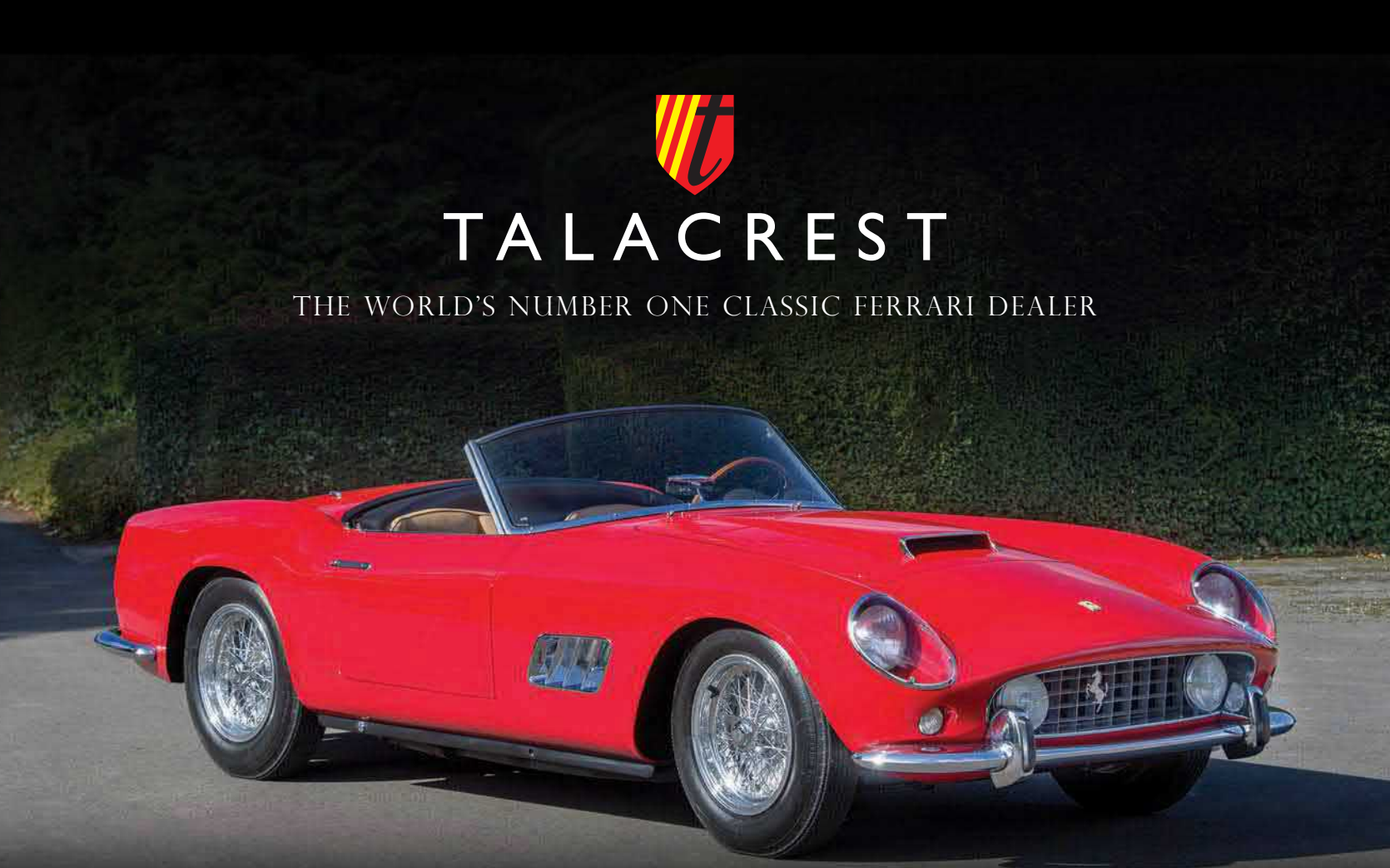
1970 MASERATI GHIBLI SPYDER 4.7L #AM115/S*1079*
One of the 25 Maserati Ghibli Spyder 4.7 European version, manual gearbox, LHD.
Concours condition.
Painted black / black interior.
Canadian title. European taxes paid.

1978 LOLA T298 #HU94
Winner at the 1981 24H du Mans in its category.
One of the best. The most original T298.
Original BMW M12-7 engine.
Original Hewland FGA 400 MKII gearbox.
Spare parts and body.

Contact us for more information:
+33 442 726 199 . gtc@guikasgtc.com . www.guikasgtc.com

TALACREST

THE WORLD'S NUMBER ONE CLASSIC FERRARI DEALER



1959 FERRARI 250 GT LWB CALIFORNIA SPYDER

OTHER CLASSIC FERRARI AVAILABLE

1966 Ferrari 275 GTB Alloy 2 Cam

1950 Ferrari 195 Inter Coupe by Touring

1992 Ferrari F40 - RHD Ex Sultan of Brunei

WWW.TALACREST.COM

+44 (0)1344 308178 | +44 (0)7860 589855 | john@talacrest.com

TALACREST

BUYING • SELLING • AUCTIONS • RACE & ROAD CAR PROFILES

SPEEDSHOP

***THIS MONTH** An immaculate Group B original • Fiat Dino • Building replica Jaguars in Suffolk • Latest auction results • MGA racer*

TOP STORY

Rare-groove rotary

A 1980s rally car that has never been raced or, indeed, rallied

The timewarp car is, for many, the holy grail of classic motoring - and yet at the same time presents one of the greatest dilemmas. The chance to drive a factory-fresh machine, decades after it was built, would be the ultimate thrill, yet at the same time would destroy what makes it so special.

Apply that to a little-known Group B car and the question takes on added significance. The Mazda RX-7 you see here is both a rare example of one of the lesser-known participants from this legendary period in rallying - and as close to a brand-new works Group B rally car as you'll likely ever encounter. Individually these would be notable qualities. Combined they make this little rotary Mazda something very special indeed, its passionate owner saying, "It has spent all its life in the shadows, never having been used and it's been like discovering a wonderful jewel." It's one that could be yours for a relatively modest sum.

A full history lesson can be found in its listing, but the short version is that Mazda's entry to Group B was made considerably easier by the fact it had to build on;y 20 cars and not 200 (it benefited from 'carry over' homologation from previous regulations). Research suggests just seven were actually completed, of which this one - chassis number 019 - was built as a spare car but never actually run. The fact it turned up in plain white paint with the decals supplied in an envelope is one example of that originality. They have since been added, though

handling brittle, 30-year-old vinyl was apparently a tense experience.

The Audis, Peugeots, Lancias *et al* have, of course, captured the imagination whenever Group B is discussed and are prized accordingly. The Belgian team behind the RX-7 was a minnow in comparison, instead relying on craftsmanship and very Mazda-like dedication to rotary power in the face of seemingly impossible odds. The car it built nonetheless speaks volumes for its expertise and looks the absolute business, the savage and ear-splitting crackle of its rotary as unique in rallying as it was to be later at Le Mans. "I love owning these things but I don't really get the buzz from driving them because they're just so extreme," says the vendor. "I go out in them, but for me it's about finding them and bringing back them to a high standard. Not that I needed to do much to this one!"

It's true that the naturally-aspirated RX-7 couldn't match the pace of the flame-spitting front-runners, but Mazda Rally Team Europe did score one credible podium - Ingvar Carlsson and Benny Melander taking third in the 1985 Acropolis Rally behind the winning Peugeot 205 T16 of Timo Salonen and Stig Blomqvist's Audi. It was a difficult rally for a supposedly outgunned car and proof of the Mazda's unexpected toughness.

And you can have one, freshly built, never rallied and for less than £200,000. Sure, it's an amazing artefact from one of the most celebrated periods in motor sport - and possibly unique. In those terms it might just be priceless and worthy of preservation in its original condition. A delivery-mileage Group B car? It would be a stylish way to go historic rallying. What future should await? Someone faces a tough decision.


1


2


3


4

(1) Engine bay appears thoroughly restored, but isn't (2) Pristine cabin (3) Road-going Mk1 RX-7 was a nice, safe way to learn about oversteer: this one needs greater care (4) Carlsson and Melander took third on the 1985 Acropolis, second on the Lindisfarne

In the market for works Group B cars

Flame-spitting firepower for those with advanced car control

1986 Lancia Delta S4

c£510,000-£690,000

Works Delta S4s rarely come to market. This reconnaissance car dates from 1986 and remains in original condition

www.bonhams.com

1984 Peugeot 205 T16 Evo 1

c£1,000,000

A genuine factory GpB car, this early T16 was driven by Vatanen and Reutemann, then stored in Peugeot's collection

www.jeremycottingham.co.uk

1985 MG Metro 6R4

c£95,000

The mid-engined Metro was never a front-runner but has all the attitude. This demo car never competed

www.coys.co.uk

Audi S1 Sport Quattro replica

£122,000

Works Quattros seldom come up for sale, but authentic replicas are popular for both show and competition

www.ebay.co.uk

Is it really 50 years? This year marks the half-centenary of the death of Jim Clark, arguably the greatest and certainly one of the most fondly remembered of all British drivers.

To mark the milestone, major events are set to take place across Europe with celebrations planned at Goodwood in the summer and at Hockenheim - the track where he was killed during a Formula 2 race on April 7, 1968.

The first, and potentially most poignant, commemoration for the man who inspired a generation will take place in Clark's native Scotland. Over the weekend of April 7-8 the Jim Clark Trust, Club Lotus, Live Borders and Chirnside Common Good Association will all come together to welcome visitors to the Scottish Borders.

The Flying Scot, 50 years on

Plans announced for Jim Clark anniversary celebrations

Visitors will be paying their their respects in an area where a new, eagerly anticipated Jim Clark Museum is scheduled to open in 2019.

The organisers say there will be a church service of remembrance, a ground-breaking ceremony for the new Clark museum in Duns plus a dinner and an open exhibition at Chirnside Village Hall for anyone who would like to showcase their own Jim Clark memorabilia. All are welcome. In addition Classic Team Lotus is planning to exhibit some of Clark's famous race cars.

"Everyone is welcome over the weekend, said Doug Niven, cousin of Clark and trustee for the Jim Clark Trust. "It is quite incredible how his memory remains so strong and emotional even 50 years on. We feel honoured that so many people have shown interest and we want this weekend to be an appropriate commemoration."

For further information visit The Jim Clark Trust, www.jimclarktrust.com

DEALING

BIG CATS ON THE PROWL

The specialist who has built more SS100s than Jaguar

Spiralling values of many iconic classics – and the fact they're being tucked away as investments rather than driven – makes any stigma about faithful, high quality reproductions like those built by Suffolk Sportscars less of a barrier for enthusiasts. Far more than lookalike kits, its SS100s are six-figure builds constructed using parts designed and fabricated in-house.

"It's all to the correct spec," says Fraser Williams, his love for classic Jaguars maintaining family tradition and inherited from his father and grandfather.

"Everything is interchangeable and we've provided parts like radiator surrounds and windscreens for restorations of genuine SS models – they all fit." Production of the Suffolk SS has recently exceeded that of Jaguar's original run too, more than 320 of its cars now with owners across the world.

The same care and attention is lavished on the C-types Suffolk also builds, these XK-engined replicas available in part-GRP for about £90,000+VAT or with full aluminium bodies for £120,000. They're not full race-spec cars but make for hugely enjoyable and – crucially – usable classics that owners can drive in confidence.

Suffolk is sole agent for for its reproductions and sells them alongside genuine Jaguars and other vehicles Fraser and his colleagues enjoy. Hence the sight of an '80s Alpina they acquired purely on the basis that it's cool. Enthusiastic, expert and happy to be supported by local specialists, Suffolk is proud of its British roots and ability to bring its love of Jaguars to a worldwide audience.

www.suffolksportscars.com

Suffolk Sportscars SS100 3.8
£76,000
Equipped by a 3.8-litre XK engine with twin SU carburettors, this SS100 is typical of a Suffolk build

Suffolk Sportscars C-Type
£105,000 + VAT
Built as a company demo, this 4.2-litre 'fast road' part-GRP C-type has 300bhp+ and keeps the 1962 registration to comply with historic regs

Alpina B10 3.5 (E28)
£POA
Lovingly restored by the Williams family, who acquired this Alpina because it's the kind of car they really enjoy

Family passion

How a childhood love of Jaguars became a lifelong obsession

The timeless appeal of classic Jaguars is one that extends far beyond English soil. And over in Holland one specialist made it his life's work to keep old E-types, XKs and SS models on the road long before many people realised their value.

Growing up in a car-mad family, Tom Zwakman was helping his father service exotica like Jaguars, Alfa Romeos, Maseratis and Ferraris before he'd even turned 10 years old, inheriting a perfectionist's eye for mechanical detail along the way.

Jaguars had especially got under his skin and when he set up his own business it was inevitable this would be where his speciality would develop. Tom being a mechanic at heart, bodywork and interior trim was sub-contracted out to local specialists leaving Tom to tinker with the spanners. Any money he made was invested in tools and machinery to help him in this task, Tom buying up a huge stock of Mk2 body and trim through the Dutch Jaguar importer in the mid-70s and adding to this over the years to create a vast inventory of original parts for everything from SS onwards. By 1983 he was in the position to set up Zwakman Motors and concentrate solely on his beloved old Jaguars.

"I have seen too much rubbish and mess from others over the years," says Zwakman. "This field wasn't - and still isn't - wide in Europe as few deliver good quality so it wasn't too difficult to find customers who really rewarded my passion."

Engines are a particular speciality, Zwakman being well-versed in SS motors, XK straight-sixes and even Jaguar V12s, the latter adapted into a special alloy-bodied E-Type with an eight-inch wheelbase chop. The in-house tuned 6-litre motors are capable of developing 700bhp-plus, Zwakman saying they are reliable and usable on the road.

