# MOTORSPORT

**GRAND PRIX RACING** 

**SPORTS CARS** 

INDYCARS

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**HISTORICS** 

**FORMULA 1 2013** 

'The races I'd dump – and those I'd revive'

By Nigel Roebuck

Tested: the GP car Jackie Stewart hated!

By Andrew Frankel

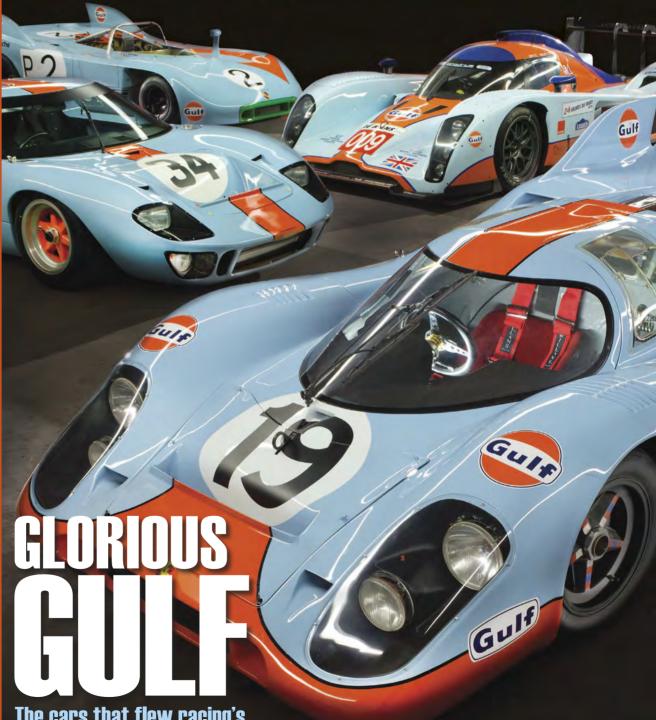
Reynard: the rise and fall of a British empire

By Simon Taylor

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The cars that flew racing's greatest colours, from Ford GT40 to Lola LMP1 – via Porsche 917



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# APRIL 2013 ISSUE ON SALE MARCH 1

### Matters of Moment

hey only let us hear it as a simulated lap of Monza, but as sales jobs go the men at Mercedes pulled out the stops to convince us that Formula 1 isn't about to be muted when its new engine regulations come on line next year.

A visit to the manufacturer's High Performance Powertrain division in Brixworth promised a sneak preview of what we should

expect in 2014 and the message was clear: yes, Grand Prix racing is heading for massive change, but the basic premise of our sport that the fastest driver in the fastest car will win the race - will not be lost in a technological overload.

As for that certain sound, the thrill of a spine-tingling on-the-limit racing engine, apparently those of us who care about such things need not worry. F1 engines will still sound as they should in 2014, although perhaps not like any we have ever heard before.

A wheel has yet to be turned in 2013, yet already so much focus is

on next year, such is the scope and significance of the revolution that is coming. To recap, F1 is ditching its current 18,000rpm 2.4-litre normally aspirated V8s for compact 1.6-litre V6 turbos that max out at 15,000rpm. It's dropping the 'k' too: forget KERS, we'll all be talking about ERS in 2014.

At first sight, the downsizing caused widespread alarm, the V6 configuration a concession to those who said the original fourpot plan wouldn't be 'racy' enough. Bernie Ecclestone waded in, fretting about the "terrible" noise such an engine would emit. But after years of ignoring the outside world, F1 wanted to fall in line with the automotive industry, reducing capacity and revs in the interests of pressing environmental needs, while offering a fresh carrot to apathetic, cashstrapped manufacturers.

If the rules echo the specs of their road cars, will Toyota, Honda and BMW return? Might even VW be tempted in? F1 wants to be 'relevant'. It never used to have to justify itself. But these are different times.

So what will it all mean? I was concerned when Andy Cowell, managing director in Brixworth, said this would be "a new way of going racing". Do we really need a new way? Apparently, yes.

The return of turbos for the first time since the 1980s also heralds the comeback of a so-called 'fuel formula'. F1 cars will be limited to just 100

> kilos of fuel, costs will be contained by a 15 per cent reduction in moving parts within engines, and just five units will be available to each driver for a season's racing rather than the current eight, effectively doubling their life demand from 2000km to 4000. The V6 will also be an impressive 30 per cent more efficient than the V8, with a thermal efficiency rating that could match a Toyota Prius.

> Yes folks, 'efficiency' is the new buzz-word. But wait, don't go! Stop yawning at the back. It's worthy, but the racing could also be fantastic.

> For all the cuts, Mercedes reckons the

"aspiration" is for cars to be as quick as they are today. That's where the Energy Recovery System comes in.

Heat energy from the exhaust stream will join kinetic energy drawn from the rear axle as an extra power source next year, doubling the power store from 60kW to 120. At the moment, KERS allows a burst of 80hp for 6.7sec. In 2014, ERS will give 161hp for 33.3sec. How this energy is deployed will likely decide the outcome of races and ultimately world championships. As Cowell says: "It's difficult to be quick without KERS. From 2014 it will be impossible to be quick without ERS."

He also highlighted the wider powerband of the V6s, the extra torque and an increase of power over grip. The cars, he said, will slide.

As for fuel saving, Cowell reckons drivers won't have to manage it any more than they have since the ban on inter-race refuelling in 2010. Intelligent strategy will be key to



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### Matters of Moment



success, but it should widen the options for teams. The cars will start lighter than they do today because of the mandated lower fuel level, but they will finish heavier because of the higher weight of the powertrain, up from 95 kilos for the V8 engine to 145 for the whole unit in 2014. Most importantly, the guys at Mercedes are adamant: ultimate performance will still decide who wins the races.