"100 per cent accurate" C- and D-type reproductions are another speciality, power upgrades for E-Types and Mk2s also being popular with customers. Collaboration with like-minded firms like RS Panels, trim specialists Suffolk & Turley and Leaping Cats here in the UK and Upper Classics in New Zealand underline the global network of specialists working together to support the increasing demand for classic Jaguars, expertise that Tom is ready to pass on to the next generation, having spent the last decade sharing his knowledge with his team.

www.zwakmanmotors.com

The Zwakman connection with Jaguars goes a long way back: this is Tom's father at his garage in 1962 with C-type XKC 019

SPEAKING TO TOM ZWAKMAN

How doing it for the love eventually reaped rewards for the Dutch Jaguar specialist

I liked fast cars from tuned Mini Coopers to Aston Martins but liked Jaguars above all and regretted seeing the old models being taken off the road and landing in scrapyards. Therefore in the early '70s I started my first classic Jaguar garage in order to preserve them. In those days the values were totally different as a 3.8 E-Type in reasonable nick was just 2000 guilders, or about £400! People didn't want to spend much on them so I was working day and night for not much money. But I was convinced this would change and people would appreciate the older cars, that there was a future in the business. Thankfully this was correct and what I had in mind from the beginning has become a reality!

Desert springs

Arizona's Collector Car Week draws buyers and sellers way out west

In the chill of a British winter, the January round of auctions around Phoenix and Scottsdale in Arizona always seems a tempting prospect whether or not you need another classic car. Yet busy as it was, two major cars didn't sell.

Headlining Gooding & Co's portfolio was the bright red Jaguar D-type once campaigned by Peter Blond and later Jean Bloxham (right). A fine race history, yet it didn't move - somewhat like 1955 when Bernie Ecclestone took the unwanted car off a dealer's hands and sold it on for £3500. At the same sale a pretty 1954 Ferrari 500 Mondial spider, a guaranteed entry to any historic race meet, hit $4.45m, yet a road-going 275 GTB merited a remarkable $8m. Mind you, it was Pininfarina's own car.

Away from Ferraris, the Lexus LFA Nürburgring was knocked down for $825,000 and a 1965 Lamborghini 350GT, the firm's first production car, made $737,000, down on its estimate of $825k. Considering it was aimed at snatching Maranello's crown, these fine V12 GTs remain a long way behind in buyers' eyes.

As SUVs take over the world maybe investors should eye up older examples. Early Range Rovers are rising - Gooding's example made $68,000 - but who would have thought a 1967 Toyota Land Cruiser merited a five-year restoration? Yet here was one which scooped $154,000 (right). Perhaps a new collector area.

Russo & Steele worked through a remarkable 800 cars, including a 1964 Cheetah (centre), which with its Chevy V8 was claimed to be a Cobra killer. Raced on both circuits and drag strips, this one is restored to an amazing level beyond its far from high-

quality origins, which helped it to $660,000.

Bonhams' list had a Porsche as top seller, not a Ferrari. One of 40 550A racers constructed, this one was a works entry that Carel Godin de Beaufort steered to a superb and unexpected fifth at Le Mans in 1958. It also contested the Dutch Grand Prix. With a complete and continuous history, it recouped $5.17m. Next top scorer did come from Maranello, though - a 1972 365 GTS/4 Daytona Spider on $1.9m.

> *After a five-year restoration, a Toyota Land-Cruiser scooped $154,000. Perhaps a new collector area?*

The same week, RM Sotheby's also featured a D-type, this time the very famous works car OKV2. With Le Mans, Reims and Dundrod under its Dunlops in 1954, this is a foundation of the Jaguar story, yet no one was prepared to meet its $12-15m estimate. Instead it was one of the American greats, a Cobra 427 S/C (top), which headed the firm's list. The semi-competition car, never raced but recently restored, had four owners from new and hit $2.94m, substantially exceeding its estimate.

Meanwhile the oldest living Alfa Romeo, the 1921 G1, made $445,000 - a surprising comparison with the Boano-bodied 1900C SS which sold at £1.2m.

At Barratt-Jackson, one of the houses now streaming its sales live, Carroll Shelby's own Shelby Mustang GT350 went to a new home at $253,000, one of the rare Belgian-built twin-grille Porsche 356B roadsters achieved $165,000, and a Lamborghini tractor made $40,000. RM Sotheby's also sold a Porsche tractor - is this a trend?

Further ahead, the Amelia Island concours in early March forms the next major

rendezvous, where RM Sotheby's has a very single-minded collection for sale - 11 Porsche 964s, including all specials of the model.

RM Sotheby's says that despite "challenging market conditions", last year it turned over $526m, including many new clients. Clearly some around the world are less challenged than others, though it seems the rush of investment-only buyers is easing, resulting in a drop off in the £100,000-plus area.

Preview & Calendar

MARCH

3 Historics at Brooklands
Ascot, UK

9 Gooding & Co
Amelia Island, USA

10 RM Sotheby's
Amelia Island, USA

11 Motostalgia
Amelia Island, USA

16 Mecum
Kansas City, USA

18 Bonhams
Goodwood, UK

21 H&H
IWM Duxford, UK

24 CCA
NEC Birmingham, UK

24 Coys
TechnoClassic, Essen, Germany

APRIL

6 RM Sotheby's
Fort Lauderdale, USA

12 Barrett-Jackson
Palm Beach, USA

21 CCA
Silverstone, UK

21 Barons
Sandown Park, UK

BONHAMS

1968 Molzon Corsa *Sold for $41,800*
Flat-six Corvair-engined concept car built by General Motors designer Bill Molzon to professional standards. A 1960s rear-engined 'Lotus Elise' which performed very well but sadly remained a one-off.

COYS

Ferrari F40
Sold for £979,000
Not many F40s were raced from the start; this one was delivered to Holland and raced at various European events.

BARONS

1968 Subaru 360
Estimate: £15-20,000
Japanese 360cc 'kei' car; air-cooled two-stroke twin, rear-hinged doors; 2+shopping design on market till 1971!

BONHAMS

1952 Kurtis KK4000
Estimate: $POA
Offy-engined roadster driven at Indianapolis in 1955 by Ed Elisian, who stopped to help after Vukovich's crash.

BARONS

1972 Lancia Fulvia coupé 1.3S
Sold for £9350
Attractive front-drive sportster with V4 motor; great handling and fine motor sporting heritage on rally stages.

THE EXPERT TIM SCHOFIELD

Director, Bonhams Motor Cars

We had a pretty good sale in Scottsdale so the market remains buoyant. A once-in-a-generation car will find a buyer, as long as it has a realistic estimate, but it's not like 2013-14; it's much less likely you'll find new buyers going beyond estimate. People who bought three years ago expecting a 20 per cent increase, as often as not that's not going to be the case. If one looks at the five-fold increase in say a DB4, 5,or 6 - well, they're not making any more of them. But the potential for us as auctioneers is also five times what it was, hence ever more glamorous locations, lavish catalogues, videos - it's become what clients expect, though you aren't seeing any dry ice as some people used to do!

Fiat Dino 2400 Spider

Ferrari glamour for a Fiat price tag ... for now

Price new: **circa £5000 in 1972** ***Price now:*** **£150,000-plus** ***Rivals:*** **Mercedes-Benz 'Pagoda' SL, Maserati Mistral, Jaguar E-type** ***Heritage:*** **Ferrari-engined Spider and coupé that helped homologate the Dino V6 motor and gifted Fiat an exotic GT in the process**

Glamorous convertible body by Pininfarina. Engine by Ferrari. Built on the Maranello production line. And yours for a relatively modest six-figure sum. Yes, you read the last bit correctly...

OK, so there's a Fiat badge on the nose. But for about a tenth of what you'd pay for a Ferrari spider of equivalent '60s vintage the Fiat Dino Spider looks like a conspicuous bargain. That may not last forever though, this long-undervalued Italian beauty recently topping a list of the fastest appreciating classic cars and finally being recognised as the equal of its more glamorous contemporary rivals.

Because it was only ever built in left-hand drive it is better known in Europe and the US, but the Dino nonetheless attracted a small but appreciative audience here in the UK. In particular it appealed to knowledgeable buyers who understood they were basically getting Ferrari engineering and performance for Fiat money. And it came with a fascinating back story to boot.

The only reason the Dino exists is due to Ferrari needing Fiat's help to build the 500 road car engines a year required to homologate the V6 for F2. In that sense Maranello 'gifted' its engine, Turin returning the favour with production facilities and scale that the 1960s Ferrari factory couldn't hope to match.

All it needed was a car. Bertone designed the coupé and Pininfarina the Spider and both shared the 2.0-litre V6 with the Dino-badged 206 GT. 1967 saw the motor upgraded to a 2.4 in line with the Dino 246, now with an iron block and improved mid-range torque. The Fiat Dino also gained independent rear suspension and a new dog-leg ZF five-speed gearbox, the upgrades greatly helping driveability and performance.

Later Dino 2400s like the car pictured were built on the Maranello line alongside their better-known Ferrari brothers, underlining quite how close a spiritual connection they really shared. And those in the know have always appreciated the fact the Ferrari heart gave the Dino a character and turn of speed perhaps unexpected in a car bearing the Fiat name.

SPEAKING TO GRAEME HUNT

The classic car dealer and two-time Fiat Dino owner on a forgotten gem

I've always loved them – I had a Coupé and a Spider in the '80s, both 2.0-litre versions. The 2.4 is a better car and actually more pleasant to drive than a 246 GT because of the engine layout. If they're well set up they're fabulous. The engine is lovely, the noise is glorious and it's a much more exciting car to drive up an Alpine pass than, say, a Mercedes Pagoda SL and rarer than an E-Type – turn up to a classic event in one and people will stop and stare. In the past they didn't have the value to justify spending a lot of money on them so a lot were simply kept on the road but the owner of the car we have for sale ran it alongside various Ferraris and looked after it the same way.

MORRIS AND WELFORD

A JD CLASSICS COMPANY

A selection of our current stock

Now available at our showroom in Newport Beach, California

1948 MASERATI A6/1500

ONE OF JUST 61 BUILT
CHASSIS # 060

1949 ALFA ROMEO 6C 2500 SUPER SPORT

COACHWORK BY TOURING
CHASSIS # 915831

1967 FERRARI 330 GTC

CURRENT FASTIDIOUS OWNERSHIP FOR 11 YEARS
CHASSIS # 09333

1973 FERRARI 246 GT DINO

FCA PLATINUM WINNING EXAMPLE
CHASSIS # 05554

1965 ASTON MARTIN DB5

SUPPLIED NEW TO H.R.H. PRINCE ABDUL AZIZ
ULTRA RARE FACTORY AIR CON
& PASSENGER HEAD REST
CHASSIS # DB5/2270/L

1967 FERRARI 275 GTB/4

SUPPLIED NEW TO ROCKSTAR/ACTOR
'LITTLE TONY' ANTONIO CIACCIA
ULTRA RARE FACTORY BLACK/BLACK INTERIOR
CHASSIS # 10063

To find out more please visit www.morrisandwelford.com

@morriswelford

enquiries@morrisandwelford.com

4040 Campus Drive, Newport Beach, California 92660, USA

+1.949.679.4999

MGA (Twin Cam)

Classic British sports car with genuine competition pedigree

Price new: *£1195 7s 6d (1959 Twin Cam)* ***Price now:*** *£50,000 (Twin Cam road car)* ***Rivals:*** *Austin Healey 100/4, Triumph TR3, Alfa Romeo 2000 Spider* ***Heritage:*** *Gorgeous roadster and coupé that put MG on the post-war sports car map; raced & rallied with considerable success*

LAT

You might consider the MGA little more than a pretty face, but the story behind those timeless looks reveals perhaps unexpected competition breeding and a direct bloodline to a streamlined racer built for Le Mans in 1951.

Known as EX172, the car that inspired the MGA was based on the more traditional TD, variations of which had remained at the core of the brand's post-war product line-up and racing activities. MG badly needed to modernise and, while EX172 was flawed - the driving position was too high and the engine didn't stay the course - the 'Safety Fast' benefits of its aerodynamic design and inherent good looks were too good to ignore. By placing the seats between rather than on top of the chassis rails, MG had the foundations for a more modern-looking car on which its revival could be built.

Launched in 1955, the MGA was immediately well received and produced in roadster and coupé variants, both powered by a 72bhp 1.5-litre engine. Commentating on the latter on these pages in 1959, Bill Boddy mentioned "the MG tradition" and summed the A up as "a safe, fast car, with first-class handling, excellent brakes and decidedly useful performance" while noting that it was "by no means inadequate for club sprints and races".

And race it did, the MGA competing at Le Mans in 1955 and the TT, where it featured upgrades such as disc brakes and a new 110bhp twin-cam engine. Factory-supported privateers also enjoyed success at Sebring, motor sport helping to establish the US as a vital export market.

By 1959 the Twin Cam had been developed into a production model, transforming performance from "adequate to potent" according to contemporary testers. It proved a troublesome and unreliable road car though, the vast majority of the 100,000-plus MGAs ultimately being powered by 1500 (and later 1600) versions of the standard B-series engine. Subsequent MkIIs featured an improved 1622cc motor with 90bhp, but were more traditional tourers than out-and-out sports cars. That image might have come to define the MGA in later years but, at its heart, it's more of a racer than most people realise.

SPEAKING TO JAMES COTTINGHAM

DK Engineering is a Ferrari specialist, but its team knows a thing or two about MGs

I've got a big soft spot for works BMC racing cars - having owned and raced an MGB for nearly 10 years I know how much fun they can be. MGAs are quick, too, and while racing versions are a lot more than a road car you only have to look at the values of original Lightweight E-types compared with standard ones to see its worth. With proper maintenance the Twin Cam is reliable, too. If you are an MG fan you'll realise cars like this are very, very special and relatively affordable given the history. I think this one will be bought by someone who wants to compete.

DUNCAN HAMILTON ROFGO

1964 CHEVROLET CORVETTE STINGRAY
Famous ex-V.V. Cooke Racing/ Allan Barker multiple SCCA Championship winning car. Huge period history, and highly developed in historics. Ready for Goodwood Revival's RAC Tourist Trophy and other prestigious European and American events.

1976 CHEVRON B36
5-time Le Mans entrant (1976-1980) including class win in 1980. Immaculate CER championship winning car with continuous history. Race ready with current HTP papers - potential 2018 Le Mans Classic winning car.

+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 FROM OUR CURRENT STOCK

2016 McLAREN P1 GTR

- 1 of only 58 P1 GTR's ever produced
- Road converted and U.K. registered by Lanzante
- A 1 owner example with only 850m from new
- Specified in the iconic Lark livery
- Some special features
- Incredible performance

£POA

1965 FERRARI 275 GTS RHD
1 of only 14 U.K. right-hand drive cars, total matching numbers, complete with a tool roll & great history file, Ferrari Classiche certified, elegance personified..... **£POA**

2013 PAGANI HUAYRA RHD
Many special features, 1 of only 100 Huayras ever produced worldwide & 1 of only 4 U.K. right-hand drive examples, 2,472m & FSH from new ..... **£POA**

1963 FERRARI 250 GT LUSSO
Original colours, matching numbers, fresh from a 2 year nut-&-bolt restoration by marque specialists Bob Houghton, an exceptional example ..... **£POA**

2000 ASTON MARTIN V8 VANTAGE V600 LE MANS 1 of only 40 ever produced, only 1,440m from new, exceptional throughout & complete with its original invoice, handbook & spare key ..... **£POA**

1989 ASTON MARTIN V8 ZAGATO VOLANTE Unique colour, special order seats, ex-Patrick Collection, only 3,800m from new, very rare right-hand drive & automatic example..... **£POA**

1979 ASTON MARTIN V8 VANTAGE 'OSCAR INDIA' Recent nut-&-bolt restoration & engine rebuild by R.S. Williams, full history, exceptionally presented, highly desirable..... **£POA**

Telephone: **+44 (0)1283 761119**

TOM HARTLEY JNR

EXQUISITE CLASSIC & PERFORMANCE CARS

BUGATTI VEYRON, THE MOST UNDERVALUED CAR IN THE WORLD!

2007 BUGATTI VEYRON

Only 674m from new, a U.K. supplied example that's recently been serviced & tyres replaced. Complete with its original owners manual/service booklet, spare key, speed key, PDA & battery conditioner. Indistinguishable from new!

£POA

2008 BUGATTI VEYRON

1 owner (that owner being of British nobility), 14,744m from new with FSH. Complete with its original owners manual/service booklet, spare key, speed key, PDA, battery conditioner & comprehensive history file.

£POA

2007 BUGATTI VEYRON

Stunning colour combination, 11,600m from new that's recently been serviced & tyres replaced. As new condition throughout, complete with its original owners manual/service booklet, spare key, speed key, PDA & battery conditioner.

£POA

WE ARE ALWAYS LOOKING TO BUY SIMILAR VEHICLES

Call today for an instant quote and decision

www.tomhartleyjnr.com

williamloughran

– THE LEADING SPECIALIST IN SOURCING THE RARE AND UNOBTAINABLE –

2006 MERCEDES SLR MCLAREN

Silver with Black Leather and Red Stitching, Full McLaren service history, Carbon Ceramic brakes and a tracker, 20,425 miles. **£259,950**

2005 FERRARI SUPERAMERICA (LHD)

Rosso Corsa with Nero Leather interior, HTC handling Pack, Daytona Style Seats, Yellow Rev counter, 7,644 km. **£395,000**

2011 ASTON MARTIN DBS CARBON BLACK EDITION

Carbon Black with Black Leather, Piano Black wood, 20" Gloss Black Alloys B & O sound system, 18,500 miles. **£112,950**

2015 PORSCHE 991 GT3 (LHD)

White with Black Alcantara interior, Clubsport Package, Roll Cage, Front Axel lift system, Sports seats, 126 miles. **£129,950**

2015 PORSCHE CAYMAN GT4

White with Black, Clubsport Package, 6 point harness, 20" Matt Black Alloys, Dynamic Cornering Light function, 396 miles. **£89,950**

WILLIAM LOUGHRAN ARE ALWAYS INTERESTED IN PURCHASING LUXURY, CLASSIC AND SUPERCARS. CONTACT ONE OF OUR SPECIALISTS.

+44 (0) 1772 613 114 // sales@williamloughran.co.uk // www.williamloughran.co.uk

ESTABLISHED OVER 40 YEARS

TOM HARTLEY

THE ULTIMATE NAME DEALING IN LUXURY, PERFORMANCE & CLASSIC CARS

OVER 60 SUPERCARS IN OUR INVENTORY

FERRARI & LAMBORGHINI

63	**LAFERRARI** Rosso Corsa/Nero Alcantara, Matte Black Alloy Wheels, Nero Roof, Front Suspension Lift, Carbon Fibre Mirrors, Sat Nav, Sports Exhaust, 4 Point Racing Harness, 5,800m	**£2,195,000**
04	**ENZO** Rosso Corsa/Rosso Leather Race Seats, Yellow Dial, Classiche Certified, 3,700m FSH, Best Example In the World	**£2,000,000**
15	**458 SPECIALE** Rosso Corsa/Nero/Rosso Tessuto Alcantara, NART Stripe, 20" Forged Gold Rims, R'Camera, Sat Nav, 600m From New, 1 Owner, As New	**£341,950**
62	**458 SPIDER** Grigio Silverstone/Sabia E/Seats, Sat Nav, Carbon S/Wheel With LEDs, Carbon Interior, Carbon Rear Moulding, 20" Forged Alloys, 20,000m FSH	**£159,950**
62	**458 ITALIA** Silver/Rosso Hide, 20' Sports Alloys, Full E/Seats, Chromed Exhaust Pipes, Nero Roof, Central Tunnel In Rosso, Ferrari 7 Year Service Pk, 15,000m	**£149,950**
03	**360 CHALLENGE STRADALE LHD** Bianco Avus/Blue & Black Alcantara Racing Seats, Carbon Interior, 12,000m FSH, Immaculate	**£164,950**
08	**430 SCUDERIA** Rosso Corsa/Black Tessuto Alcantara, 4 Point Safety Harness, Nav System, Carbon Steering Wheel With LEDs, Handley Fire Extinguisher, NART Racing Stripe, Carbon Racing Seats, 16,000m	**£184,950**
54	**360 SPIDER MANUAL** Rosso Corsa/Nero Hide With Red Piping, Red Carpets, Challenge Rear Grille, 1,200m, 1 Owner, Just Serviced, The Very Best Available	**£139,950**
67	**HURACAN LP 640-4 PERFORMANTE** Grigio Titans/Black & Red Alcantara, Racing Carbon Seats, Front Lifting, Carbon Ceramic Brakes, R'Camera, LDS, Branding Pk, NEW, Del Miles	**£289,950**
15	**HURACAN LP 610-4** Verde Mantis/Black Leather, Front Lifting System, Coloured Stitching, Sports Exhaust With Style Pk, Italia Decals, Giano Rims In Black, 2,500m, Stunning	**£159,950**
63	**AVENTADOR ROADSTER LP700-4** Grigio Estoque/Black Leather, Full E/Seats, Grigio Alloys, Sat Nav, Orange Brake Calipers, 3,000m, As New	**£254,950**
14	**AVENTADOR ROADSTER LP700-4** Black/Black Leather Stitched Red, Capristo Exhaust, Carbon Interior, 20"/21" Dione Forged Alloys, DMC Carbon Exterior Pk, RHD, 6,000m, Stunning	**£264,950**

CLASSICS

1995	**FERRARI 512M** Rosso/Crèma, E/Windows, 1 Of Only 41 RHD UK Cars, Great History File, 3 Owners, 38,000m FSH, Perfect	**£229,950**
1988	**FERRARI TESTAROSSA** Rosso/Black Hide, E/Windows, 7,000m FFSH, Just Had Major Service With Graypaul Ferrari, Immaculate Condition Throughout	**£179,950**
1998	**FERRARI TESTAROSSA** Rosso/Black Daytona Seats With Rosso Inserts, E/Windows, 1 Of Only 438 RHD UK Cars, 23,000m FFSH, Immaculate Condition Throughout	**£139,950**
1991	**FERRARI TESTAROSSA** Argento Nürburgring/Black, E/Windows, 1 Of Only 438 RHD UK Cars, 2 Owners, 41,000m, Just Serviced	**£119,950**
1988	**FERRARI 328 GTS** Rosso Corsa/Crèma Hide, Rear AeroFoil, Rosso Carpets, UK Supplied, Only 5,400m, As New	**£159,950**
1983	**LAMBORGHINI JALPA P350 TARGA** Red/Cream, 1 Of 35 RHD Cars, Featured In Many Articles, Original Tools, Books & Spare Wheels, Award-Winning Example, 40,000m	**£99,950**

ROLLS ROYCE & BENTLEY

13	**PHANTOM SERIES II** Diamond Black/ Seashell Hide, Sliding Roof, Rear Theatre, TV, Visible Exhausts, Camera Pk With Top View, 6 DVD Changer, Dynamic Pk, 9,000m	**£189,950**
16	**DAWN** Dark Tungsten/Jubilee Silver/Mandarin Leather, 21" Full Polished Alloys, Wood Decking, Wood Interior Panelling, Mandarin Coachline, Black Hood, Night Vision, Bespoke Audio, Launch Spec, 13,000m	**£224,950**
11	**PHANTOM** Darkest Tungsten/Light Grey Hide, 21" Part Polished Alloy Wheels, Sliding/Tilting Sunroof, Rear Lounge, TV Function, Visible Exhausts, F'& R'Camera System, 37,000m, Stunning	**£139,950**
17	**CONTINENTAL GT V8 S** Anthracite/Linen & Beluga Hide, 21" Limited Edition Black Alloys, Mulliner Spec, R'Camera, Alcantara Headlining, 14 Way Memory Seats, Contrast Stitching, As New, 2,500m	**£119,950**
16	**BENTAYGA 6.0 W12** Hallmark/Linen & Beluga Hide, Touring Spec/City Spec, 22" Polished Directional Alloys, Bentley Carbon Exterior Pk, 22 Way Memory Seats With Massage, Massive Spec, 12,000m	**£129,950**

PORSCHE

54	**CARRERA GT** GT Silver/Ascot Brown Leather, Bucket Seats, Luggage Set, Air Con, Porsche Online Pro Radio, Full History File, Totally As New, 599m From New	**£POA**
63	**991 TURBO S** Wrapped Nardo Grey (Jet Black)/Agate Grey Leather, Electric Tilt & Slide Sunroof, 18 Way Memory Seats, Sport Chrono Package Plus, BOSE, TV Tuner, 27,000m, Stunning	**£96,950**
65	**991 GT3 RS 4.0 LHD** GT Silver/Black Alcantara & Leather, 918 Spyder Bucket Seats, RS Pedals, FI Exhaust, Clubsport Pk, PCCB, Front Lift, Dynamic Engine Mounts, Massive Spec, 4,500m	**£179,950**
66	**991 GT3 RS 4.0 LHD** Lava Orange/Orange Alcantara & Black Leather, Silky Black Alloys, PCCB, Front Axel Lift, 918 Bucket Seats, Sports Exhaust, Michelin Decals On Tyres, Sports Exhaust, 8,000m	**£174,950**
17	**MACAN GTS** White With Black Leather & Alcantara, PCM With Navigation, Panoramic Roof, Carbon Fibre Interior Pk, 21" Sport Classic Alloy Wheels, R'Camera, Switchable Sports Exhaust, 1,500m, As New	**£69,950**
17	**991 CARRERA 4S CABRIOLET** White/Bordeaux Red Leather, 20" Grey RS Spyder Alloys, Sport Chrono Plus, Navigation, PASM, Sports Exhaust System, 4 Way E/Seats, E/Wind Deflector, 3,000m, As New	**£106,950**

OTHERS

14	**McLAREN P1** Volcano Yellow/Black Alcantara & Leather, Exposed Carbon Exterior, 20" Lightweight Alloys In Stealth, Carbon Roof Snorkel, Meridian Sound System, UK Supplied, 1 Owner, 1,500m	**£1,495,000**
17	**McLAREN 720S LAUNCH EDITION** Glacier White/Black Leather, Lux Spec, Carbon Fibre Upgrade Pk 1, Front Lift, Visual Carbon Structure, Soft Close Doors, Carbon Fibre Intakes, Carbon Fibre Structure	**£244,950**
66	**McLAREN 675LT SPIDER** Chicane Grey/Black Alcantara, Carbon Wing Louvres, Carbon Steering Wheel, Visual Carbon Airbrake, Carbon Wiper System, Carbon Side Vents, E/H/Seats, £362K List, 1,100m	**£309,950**
17	**McLAREN 675LT SPIDER** Napier Green/Black Leather & Alcantara, Super Lightweight Forged Alloy Wheels, R'Camera, MSO Napier Green Switches, Front Lift, MSO Carbon Exterior Upgrade, Del Miles	**£314,950**
67	**McLAREN 570S SPIDER** Ventura Orange/Black & Orange Alcantara, Front Lift, Super Lightweight Alloys In Stealth, R'Camera, Luxury Pk, Orange Brake Calipers, As New, 200m	**£189,950**
65	**McLAREN 650S LHD** Brilliant Silver/McLaren Orange, Sat Nav, Parking Sensors, Carbon Side Intakes, Great Spec, Delivery Mileage	**£139,950**
05	**TVR SAGARIS** Midas Pearl Yellow/Black Leather, 18" Spider Alloy Wheels In Black, Sat Nav, Aluminium Stalks, Clear Spoiler, Fibreglass Shell, Superb Example, 1 Of 200 Made, 53,000m	**£59,950**
16	**ASTON MARTIN V12 VANTAGE S SPITFIRE 80 EDITION** Duxford Green/Tan Leather, 1 Of 8 Worldwide, Tribute To The RAF Supermarine Spitfire 80th Anniversary, 680m, As New, Great Investment	**£249,950**
59	**ASTON MARTIN V12 VANTAGE** Onyx Black/Obsidian Black Leather, 700W Aston Martin Premium Sound System, Silver Contrast Stitching, 10 Spoke Alloys, Full AM Service History, 22,000m	**£79,950**
15	**ASTON MARTIN V8 VANTAGE** Matte Grey (Sunburst Yellow) Wrapped/Black Leather, Sat Nav, Yellow Calipers, Bluetooth, 19" Black DT V Spoke Alloys, Comfort Suspension, Yellow Stitching, 3,800m, As New	**£59,950**
13	**ASTON MARTIN DB9 VOLANTE** Meteorite Silver/Sandstorm Leather, 20" 5 Spoke Alloys, R'Camera, H/Seats, Wind Deflector, Black Hood, Comfort Suspension 28,000m	**£79,950**
67	**MERCEDES-BENZ AMG GTR** Matte Designo Selanite Grey Magno/Black Nappa Leather & Dinamica, VAT Q, Premium Pk, Memory Pk, R'Camera, Burmester Sound, Delivery Miles, As New	**£174,950**
14	**MERCEDES-BENZ SLS BLACK SERIES LHD** Designo Mystic White/ Black Leather & Alcantara, 1 Of 150 Worldwide, AMG Performance Seats, Ceramic Brakes, R'Camera, COMAND With Nav, 1,600m	**£419,950**
61	**MERCEDES-BENZ SLS** Matte Designo Allanite Grey Magno/Classic Red Designo Leather, Black Twin Spoke Alloys, COMAND With Nav, Carbon Interior Pk, R'Camera, Immaculate, 31,000m	**£144,950**
61	**MERCEDES-BENZ SLS ROADSTER** Obsidian Black/Saffron, Sat Nav, R'Camera, Airscarf, Blind Spot Assist, 10,000m FSH, As New	**£144,950**
66	**MERCEDES-BENZ G63 AMG** Palladium Silver/Black Leather, Designo Exclusive Pk, Rear Entertainment, Sunroof, Harman Kardon Sound System, Privacy Glass, TV Tuner, 6,000m, As New	**£109,950**
66	**BMW M4 GTS** Alpine White/Black Alcantara, Clubsport Package, Carbon Fibre Interior Pk, Racing Bucket Seats, Professional Navigation, 1 Of 300 Made, 1,500m, As New	**£119,950**
67	**RANGE ROVER SPORT AUTOB. DYN. 5.0L** Santorini Black/Black Leather, Side Steps, Rear Entertainment, Black Pk, 22" Black Alloys, Panoramic Roof, Meridian Sound System, 1,800m, As New	**£77,950**

WE ALWAYS PAY MORE FOR YOUR CAR & WILL COLLECT TODAY

Telephone: +44 (0)1283 762762 Email: info@tomhartley.com www.tomhartley.com

Follow us: @TomHartleyCars TomHartley

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

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

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! **£109,950**

1996 PORSCHE 993 CARRERA 2 CABRIOLET. Carrera 2 Cabriolet RHD 6 speed manuel. Iris blue with marble grey leather trim. Blue power hood, air cond, Cup Alloys, teardrop mirrors, 35,000 miles only with full documented history. Stunning and original example. **£69,950**

2007 BENTLEY CONTINENTAL GTC. Masons black with tan leather and dark wood. Mega spec, 2 owners and 44,000 miles only. Superb unmarked original car. Stunning **£44,950**

1958 BENTLEY S1. Oxford Blue with red leather trim. Original RHD example with factory power steering. Sold by us to its last owner, a superb and immaculate low mileage example. **£49,950**

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.. ..... **£179,950**

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. **£22,950**

2008 FERRARI 599 GTB FIORANO F1. Grigio Silverstone with Grigio Scuro leatherTrim, massive spec includes, 20"alloys, yellow callipers, carbon fibre brakes, Daytona style trim, wing shields, Bose HiFi system. 16,900 miles, one previous owner, full documented history. Superb throughout, utterly stunning....**£125,950**

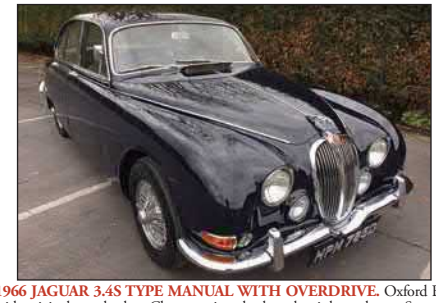
2007 FERRARI 430 F1 COUPE. Rosso Corsa with creamer and red stitching. Red callipers, wing shields, carbon dash. Plus, one previous owner and 11,900 miles only. Full main dealer history and just serviced. As new.. ..... **£107,950**

1966 FORD MUSTANG 289 Auto with power steering, and power hood. Matching numbers two owner car with 52,000 genuine miles. Correct colour combination and restored by Leading specialist to concours standards. The best we think in the Uk today..... **£49,950**

1982 MERCEDES 280SL W107 SPORTS. Milan brown with beige tex trim. Hard and soft tops. Mexican hat Alloys, and 2 owners with only 44,000 miles Only from new. A mint and original, time warp motorcar..... ..... **£39950**

1970 PORSCHE 911 2.2E LHD. (rebuild to Full RS/ST specification). This is the finest recreation we have ever seen, build on a genuine 1970 chassis. Fitted 3.0 RS spec engine on carbs. C 230 BHP. The car looks and drives as new. Please Contact us For full details or view our website..... **£139,950**

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**



1966 JAGUAR 3.4S TYPE MANUAL WITH OVERDRIVE. Oxford Blue with original grey leather. Chrome wire wheels and stainless exhaust. Stunning original matching numbers RHD low mileage, time warp, example. All books, tools, etc **£34,950**

1967 ALFA ROMEO 1600 DUETTO SPIDER. LHD, Rosso with black trim and black mohair hood., stunning original rust free example. Spent all its life until recently in California..... **£38,950**

2009 CATERHAM 7 CLASSIC. 1400 K series, black and alloy, minilite wheels, roll bar, full weather equipment. Never registered. As NEW less than 2 miles..... **£19,950**

www.classiccarshop.co.uk

ASTON MARTIN SPECIALISTS
NICHOLAS MEE
& COMPANY LTD

ASTON MARTIN
HERITAGE

A SELECTION OF OUR CURRENT STOCK:

2010 Aston Martin Vantage GT2 £299,950

The Vantage GT2 was launched in 2008 to compete in series such as the FIA GT Championship, ELMS, Asian and AMLS and of course, the Le Mans 24 Hours itself. Based heavily on the Vantage road car, just 10 Vantage GT2s were built before evolving to become the Vantage GTE in 2012.

The car we now offer, chassis GT2-007 was built by Aston Martin Racing in 2010 and raced in the 'GT Open' category in that year. GT2-007 sat out the 2011 season but was back in action in 2012 where it entered the AMR Festival event at Le Mans. It completed the race without incident to score a commanding victory, finishing more than a minute ahead of the next car.

Since acquisition in 2015 the current owner has had the car professionally prepared including a full engine rebuild by Prodrive and had a new gearbox. Vantage GT2-007's last outing was at Spa in September 2017 where it competed in the inaugural round of the Masters Endurance Legends, where it finished first in class.

Now offered in race ready condition with both engine and gearbox mileage being at a minimum having only been used for one day of testing and race win at Spa. The Vantage GT2 is eligible for the Masters Endurance Legends series, confirmed for 2018 and the 2018 AMR Festival at the Le Mans 24 hours.

All the equipment required to run the GT2 is supplied with the car, comprising of a laptop; data cable; air jack connector; and a water heater to warm the engine for starting from cold. Accompanying the car is a substantial spare parts package, the full details of which are available on request.

2000 Aston Martin Vantage Le Mans £475,000

2016 Aston Martin Vantage GT 12 £425,000

www.nicholasmee.co.uk Telephone: 0208 741 8822 Email: info@nicholasmee.co.uk

RMD

Our passion is classic competition cars

1974 Porsche 911 RS 3.0

(911 460 9018)

Ex Max Moritz with extensive race history incl. Le Mans 24hr. Fully restored, matching numbers and well documented. Exceptional!

P.O.A.

1969 Lola T70 Mk3B factory continuation (HU76/160)

The 2nd of six built by Lola Ltd. Two owners from new. Completely overhauled and in fresh, race ready condition. Good spares and 2016 HTP.

P.O.A.

1976 March 761/04

Ex-Arturio Merzario 1976 F1 championship car. Genuine, no-stories 761 with documented history. Fresh, on-the-button and entered for 2018 Monaco HGP.

P.O.A.

1976 Wolf-Willams FW05/3

Unique and stunning Williams F1. Ex- Jacky Ickx & Arturo Merzario. Race- ready with fresh crack testing. Very eligible and winning car for Monaco HGP 2018.

P.O.A.

1968 Lola T70 Mk3 (SL73/128)

"Simoniz Racing" Mk3 with excellent provenance. Race-ready and fully sorted w/ coupe & spyder bodywork. 2017 FIA HTP and good spares. Eligible everywhere.

P.O.A.

1972 De Tomaso Pantera Gr4 (#2858)

One of only 14 genuine Gr4 Pantera's. Well documented history with long-term ownership. Race-ready with current FIA HTP and good spares. A rare opportunity!

P.O.A.

1971 Ford Capri 2600 RS

Well known and iconic Capri. 2017 Peter Auto HTC championship winner. Sold in race-ready condition with current FIA HTP and spares.

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

Graber

GRABER SPORTGARAGE AG

1999 Courage C52

24H le Mans in 1999

Chassis C52 #02 was built by Courage for Nissan Motorsport, Japan. The engine used was a Nissan VRH 35Z with 3.5L Twin-Turbo. The body is in Carbon fiber-Kevlar and the chassis is in Carbon fiber/honeycomb from Dassault System Technology. The engine has an output of 700 Bhp at 6800 Rpm and the car was measured at 332 Km/h in Le Mans in 1999. The brakes are from Brembo and the transmission is a Nissan X-Track 6 speed sequential gearbox.
The C52's have taken impressive 6th and 8th places at the 24 Hours of Le Mans in 1999.
This car, starting No. 21 (Chassis #02) was driven by Didier Cottaz (F), Fredrick Ekblom (S) and Marc Goossens (B) to an excellent 8th place after beeing 16th on the starting grid. The car is completely restored and in race ready „on the button" condition. **EUR 345'000** (with EU Tax paid)

1981 Porsche 924 Carrera GTR

One of only 17 Porsche 924 Carrera GTR produced (No 006). This car drove 61 IMSA races between 1981 and 1989. It was delivered directly from Porsche to Tom Winters in 1981. The engine was completely rebuilt in late 2016 and the car is ready to race on the button. New FIA HTP (valid until end 2026). A huge number of spare parts come with the car (engine, turbo, gearbox, gears, wheels etc.) The car is eligible for Peter's Auto CER "Classic Endurance Racing", Le Mans Classic and many other events. Fully documented history.
EUR 595'000

1995 Porsche 993 GT/2 EVO Race Car

Porsche 993 GT/2 with period Race History in ADAC GT, BPR and FIA GT Championship.
Chassis W09POT212SDM13002.
1995 Built by Mamerow Automobiltechnik in Germany. The car was used for show purposes and track days since 1998. Comprehensively restored in 2002-2003 and updated to the latest GT2 period specs. Engine has only 6 hours since restoration. The car is now fully serviced with new FIA Fuel Tank and ready to drive or race on the button. Swiss Form 13.20 (Swiss Tax paid).
EUR 395'000

Graber Sportgarage AG • 3125 Toffen / Switzerland • ch.traber@grabersportgarage.ch

ART & REVS

The Fine Automobiles Gallery

Ferrari F50

8500km, Classiche, immaculate and never repainted.

Ferrari F40

Completely serviced, full history from new, fantastic driver.

Tyrrell 010

Ex. Jarier & Daly, race ready and multiple winner in FIA F1 Historic

Cortina Lotus

FIA prepared to the highest specifications, only 2 hours since.

Porsche 962

Chassis 162, 3.2 liter, engine and gearbox 2h, all original in every detail.

Matra MS630

First continuation car built at EPAF. FIA papers and ready to race.

Arrows A11C : 1991 ex. Alboreto, originally fitted with Porsche V10, now on Cosworth
Chrysler Viper GTS-R : 2000 ORECA factory car, glorious history including Le Mans
Ferrari 360 GT : Chassis 000M, the very first of modern Michelotto cars, extensive history
Jaguar E-Type 3.8 : concourse restoration, black on red interior, full report available
Mercedes SLS GT3 : excellent condition car, ready to race, comes with spares package
Porsche 964 RS : 21000 km, silver, excellent condition, fully serviced
Porsche 997 4S : 52000km, grey, sport chrono plus, just serviced

ART & REVS – Howald, Luxembourg

www.artandrevs.com • contact@artandrevs.com • Tel: 00352 661 700 777 • Mobile: 00352 26 48 17 41

All the listed cars are located in our Showroom and visible only by appointment
We are always looking for similar cars do not hesitate to contact us if you wish to sell one

STEVE SOPER OFFERS HIS CORTINA LOTUS FOR SALE

THIS CAR HAS NEVER BEEN BEATEN BY ANY OTHER LOTUS CORTINA & I BELIEVE TO BE THE FASTEST FIA CORTINA AROUND

BUILT AND FULLY DEVELOPED FOR STEVE SOPER BY TEAM DYNAMICS, ARGUABLY THE BEST BTCC TEAM AROUND WINNING THE BTCC DRIVER'S CHAMPIONSHIP 6 TIMES AND THE CONSTRUCTOR'S CHAMPIONSHIP 4 TIMES. THIS CAR WAS BUILT UP FROM AN ACID DIPPED SHELL & FINISHED APRIL 2017 WITH ALL NEW PARTS WHERE POSSIBLE, UNDER WEIGHT NEEDING BALLAST, NEIL BROWN ENGINE JUST REBUILT, A FRAME REAR END, FUEL BAG TANK, BTB STAINLESS STEEL EXHAUSTS, RACELOGIC, QUAIFE STRAIGHT CUT GEAR KIT, QUAIFE HALF SHAFTS, NEW FULL FIA HTP PAPERS, COMPETED IN ONLY 6 EVENTS SINCE BUILT.

RESULTS

Finished 2nd in U2TC Championship only 2 points behind the Banks Brothers winning Alfa

APRIL 28-29 2017	U2TC DONINGTON PARK FESTIVAL UK	**2nd in BOTH RACES**
JUNE 17-18 2017	MASTERS CHAMPIONSHIP SILVERSTONE GP UK	**OVERALL POLE**
JULY 28-29 2017	U2TC CHAMPIONSHIP SILVERSTONE CLASSICS UK	**OVERALL POLE**
SEPT 1-2 2017	MASTERS CHAMPIONSHIP ZANDVOORT HOLLAND	**Started 36th and won 1st OVERALL in Masters**
SEPT 16-17 2017	U2TC CHAMPIONSHIP SPA BELGIUM	**2nd in BOTH RACES**
OCT 28-29 2017	U2TC CHAMPIONSHIP PORTIMAO PORTUGAL	**1st in RACE 2 & 2nd in RACE 1**

SUITABLE FOR 2018 U2TC, MASTERS, HSCC, HRDC, and GOODWOOD REVIVAL

£150,000 (NO TIME WASTERS)

Contact **STEVE SOPER** on email **sopersteve@gmail.com**
or **James Rodgers at Team Dynamics + 44 (0)1905 793800**

IVAN DUTTON LTD

SALON AT RETRO MOBILE

We will be at Retromobile 7th – 10th February 2018 Paris Expo

Come and visit us on our extended stand in Hall 1 for show specials and a selection of sale cars

STOP PRESS

Ivan Dutton Ltd are proud to have supported the Bugatti Owners Club with 5 of our customers cars on the award winning stand at the NEC Classic Car Show

Peacehaven Farm, Worminghall Road, Ickford, Bucks, HP189JE

Tel: 01844 339457 • Fax: 01844 338933 • Ten minutes from M40 Junction 8a • www.duttonbugatti.co.uk

1988 SPICE C2 SE88C

Originally owned by Jean-Louis RICCI, the car took part to the whole 1988/1989. Group C2 World Sport Championship, driven by Jean-Louis RICCI and Claude BALLOT-LENA joined by Jean-Claude ANDRUET for the 1988 24 Hours of Le Mans. Race ready in C2 SPEC 3,3 DFL (2hours) and always maintained by top team MEC Auto. Perfect entrant for Le MANS CLASSIC 2018

1961 ASTON MARTIN DB4 S4

Delivered new in France by MIRABEAU the French importer. Only three owners from new. Restored to a very high level in matching black pearl. Matching engine and gearbox with OD, The incredible sound of the engine, the elegant shape of its body, make this left hand drive DB4 one of the most desirable GT cars of the 60's.

1966 PORSCHE Carrera 6

One of only 65 Carrera 6 built, Ex-Targa Florio, 12 heures de Reims, 1000 km de Francorchamps. Ex-Mike de Udy / Porsche Cars GB. Long racing history in the U.K., Germany, France, Italy and South Africa. Original Type 901/20 engine, original gearbox and chassis. Ready for immediate delivery

FINE CLASSIC, RACING & Historic Cars

WWW.HISTORICCARS.FR

We will be present at Retromobile 2018 come and say hello stand 1 S 131

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

MG Metro 6R4 - Ex-Colin McRae

This is the original MG Metro 6R4 that Colin McRae bought on retirement from the WRC. A former National rally winning car that Colin bought for his own enjoyment, once freed from works contracts. He used it for Course Car duties during the 1998 Colin McRae Stages and was featured on Motors TV.

Very rarely can a 6R4 be seen driven in anger with such skill and control. It is no suprise that Colin McRae was voted the 'Ultimate British Driver' by the readers of Motorsport News 2014. Colin's stature and reputation make him known worldwide by a much broader audience than just Rally fans. An household name that will never be forgotten.

After using it for Course car duties the car unfortunately caught fire whilst Colin was working on it in his garage.

6R4.com have recently completed a full bare metal, ground up restoration and the car is now in Tarmac Specification.

A genuine 6R4 that is also road registered and having excellent provable provenance. It has the original V5 document verifying Colin Steele McRae as a previous owner.

Reluctant sale due to the continued investment and development of 6R4.com

£450,000 ono

Part exchange considered - F1, 6R4, etc...

For further information please contact Dr Ian Rowlance

Tel: +(44) 1942 676077

Email: sales@6r4.com • Web: www.6R4.com

Melvyn Rutter Limited

International Morgan Sales, Service, Parts and Restoration for Morgan Cars from 1936 to Present Day

MAIN DEALER

2016 ROADSTER – £59,950

One owner car supplied by us, only 1200 miles on the clock. Car has EVERY factory optional extra available to order plus more! Rolls Royce Georgian silver with Yarwood Imperial leather. 7" x 16" Stainless steel wire wheels. Maroon mohair hood pack. Walnut dash

2017 AERO - £99,750

6 spoke 18" alloy wheels in graphite with polished rims. 6 speed automatic gearbox. Diamond quilted leather on seat centres and door panels. Wood dash in Tawny. Heated seats. A/C. Footwell and toggle switch lighting in cool white. Silver wing and splitter cooling vent mesh.

MORGANS WANTED – PURCHASE FOR CASH

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

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

SPEEDMASTER

PLEASE CONTACT THE SALES TEAM AT SPEEDMASTER
T +44 (0)1937 220360 M +44(0)7768 800773
INFO@SPEEDMASTERCARS.COM
WWW.SPEEDMASTERCARS.COM

1980 Ensign N180 DFV F1 Car

Offered for sale the Ex Jan Lammers / Clay Regazzoni / Tiff Needel Ensign N180 complete with T Max Cosworth DVF Engine. The N180 was Ensign's entry for the 1980 F1 season where Mo Nunn's team utilised a similar ground effect concept to the highly successful Williams FW07 design. One of only 3 surviving chassis, this car was fully rebuilt over the winter of 2016/17 and was a podium finisher earlier this year. A recent race winner and front running Masters entry, this car has been entered into the Monaco Historic GP 2018. The car includes spares package and new HTP Papers.

Please call for further information.

1978 ARROWS FA1 - COSWORTH DFV FORMULA ONE CAR BUILT IN 1978, RECENTLY REBUILT, AND WITH 0 MILES RICHARDSON ENGINE, WITH NEW FIA PAPERS (IN PROCESS) AND SMALL SPARES PACKAGE, IDEAL ENTRY FOR MASTERS FIA FORMULA ONE OR USA F1 AND IS ELIGIBLE FOR MONACO HISTORIC GP IN 2018.

1972 FORD RS2600 RIGHT HAND DRIVE, FIA PAPERS, READY TO RACE, NEW BUILD IN 2017 £179,000

LOTUS CORTINA MK1 1965 COMPLETE AND READY TO RACE WITH SPARE WHEELS, AND UK REGISTRATION DOCUMENT. **£90,000**

1981 LOTUS 87 - FORD COSWORTH DFV. RACED BY NIGEL MANSELL IN HIS FIRST F1 SEASON. ELIGIBLE FOR MASTERS FIA F1 & MASTERS HGP IN EUROPE & THE USA. **P.O.A**

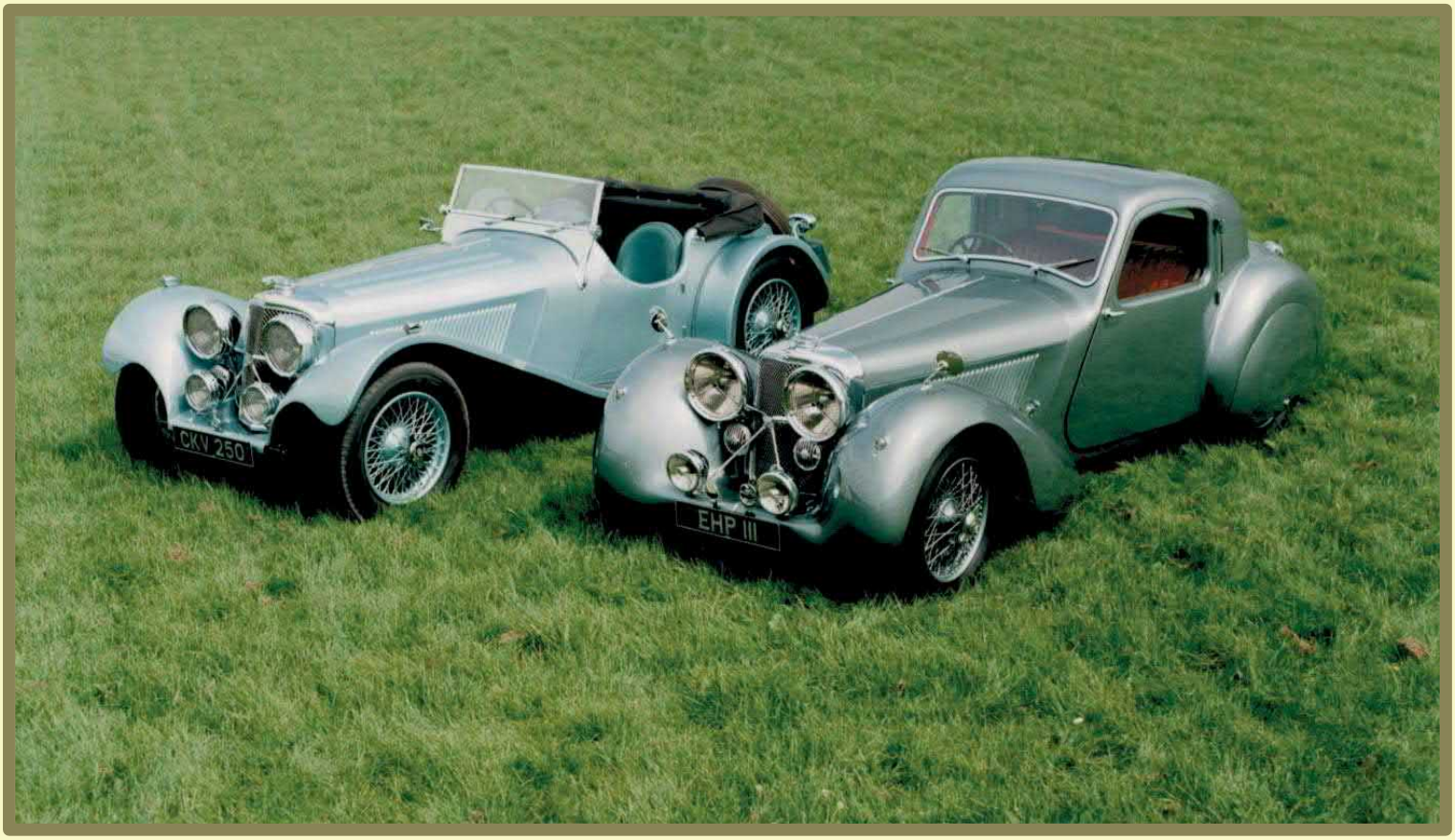
LOLA 210 - COSWORTH FVC EX K FOITEK, LE MANS CLASSIC ELIGIBLE, READY TO RACE £230,000

1974 FORD RS3100 LEFT HAND DRIVE, FIA PAPERS, GREAT SPARES PACKAGE, FRESH ENGINE REBUILD, SPARE ENGINE **£245,000**

MOTORS EUROPE

ZWAKMAN

The Dutch world of historic Jaguars



WWW.ZWAKMANMOTORS.COM

LIVING WITH COMPETITION CARS

GARAGISTA

THIS MONTH *HERITAGE TOURING CUP NEWCOMER NEARS COMPLETION • PEUGEOT V10 PARTS MORE EASILY FOUND THAN YOU'D THINK • MGB POST-SEASON HEALTH CHECK*

RACER REBUILD

Alfasud Sprint Veloce

Alfa racer Geoff Gordon's new project is now but a few decals away from completion, though testing will have to wait...

It's hard to describe the feeling when a 'new' racing car fires up for the first time - I know it's a 1979 model, but it feels new to me. In this instance it was definitely an early Christmas present. After its engine had been fitted and checked over briefly at Raceworks Motorsport, builder Dave Ashford took the Alfasud Sprint Veloce to Brunswick Racing's own premises near Ely for a much more exhaustive series of checks.

I was there on the first day it ran properly - and it sounded absolutely fantastic, as any racing Alfa should. The tests seemed to go well and I could tell from Dave's reaction that he was very pleased.

We were all confident that he'd do a good job, given his track record with Alfas, but this was the first time he'd dry-sumped an engine of this kind. I guess there was a slight note of trepidation, but that was soon allayed. The four-pot delivers good, usable power between 5000 and 8200rpm, which is fairly typical of Dave. He also prepared my Giulietta's engine and that has similar flexibility - which is always quite useful for the likes of me.

As a non-professional I suspect I'm not alone in occasionally finding myself in the wrong gear, but the Giulietta allows you to pull through such problems and it looks as though the 'Sud is set to do the same.

It ran faultlessly on the dyno for a couple of days, after which Dave hung onto the car for


CRUISE MATE
ROAD - A - MATIC XII
Sun
SERVICE EQUIPMENT

"Flexibility is quite useful for the likes of me. I suspect I'm not alone in occasionally finding myself in the wrong gear"

a short while to make a few tweaks to the dry sump and ensure that its ground clearance would be OK.

The 'Sud then went back to Raceworks and now has a full set of windows fitted - they're all acrylic except for the front screen, which has been especially made with a heating element to avoid misting. With each passing day it started to look ever more like a complete racing car and eventually all that remained was to apply the graphics to put the finishing touches to its red-and-white racing livery.

At that point we should have been able to start looking around for available test days, but then DC Electronics, which built the wiring loom, invited me to display the car on its stand at the London Classic Car Show, which runs at ExCeL in Docklands in mid-February.

That didn't necessarily prevent us from going testing, but to do so would potentially have caused a lot more work. If it had been raining we'd inevitably have faced a major clean-up job - and there was also the risk of gravel chips or other damage, so we felt discretion was the better part of valour and decided to push back the test programme. For the guys that have put everything together, it's nice that a wider audience will have the opportunity to appreciate their handiwork after so much patient endeavour.

Once the car is back from the show, we will look to start testing as soon as possible - which probably translates as the final week of February. We will almost certainly shake the car down at Donington Park and do most of our pre-season running there, but I should add that another key component also needs testing - me!

I have been keeping up a bit of fitness regime ahead of the new season and, as I'm unfamiliar with racing front-wheel-drive cars, I'm booking myself in for some one-to-one tuition with John Norrington, who has a vast amount of experience in a wide variety of cars and with drivers from right across the spectrum.

In all likelihood we'll be taking an Alfa Romeo 145 to a trackday at Snetterton and fitting it with an extra seat, so he can give me some direct coaching inside the car. The whole thing will be a completely new challenge for me and I'm really looking forward to it.

My first scheduled race is the opening round of Peter Auto's Heritage Touring Cup in the Espiritu de Montjuïc event at Barcelona on April 8-9, hopefully with Dickie Meaden co-driving, then we move on to Spa, Dijon-Prenois and Paul Ricard before the series concludes at Imola towards the end of October. As I have mentioned previously, we also intend to take in any non-clashing UK meetings that include a suitable category for the car - and hopefully that will include the Silverstone Classic.

I'm optimistic that we'll have done a reasonable amount of testing before the season gets into its stride.

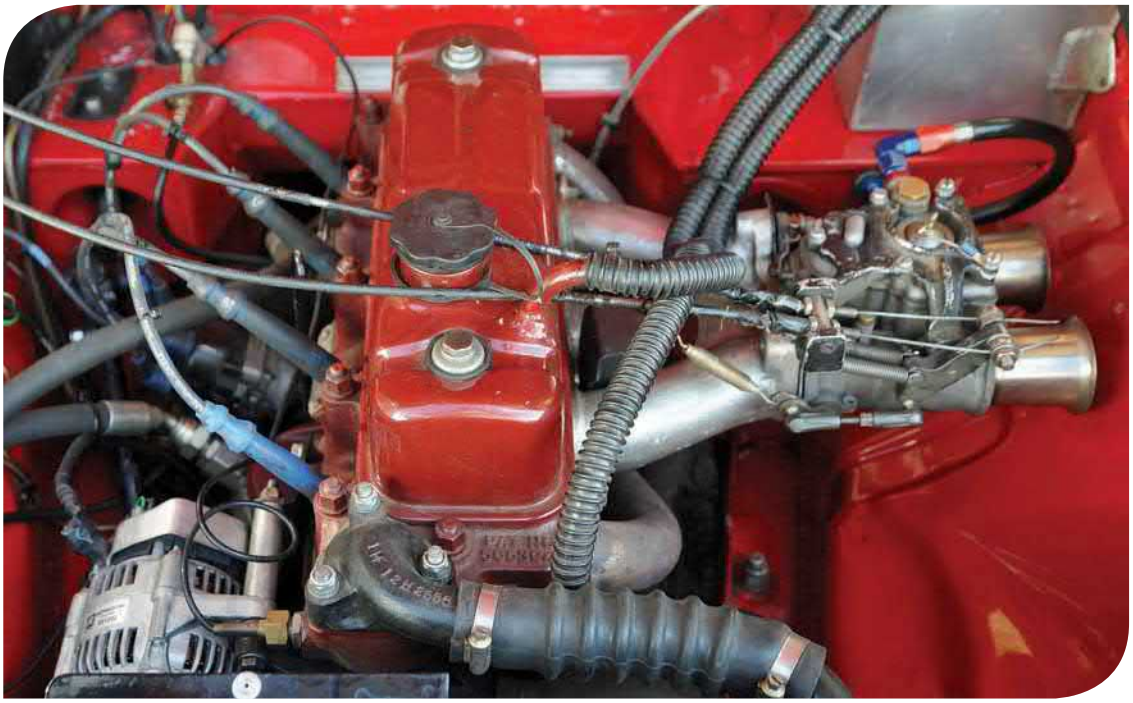
'Sud delivered promising results first time out on the rolling road. First track test is scheduled for late February, with debut race in April

Next month: ***first shots of the finished Alfasud***
Thanks to: ***Raceworks Motorsport, Brunswick Motorsport***

HISTORIC RACER

MGB Roadster

Time to put the MGB away and start saving up for the 2018 campaign? Not exactly, as Nick Trott explains



The winter season. As many club racers will know, this is a quiet time – where the car is tucked up, incurring no costs and resting peacefully until the new season arrives.

This is, of course, complete tosh! The off-season, it would appear, is nothing of the sort if the MGB is any barometer. Indeed the 'off' season seems to have the potential to cost more than the 'on' season...

BRX 855B raced infrequently before owner Ed Foster dug it out for 2017, so he always knew that winter would be important to analyse and tweak the car – if it survived the season, that is. Well, mechanically the car did survive – although the bodywork received some damage at an early event. Less obvious were any mechanical foibles, so regular fettler and race support Roy Gillingham took the car away for a health check.

This included leakage, compression and power tests on the engine, weighing the car, brake function and condition tests, half-shaft and bearing checks and a geometry analysis.

The good news? The car weighs 855kg – the lightest Roy (a racing MGB expert) has known. The bad news? Um...

Well, the engine has an air leak that's under investigation. We know this because the top MGBs produce 114bhp at the rear wheels and BRX, well, doesn't. On the rollers, the dial topped out at 94bhp. Of course, Ed and I immediately felt a lot better about our decidedly average 2017 results upon hearing this news. The plan is to fix the air leak and tune the engine as best we can without incurring the cost of a full rebuild. If we can find another 10 per cent we'll be happy (and hopefully closer to the sharp end).

We're also taking this opportunity to switch the rear to parabolic leaf springs – as used by the top racing MGBs. We have experienced a rather unstable rear end during racing, and in particular roll oversteer. Parabolic springs, which use two rather than multiple leaves, are a step towards improved stability.

And the brakes? It looks like we need new front calipers, and the system requires a general service – hopefully curing the struggles we had with inconsistent braking performance and feel in 2017.

Finally – the gearbox. Notoriously the Achilles heel in racing MGBs, we're looking at a full winter rebuild to ensure top performance and reliability throughout the 2018 season. And the price? Not sure yet – much depends on what's found in the gearbox and engine, how much time is required on the rollers and for the geometry set-up, but £4000-£5000 is a sensible estimate. For now...

Next month: ***Results from the engine tuning and general mechanical fettling***

Thanks to: ***www.chequeredflagclassics.co.uk, Ed Foster, www.equipegts.com***

KAAIMANS
INTERNATIONAL

WELCOME TO THE HOME OF ICONIC AUTOMOBILES

(44) 01949 833288 | info@kaaimans.com

2016 Aston Martin Vulcan
1 of only 24
£2,250,000 + VAT

2010 Rolls Royce Ghost
38,000m | £99,975

2016 McLaren 650S Spider
3,700m | £167,975

1972 Ferrari 246 GT 'Dino' RHD
52,000m | £329,975

2015 McLaren 650S Spider
3,500m | £164,975

1998 Lamborghini Diablo SV
16,000m | £249,975

1983 Lamborghini Countach 5000 'S' 1 of 23 UK RHD
5,000m | £449,975

1963 Jaguar E-Type 3.8 S1 Roadster
83,000m | £149,975

2014 Rolls Royce Wraith
8,000m | £174,975

2015 Bentley Continental GT V8 'S' Mulliner
14,000m | £92,500

2007 Bugatti Veyron 16.4
4,500m | £1,250,000

A selection of current stock

To buy, sell or part exchange call now: (44) 01949 833288

@kaaimansint

kaaimansinternational

WWW.KAAIMANS.COM

F1 RESTORATION

Jordan 195

Spares for a mid-1990s Peugeot F1 engine are easier to find than you might imagine – and Warren Stean's V10 is edging ever close to a dyno

The engine is the final part of my Jordan puzzle and has been with Engine Developments – better known by its Judd brand name – for a little while. It is a Peugeot A10, a 72-degree, three-litre V10 with four valves per cylinder, which weighs in at 133kg and gives a power output of about 730bhp with a 15,500rpm rev limit.

Peugeot entered F1 with McLaren in 1994, supplying a 3.5-litre V10 before the following year's regulation change, and then partnered Jordan for three years. Its engines were subsequently used by Prost and, with Asiatech badges, by Arrows and Minardi. The design originated in Peugeot's 905 Group C car, which won the Le Mans 24 Hours in 1992-1993 before the French manufacturer pulled out of sports car racing. Quite a few are still being used, so parts are available.

The engine had been run before I purchased the car, but it does look like it had done minimal work - most likely dyno time only. The first thing Judd did was bore scope and pressure test the engine. It passed all health checks, apart from the coolant system's ability to hold pressure. The air-valve system tested well, with minimum leakdown when fed with 16bar delivery pressure.

The coolant system failed to hold pressure due to corrosion of the pump casting/housing and a transfer pipe. These will be repaired using modern techniques to allow the castings to be reused. The engine is currently stripped down for a full inspection, which will allow us to validate that all components are serviceable, as well as enabling us to crack-test critical parts such as the crankshaft, rods and pistons.

This engine uses pneumatic valve actuation, but the original air-valve system (AVS) was missing from the car. Thankfully, many of the components are available from the original suppliers. The AVS is relatively simple but has to be 100 per cent reliable because a failure means one thing -a blown engine.

A one-litre bottle is used to hold compressed air at 220bar, a first-stage regulator reduces this pressure to 80bar and feeds a second-stage regulator that further reduces the pressure to the required 16-20 bar range.

Once the engine is complete and back with the car at Tour-de-Force Power Engineering, we will be able to undertake final assembly. The fuel cell and pumps have now been manufactured and fitted. We are replicating the original Jordan cell design, with a fuel lift pump in each rear corner of the cell feeding into a vertical cylindrical collector that will run slightly pressurised. This collector will feed the high-pressure fuel pump, which then delivers fuel through a bulkhead fitting to the fuel rail. The return from the rail is then fed back into the collector, meaning the lift pumps only ever have to replenish the fuel the engine uses rather than the total amount fed through the high-pressure pump.

I am still crossing everything that the engine passes all further tests without major drama. Time will tell, but I am hoping to have a freshly checked and rebuilt engine on the dyno within a couple of weeks.

Next month: ***Almost a quarter-century after it first raced in F1, the engine is back on the dyno***

Thanks to: ***Tour-de-Force Power Engineering, Bedford; Engine Developments, Rugby***

Directory

To advertise, please call William Hunt on 020 7349 8480 or email william.hunt@motorsportmagazine.com

ART / ATTIRE / GARAGES

1981 EAGLE CHALLENGER "WHITE CASTLE"

Automodello 1:43
Driven by Chip Mead

$159.95

1964-1965 SUNBEAM TIGER

Automodello 1:43
PreOrder "Monster" or "Rally"

Starting at **$127.95**

1981 EAGLE CHALLENGER "PEPSI"

Automodello 1:43
Hand-signed by Dan Gurney
or Geoff Brabham

Starting at **$159.95**

1965 BUICK RIVIERA GRAN SPORT

Automodello 1:24
Available in 7 colors

Starting at **$299.95**

1970-71 LINCOLN CONTINENTAL MARK III

Automodello 1:24
Available in 3 colors

Starting at **$299.95**

1967 JIM CLARK SET LOTUS 49 & FORD DFV

Automodello 1:12
Includes Display Cases

$899.95 with MSM18M

1967 DAN GURNEY EAGLE-WESLAKE V12

Automodello 1:12
Removable Engine Panels and Display Case

Certificate hand-signed by Dan Gurney or Pure Edition (no decals) **$1499.95**

Automodello™
DREAMS ENGAGED™

Free Automodello™ Catalogue & Shipping on Orders Over $149
10% off order with **MS18M** · Hand-Built Limited Edition Resin Art™

+1.847.274.9645 · AUTOMODELLO.COM

enquiries@formhalls.com **01725 511241** www.formhalls.com

FVR FORMHALLS Vintage & Racing Ltd.

Approved aircraft quality & reliability for competition & road cars

Parkers Close, Downton Business Centre, Downton, Wiltshire England. SP5 3RB

White Metal Bearings (Formhalls Hoyt)
Guaranteed fault free for the life of your engine

Engine & Mechanical Rebuild, Restoration
Photographic build sheet for your car log

Bearing Manufacture & Precision Machining

Refacing / Seats / Boring

Welding & Stitching

Lathe & Milling Services

Beaulieu — Much more than a Motor Museum

BROOKLANDS MUSEUM

FEDERATION of British Historic Vehicle Clubs — Yesterday's Vehicles for Tomorrow's Roads

IMI INSTITUTE OF THE MOTOR INDUSTRY

follow us

Cars for sale

THE PINK SPICE IS FOR SALE

The famous 1991 Desire Wilson all girl crew Le Mans entry. Chassis 017 SE90C, 3.5 Cosworth DFR (two races old).

Race at the Le Mans Classic in 2018, price includes race entry.

The car is pre-approved and accepted, you only need your international licence.

Contemporary race history includes the Le Mans 24 hour support race, multiple Group C wins and invitations to the Goodwood Festival of Speed and the Goodwood Members' Meeting.

Excellent spares package including half-life Cosworth DFZ.

Absolutely race ready fresh from the Hungaroring.

£399,000 ovno (Isn't POA irritating)

For further information email
karenburchett@btinternet.com

MURRAY SCOTT-NELSON

www.classic-spares.com

Austin Healey Specialist

www.murrayscott-nelson.com

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.** Please note private registration number not included in sale.

Austin Healey 3000 Mk 3 BJ8 Phase 2.
1964 Ex US car. The subject of an older total nut and bolt restoration to a very high standard. We refreshed the car approx. 2 years ago and have maintained it over the past 20 years. Covered less than 5000 summer miles since 2004. Finished in Colorado red with black leather trim and weather equipment. Fitted with stainless steel wire wheels, spot lights, cape sport luggage rack, aluminium radiator, Kenlowe cooling fan, stainless steel sports exhaust system and overdrive. **£79,950**

Austin Healey 100/6.
1957 Rare Longbridge ex US car. The subject of an older but extensive restoration with major mechanical work carried out in 2012 by a leading marque specialist including fitting a correct late 100/6 engine with 12 port cylinder head, aluminium inlet manifold and 1 3/4" HD6 carburettors, Mallory distributor plus gearbox overhaul and front disc brake conversion. Finished in Colorado red over Ivory white with red leather trim. Fitted overdrive and wire wheels. **£59,950**

Maserati Sebring 3500 GTI Series 1.
Ex US car now registered in UK. Recently recommissioned including new bespoke carpet set, Borrani wire wheel conversion & new correct hubs. Finished in Grigio Albany with black leather upholstery. Fitted with Lucas fuel injection, 5-speed gearbox, correct period Pirelli Cinturato tyres, restored Blaupunkt radio, stainless sports exhaust system. Only 348 Series 1 Sebrings were made. This is a lovely example of such a rare car. **£195,000**

01723 361 227 | info@murrayscott-nelson.com

Murray Scott-Nelson, Beaconsfield Street, Scarborough YO12 4EL

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**

Buying or Selling Aston Martin

allastonmartin.com

DB6 Vantage 5-Speed ZF, 4.2 Engine up grade, P.A.S. Air Cond, Turrino Wire Wheels. Dark Blue with Beige leather and Dark Blue carpets, extensively restored and documented with a photographic record, this is a stunningly attractive DB6 original Vantage, £350,000. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

A

DB7 i6, Automatic, Mendip Blue with Pacific / Parchment leather, this is a good-looking car with an outstanding and comprehensive annual service history by a franchised dealer and a 'division one' specialist. This stunning example has had only three owners since new and covered just 61,500 miles, £29,950. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@.allastonmartin.com**

DBSV8 5-Speed Manual ZF Silver, with a Blue Leather, one family owned for 40 years, £115,000. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

AMV8 Series III, Auto, Emerald Green Metallic, with a Black Leather, Front Arm Rest, Fog Lamps, extensive MOT and documented service and restoration history file since new in 1975, which confirms the current odometer reading of just under 58,000 miles, according to the late second owner and factory Warranty Card, the car was originally finished white but at the request to AML by the first owner, the car was refinished in the now stunning colour to match that of a Corgi or Dinky model he had as a child, £89,950. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

AMV8 Series III 'S' Spec, Auto, Dark Blue, with a Burgundy Leather, Vantage front Air Dam, Auxiliary Driving Lights, Front Arm Rest, extensive MOT and documented service and restoration history file since 1987, including a chassis and engine rebuild, very good looking, £99,950. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

A

Virage Volante L.H.D. Automatic, Black with a Beige Leather, £89,950 **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

Virage Volante 6.3 'Wide Bodied' 4-Speeed Automatic, OZ Alloy Wheels, British Racing Green with a Black Mohair Hood and a Parchment Leather interior, continuous service history from new, £125,000 **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

V8 Limited Edition Coupe, One of only 9, Auto, Deep Jewel Green Metallic with Special Tan leather, less than 12,000 miles approximately and only two owners since new, serviced by the same Aston Martin Dealer, an outstanding car and an undiscovered gem, £89,950. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

Lagonda Rapide, Manual, Blue Metallic with a Beige Leather, £150,000. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

B

1965 Bentley S3 Continental DHC by HJ Mulliner / Park Ward – Concours condition. Now available from www.graemehunt.com. **Tel. 020 7937 8487**

A

V8 Volante Junior, Automatic, Dark Blue Metallic with Magnolia Leather piped Blue, make a big boy happy this Christmas, £25,000. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

A

DB4 Series IV, L.H.D. Aegean Blue with Black leather, extensively restored, ooks beautiful, matching numbers and very rare as an original left-hand drive, £525,000. **Byron International. www.allastonmartin.com Tel: 01737 244567. sales@allastonmartin.com**

E

1971 Elden Mk 8 Formula Ford 1600
Offered as rolling chassis or complete

1973 Elden Mk 10C Formula Ford 1600
Offered as rolling chassis or complete

Both chassis are recently fully refurbished after full rebuild, including new bodywork, unused rebuilt Connaught engine and all suspension re-chromed. No expense spared immaculate throughout including large spares package.

Contact: Alan Bowles
Tel: **01634 571016**
Email: **alan@kejan-eng.co.uk**

Cars for sale

Chevron B8-DBE-52

This Chevron B8 is one of the most successful in existence. In a racing career spanning four seasons of international and British Club racing, B8-DBE-52 took part in 88 races, won 16 of them, and managed to finish in the top three podium 45 times.

It was sold new in early '68 to John Bridges and raced by him and John Lepp. The car is fully race ready and a podium contender.

Newly rebuilt Lester Owen Engine
New gearbox and internals.
6 point roll cage.

Fresh HTP's to 2026
New Bilstein shocks
New fire system

Rebuilt and crack tested suspension
Full silenced exhaust system – 105db
2 sets of wheels

BLAKENEY LTD motorsport

Please contact **Patrick Blakeney-Edwards** on **01763 274100**
Email: **patrick@blakeneymotorsport.com**

F

1963-1/2 Ford Falcon Sprint circuit/rally race car, 1 of 27 vintage race cars built by Walt and Chip Hane in Colorado USA. Contact Keith Davidson Email: **mightyfalconracing@gmail.com**

Ferrari 550 Sbarro Barchetta, Prototype Geneva Show 2005. **p538@yahoo.com**

I

Isdera Imperator Sbarro, Prototype Geneva Show. **p538@yahoo.com**

J

1961 Jaguar Mk2 3.8 Saloon, Manual with O/D, Pale Blue Metallic with Blue leather. Nut 'n Bolt Restoration in 2001 included the very comfortable Reuter Reclining Front Seats, PAS, Harvey Bailey Suspension, Zeus uprated brakes, Sigma Engineering Fast Road Engine, Uprated Aluminium Cooling System, Chrome / Stainless Steel Wire Wheels. Restoration cost in 2001 of £60,000 (estimated equivalent today £120,000) Offered from a Private Collection for just £65,000. **Byron International www.byroninternational.com Tel: 01737 244567.sales@byroninternational.com**

1966 JAGUAR 3.4S TYPE MANUAL WITH OVERDRIVE. Oxford Blue with original grey leather. Chrome wire wheels and stainless exhaust. Stunning original matching numbers RHD low mileage, time warp, example. All books, tools, etc. **£34,950. Tel: 01663 733209. Mob: 07767. www.classiccarshop.co.uk**

L

R

1975 Rolls-Royce Corniche 2 door saloon – Amazing Example. Now available from Graeme Hunt Ltd. www.graemehunt.com. **Tel. 020 7937 8487**

1996 Range Rover Classic Vogue SEa 25th Anniversary – 16,000 Miles only. Now available from www.graemehunt.com. **Tel. 020 7937 8487**

MAGAZINES

MOTOR SPORT Volume 1 (1924) – Volume 15 (1939). All bound, might split. Full details from 01273 845000 (mornings) or email me info@kennethball.co.uk

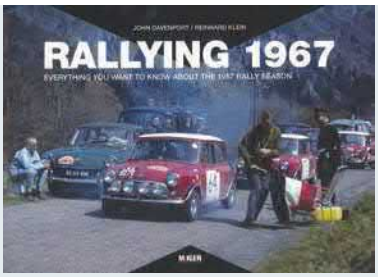
MOTOR SPORT BACK ISSUES
I have ten years of Motor Sport from 2007 to present needing a good home. There are about four copies missing and 9 of the years are bound in MS binders. Just looking for cost of sale plus any carriage incurred. If interested E-mail me please **terry@tdwilliams.plus.com**

65 MOTORSPORT MAGAZINES
from 1930 – 1952. For any details and offers
Please Tel: **01733 840 607.**

STEERING WHEELS

WANTED

WANTED
Old motoring & motor racing press photograph Archives, 1900 to 1970s.
Tel: **07785 367775** or **01276 477201.**
Email:
andrew_currie@btinternet.com



Rallying 1967

John Davenport, Reinhard Klein

This is a tome of considerable heft - and the content reflects the pedigree of its contributors. Davenport is an accomplished co-driver whose past credits include stints as rallies editor of *Motoring News* and competition manager at British Leyland, as well as being a regular *Motor Sport* contributor. And Klein is patriarch of rallying's finest photographic archive, bar none - though these are mostly from a time before his trademark panoramic style had fully evolved.

The book is subtitled 'everything you want to know about the 1967 rally season' and meanders through a broad range of events, from obvious choices such as the Monte Carlo and East African Safari to the Marathon de la Route at the Nordschleife, Rajd Polksi, rallycross at Lydden Hill and atmospheric shots from the RAC Rally HQ, shortly before the event was cancelled due to the spread of foot-and-mouth disease.

It isn't all action sequences: there are photo essays from selected workshops and the text is backed up with entry lists, results sheets, route maps and similar paraphernalia.

Pick of the photos, for reasons of curiosity rather than technical virtuosity, is perhaps that on page 138. It shows a Mk2 Ford Cortina GT and the caption relates how driver Peter Hughes did much to raise the marque's profile in Africa. It neglects to mention, however, that there is a lion perched on the roof... SA

Published by McKlein, ISBN: 978-3-927458-99-4, €99.90

In The Zone

How Champions Think and Win Big

Clyde Brolin

We've all had it: that feeling while watching a race, or a match that one of the competitors is operating on an entirely different plane to rivals.

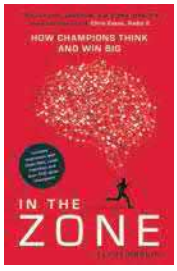
Clyde Brolin, a former Formula 1 reporter, calls this state "the zone", and over the course of his career has become so hooked on exploring it that he has written two books on the phenomenon. His first, *Overdrive: Formula 1 in the Zone*, was published in 2010 and now there's a paperback version of last year's *In the Zone*.

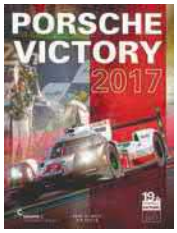
Inspired by Ayrton Senna's famous description of his qualifying lap at Monaco in 1988 - where he ran 1.427sec faster than his team-mate Alain Prost and claimed he drove beyond his "conscious understanding" - Brolin attempts to explain how to reach such peaks of performance.

He speaks to dozens of athletes - from tennis players to golfers as well as drivers - and the result is a fascinating book that sheds some much-needed light onto a little-known area of sports psychology. ***JD***

Published by Blink Publishing

ISBN-10: 1911274570, £8.99





Ferrari in Art

Paul Chenard

Author Chenard's approach to book publishing is very much like his preferred subject matter. Racing teams went about their business in a fairly relaxed manner during the '50s and '60s - and Chenard applies that ethos to his sketches and paintings.

This charming collection of Ferrari art isn't about to grace the walls of the V&A any time soon, but that rather misses the point. A few pieces here rely on photographs as base material, so consequently feel a little familiar and simplistic, but when he relies on his graphic design background and creates something from scratch, the result is much more appealing. ***DC***

Published by Blurb Books

ISBN: 978-1-36-457791-9, $68.79

Porsche Victory 2017

René de Boer, Tim Upietz

Three Le Mans wins equates to three consecutive large-format Porsche Victory books from Messrs de Boer and Upietz. The concept is as before, taking Porsche fans inside the Weissach factory's campaigns in GTE-Am, GTE-Pro and LMP1.

In that sense it isn't a full recap or memento of the race, but a Porsche product for Porsche enthusiasts. It also has the best 2017 Porsche photos you'll see in one place. The often stunning pictures take precedence over the words, which are in German, English and French. As is usual at Le Mans, there's something special about dawn and dusk shots. But equally arresting are the behind-the-scenes images as the dramatic race unfolded.

The production is good, it is hardback and the thick expensive pages more than match the quality of the shots within. This will be the last of the series for now, you'd suspect, and that might add to its appeal. ***JP***

Published by Gruppe C

ISBN: 978-3-928540-92-6, €40

Austin-Healey 3000

The Story Of DD3000

Simon Ham

Mention Big Healey achievements and the mind turns initially to European rallies. But this first entry in Porter Press's new *Profile* series - a sort of publishing F2 to the firm's Great Cars brand - reminds us of the model's success on the track too, and especially what one example achieved. Originally a BMC works Sebring entry, DD300 gained fame in the hands of marque devotee John Chatham who raced it for more than 40 years, challenging Cobras and E-types and even mixing it with Lola T70s and GT40s.

Author Ham steers us through the car's astonishingly rich career, which includes three Le Mans, the TT and the Kyalami 9 Hours plus endless GT, club racing and now historic events, while its drivers have numbered Jack Sears and even Stirling Moss. So it's a well-storied machine to commence this new project, which at £20 offers a good-value auto-biography.

Presentation is neat rather than stylish and the story thorough more than thrilling, with studio shots of the car today, still campaigning - having shrugged off its lairy 1960s Modsports modifications. ***GC***

Published by Porter Press

ISBN: 978-1-907085-70-3, £20

HALL OF FAME TICKETS ON SALE NOW

Buy your ticket for one of the most anticipated events of the year as Motor Sport celebrates some of the greatest names in motor racing

Join us for an awards evening like no other, taking place in the stunning Royal Automobile Club Woodcote Park clubhouse on June 4 2018. Sip champagne amongst motor racing legends and watch as an array of stunning cars and bikes roar up the Captain's Drive before witnessing the class of 2018 inducted into the Motor Sport Hall of Fame.

Who will join the greats such as Ayrton Senna, Jim Clark, Damon Hill, Giacomo Agostini, Derek Bell and Nigel Mansell in our roll of honour? With only 150 tickets on sale for this intimate event, the evening is a unique opportunity for motor racing fans to rub shoulders with famous names from the motor racing world and have the chance to enjoy the sight and sounds of famous cars and bikes that are rarely on public display.

To find out more visit www.motorsportmagazine.com/2018HOF

Ticket packages start from £360* and include: Champagne and canapé reception • 3-course dinner • Demonstration car runs driven by motor sport stars • Historic car displays from F1, sports car racing and Moto GP • Live interviews and much more

Offer available to Motor Sport subscribers. Please call 0207 349 8484 for further information.

ART

FEATURED ARTIST

Ilya Avakov

From combines to classics: product designer who is discovering cars

Ilya Avakov's highly rendered illustrations bear the stamp of the industrial designer – striking angles, slashes of colour, carefully worked up reflections. Not surprising, as Ilya trained as an industrial designer in St Petersburg and worked for a major Russian design agency. While shaping anything from bath toys to combine harvesters he developed an interest in classic cars and these now feature large in his artwork

"I'm just discovering the world of cars now," he says, "and painting them gives me a chance to properly learn the car." While he works in tempera, acrylic and mixed paint and pencil, oil is his main medium, on large canvases.

"Working from my own drawings or photos – and sometimes finding just the right angle takes a lot of time – my technique is to create a quick sketch on the computer and work that up in oils, though sometimes I also make a digital print onto the canvas and finish in paints."

While he says it's the beauty of classic cars that inspires him, he also paints modern vehicles which he reckons demand a different graphic language, more like the studio concept sketches that begin a new car design. His works hang in many Russian private collections, but the Royal Automobile Club's 2017 show was his first outside Russia.

He'd love to see these cars in action but laments that there hasn't yet been a major historic race meeting in his homeland. However, there are classic rallies, and he is currently doing the illustrations for a Chopard gathering in Moscow.

www.historiccarart.net

MEMORABILIA METAL CAR BADGES

BMW Motorsport grille badge

£39

Mint, unused condition, with fixings

www.automobiliaforsale.co.uk

MAC car badge

$120

Midland Automobile Club member's badge, enamel on chrome, 3in diameter

www.arteauto.com

Zandvoort circuit car badge

£55

As sold at Zandvoort GP up to 1985, good condition, 3.5in diameter

www.automobiliaforsale.co.uk

Cooper racing school pin badge

£99

Dates from 1957, very rare, from Cooper racing school at Brands Hatch

www.automobiliaforsale.co.uk

KLG Motor Club car badge

$160

Image of Golden Arrow, cast resin on brass

www.arteauto.com

FEATURED MODEL

Flying Ford

Marcus Nicholls describes a 1:24 replica of Timo Mäkinen's Escort RS1600

Last May we lost Timo Mäkinen, truly one of the greatest drivers of all time and the original Flying Finn. He was perhaps best known for his exploits in Mini Coopers, driving in terrible weather conditions, but he took the early rally-rigged Ford Escort RS cars to new heights, too. One of his most colourful machines was the Pepsi-sponsored Ford Escort RS1600 MkI that competed in the 1972 Monte Carlo Rally with Englishman Henry Liddon as his co-driver.

The Escort is available in various diecast forms, but for pure scale-modelling pleasure it just has to be a plastic kit - and specifically the exquisite 1:24 model from Belgian producer Belkits. It comes as a full build-up production with miniature leaf-spring suspension and detailed cabin interior with rollcage, racing seats and scale-perfect fabric seat harnesses.

The main parts of the Ford are injection-moulded in white polystyrene, the perfect polymer for this type of model as it can be cut and sanded easily and takes acrylic and cellulose paints well. As the accompanying photos hopefully attest, the manufacturer has captured the Escort's profile perfectly, something not always guaranteed in a model. In the past, kit manufacturers would measure and photograph the full-sized subject's body shape then attempt to reproduce the complex curves in miniature. Now, using portable laser-scanning technology and even CAD data direct from the real car's maker, near perfect scaled-down versions of bodies are achievable, accurate down to the smallest detail despite being a fraction of the original's size.

The Escort we see here has had some additional work done, in the form of aftermarket items; just like full-size cars, there's a whole world of add-ons for scaled-down replicas. The idea for this particular project was to depict a newly restored classic Timo Mäkinen rally car that was to be used in historic events. With that comes new rules in order to compete, such as upgraded bucket seats, fire and safety systems, wiring, electric cut-offs and so on, all incorporated during construction.

In the UK, Belkits models are distributed and imported by The Hobby Company and can be purchased through Hiroboy; www.hiroboy.com

The Minilite wheels in the kit were replaced with better detailed resin castings, the new seats represent Sparco designs to reflect the modern usage and there is a new-style fire extinguisher fitted. The model comes with windscreen wipers moulded in the same material as the bodyshell and, while this is practical option, the plastic can't reflect the spindly nature of the real things. Here, photo-etched metal comes into its own; it replicates pressed sheet-metal parts brilliantly (because it is sheet metal!) and doesn't need to be painted to simulate stainless steel.

The Pepsi livery (another aftermarket item) comes in the form of waterslide decals that, once trimmed out, are briefly soaked in water, then slid from their paper backing sheet onto the model and nudged into place with a fingertip. In the case of this model, the markings were given a two-part epoxy varnish overcoat to give them a 'painted-on' appearance. The combination of high quality model kit, some aftermarket goodies plus lots of time and patience have resulted in an exquisite replica of Timo's RS1600 and a fine tribute to the original Flying Finn.

Hot new kits on release and on the way

Tamiya 1:20 Tyrrell P34 Six-Wheeler 1976 Japan GP

£35

www.hobbyco.net

Tamiya 1:10 RC NSU TT Jägermeister

£115

www.hobbyco.net

Italeri 1:24 Renault R5 Alpine Rally

£25

www.hobbyco.net

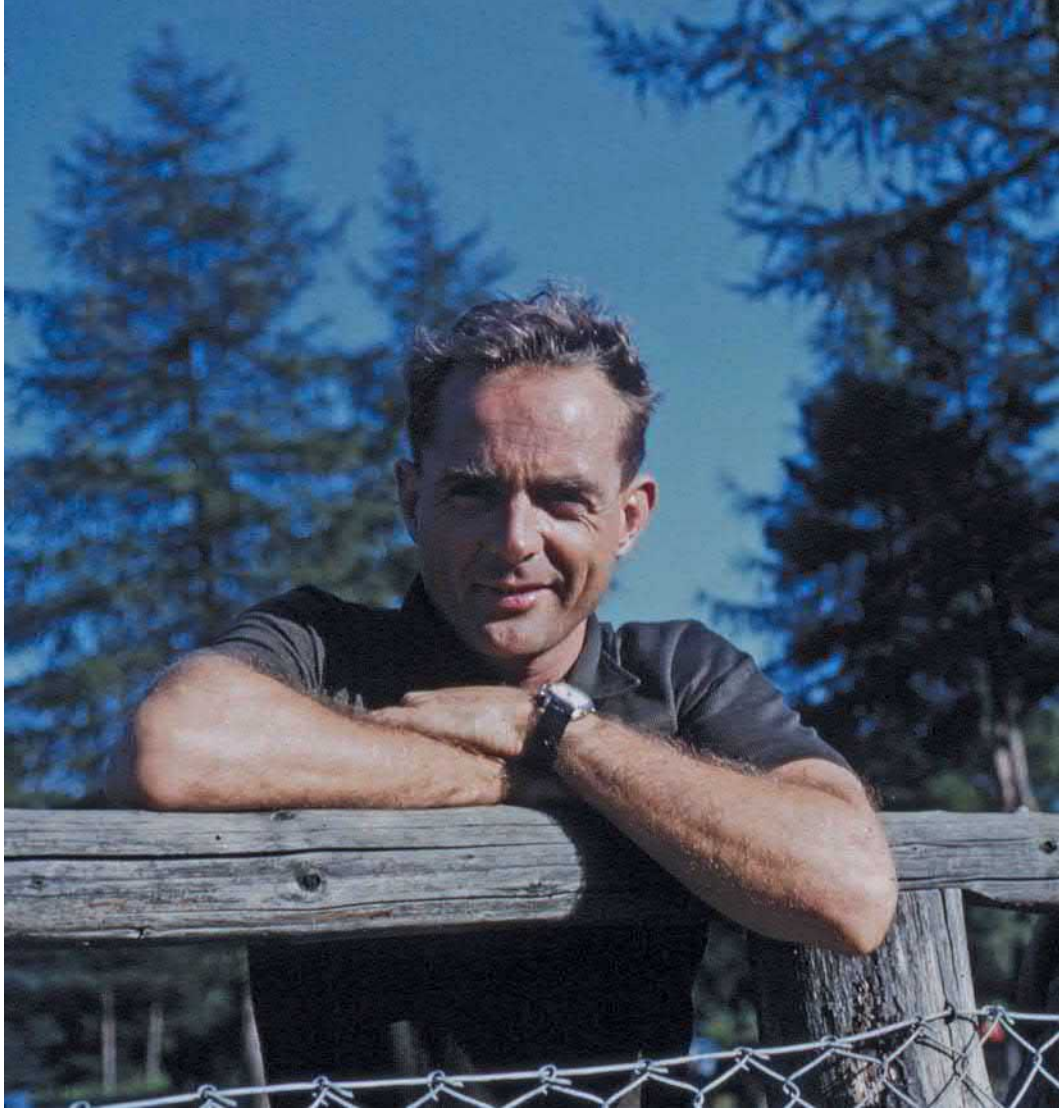
Parting Shot

October 1, 1978

Silverstone, UK

This year marks the 40th anniversary of the USAC IndyCar championship's UK double-header, at Silverstone and Brands Hatch. AJ Foyt pits to refuel his trusty Coyote *en route* to winning the first of the two races. Pit safety apparel has evolved slightly over the subsequent four decades... Rick Mears finished second for Penske, but six days later won in Kent (where Foyt finished fourth).


GOODYEAR
GILMORE
14
14
14
GOODYEAR
GOODYEAR
GOODYEAR



Clockwise from left: During a break in practice Phil Hill was spotted studying the track from a spectator area – he took pole and finished third; Wolfgang von Trips (Ferrari) heads through the Karussel on his way to second; Innes Ireland (Lotus); Bruce McLaren (Cooper); Jo Bonnier (Porsche); Graham Hill (BRM)

You were there

In 1961 Paul Meis was based in Germany with the US Army. Cue a trip to the Nürburgring with Retina IIIc camera and borrowed 85mm lens.

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

The restoration of an historic vehicle, whether competition car or concours, requires extrordinary skill and experience. Understanding original construction methods and having the eye of a sculptor is critical to being able to recreate some of the most enduring forms in automotive history.

SOUTHSHORE COACHWORKS

- Restoration & Recreation
- Steel & Aluminum Bodywork
- Fabrication
- Composite Repair
- Gas, TIG, MIG & Aluminium Welding
- Bespoke Design Service

southshorecoachworks.co.uk

Telephone - +44 (0)2392 254488 Email - info@jswl.co.uk
Pipers Wood Industrial Park, Waterlooville, Hampshire. PO7 7XU United Kindom

See more of what we do... @southshorecoachworks

PAVILLION 1 SALON RETRO MOBILE 2018

TECHNO CLASSICA ESSEN MARCH 2018

South Shore is a member of the JSW Group

DK Engineering

Est. 1977

1953 Ferrari 166MM Competition Berlinetta by Pininfarina

Currently Available for Acquisition at DK Engineering






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

@dkengineering @dk_engineering

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

London City Centre 20 miles

Helicopter Landing Facilities

www.dke.co.uk

A Cottingham Family Business

OFFICIAL FERRARI DEALER

Meridien Modena

Ferrari 550 Maranello
Year: 1999: Miles: 19,000
External colour: Rosso Corsa
Internal colour: Crema
£129,995

Ferrari 250 PF Coupe Series II
Year: 1959
External colour: Grigio Argento
Internal colour: Nero
£699,995

Ferrari 360 Modena
Year: 1999: Miles: 27,800
External colour: Rosso Corsa
Internal colour: Cuoio
£74,995

Ferrari 328 GTS
Year: 1988: Miles: 14,800
External colour: Rosso Corsa
Internal colour: Crema
£109,995

Ferrari 456 GT Manual
Year: 1994: Miles: 27,000
External colour: Blu Swaters
Internal colour: Blu
£74,995

Ferrari 360 Modena
Year: 2001: Miles: 18,000
External colour: Rosso Corsa
Internal colour: Crema
£89,995

Ferrari F355 Spider
Year: 1996: Miles: 13,000
External colour: Giallo Modena
Internal colour: Nero
£119,995

Ferrari Dino 246 GT
Year: 1974: Miles: 17,100
External colour: Rosso Corsa
Internal colour: Nero
£359,995

Meridien Modena
77 High Street, Lyndhurst,
Hampshire, SO43 7PB
Telephone: 02380 283 404
www.lyndhurst.ferraridealers.com

CLASSICHE