Speaking of which, Lewis Hamilton has good reason to be confident that his team switch will pay off. At the moment, only the factory Mercedes team under Bob Bell is working with the Brixworth powertrain squad. Thanks to its customer contract, McLaren won't get a look in until an unspecified time later this year. Here lies the advantage opportunity alluded to recently by Ross Brawn.

As for the sound of the little V6 (we were shown one sitting on a dyno - it's tiny), what Cowell told us was promising. All six cylinders will feed into one exhaust to spin the single turbo. "With one turbo, all the noise will come through one tailpipe, so the frequency will be higher than with the V8s," he said. "It will be pleasant to the ear, loud and sweet-sounding."

And most intriguing of all will be the noise

from the turbo itself, rotating at a maximum speed of a mind-bending 125,000rpm: "I reckon we will hear the whine of the turbo, especially on the exit of corners as drivers work to get the compressor spinning on acceleration," said Cowell. "It will be very interesting to stand trackside for the first time when they run."

There are still some big questions, the most prominent being cost. The powertrain won't come cheap for customer teams. Greater technology also tends to widen the gap between front-runners and the rest. Then there's

understanding what the hell is going on if you're watching the race on TV and, lest we forget, from the side of the track. F1 will need to work even harder to tell its already complicated story to a global audience.

All a long way from Stirling Moss twirling with abandon the wheel of a Maserati 250F, is it not? There's no point comparing it. Grand Prix racing survives today in a different world. As do we all.

ack in 2005, during my first stint as the editor of Motor Sport, I commissioned a feature on the late Jim Crawford. The writer has yet to deliver the story, but the commission surely the longest in the magazine's 89-year history - remains open. Now he's stopped travelling the world as a paid-up member of the elite band of F1 freelancers, said writer might have time to finish that tale - especially as he'll be sitting opposite me on a regular basis! I'm delighted to welcome former editor Simon Arron back to the staff, as our new features editor. We can't wait to draw on his great wealth of knowledge, experience and sheer enthusiasm. Especially on Scottish Indycar racers of the 1980s.









#### **CONTRIBUTORS**

We rate our photographers less on the goods they produce when the sun is shining than on how they cope when the circs are against them. MATT HOWELL is used to sunny climes for much of his glossy corporate work, but we gave him a winter's day, a barn full of cars and one lorry to work with - and he still produced a great looking set of snaps. But it did require multiple exposures, a cherry-picker platform and one hell of a lot of planning.

Like anyone who's spent years following Grands Prix, NIGEL ROEBUCK has his favourite circuits, some bêtes noirs - and he areatly misses some of the classic tracks displaced by the eastward shift. So as a New Year present we gave him a magic wand to overrule Bernie and plan his own F1 season. If only it were real, and if only Bernie would listen...

Racing drivers seem to get smaller as time goes on. Not so ANDREW FRANKEL, whose imposing frame was ideal for rugby at school but proves to be a hindrance when putting on a Formula 1 car. Even the Caterham Supersport R was easy access compared to the March 701 in this issue. Frankel is used to chucking the seat overboard before he even climbs into an E1 car but this time he had to leave half the bodywork behind too. Good job the scrutineers weren't checking.

Mind you, in the staff height race AF is over-shadowed by ED FOSTER'S 6ft 7in. Which must be why he flew business class for his trip to Morocco to check out Race2Recovery's preparations for the Dakar rally. Not that the rest of us, stuck in soggy London, begrudged him four days of Sahara sun and adventure.

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# The Motor Sport Month



#### Key F1 staff leave posts

Norbert Haug's departure from Mercedes-Benz marks the end of an era for the German manufacturer, and emphasises that Niki Lauda has become a major player for the Stuttgart marque.

Former journalist Haug joined the company in October 1990 to run its motor sport activities, which were then focused in sports cars. In addition to ensuring that Mercedes became a major player in F1 - even buying its own team just as rivals were pulling out - he also oversaw considerable success in the DTM and F3.

However, the lack of results in F1 over the past three years weakened his position, which was made even less tenable after Lauda was brought in as chairman of the board late last year.

In another surprise development, Mark Gillan (below) has left his job as chief operations engineer at Williams after barely 18 months in the role. The highly regarded Gillan played a key role in reviving the team's fortunes in 2012.





# Teams prepare for two-way challenge

What promises to be a fascinating 2013 F1 season will officially kick into gear when testing gets underway at Jerez on February 5.

The last year with 2.4-litre V8s will be full of intrigue for many reasons, not least because of the build-up to the new turbo era in 2014.

The cars we will see in 2013 will be subtle developments of those that raced last season, and indeed thanks to relatively minor tinkering with the rules from year to year, they actually have a heritage that stretches back over several seasons.

These days F1 is all about the relentless quest to find

performance over the course of a campaign. Regulatory continuity means that most of the last-minute R&D work done by teams in last year's title fight will continue to pay dividends.

That won't be the case as we head into 2014. The new turbo engines and associated energy recovery systems mean that the next generation of cars requires a clean sheet of paper.

The top teams have long had groups of engineers dedicated to 2014 concepts, and at some point this summer the focus of the entire R&D staff will shift to the new car and away from the model being raced. Inevitably, that will happen earlier than usual.

Even for teams with seemingly unlimited resources, that process is bound to compromise ongoing progress on their 2013 models as the championship battle approaches its climax. How teams manage that

"THE LAST YEAR WITH 2.4-LITRE V8s WILL BE FULL OF INTRIGUE AS TEAMS BUILD UP FOR THE NEW **TURBO ERA"** 

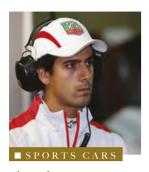
conundrum - without leaving themselves a step behind heading into '14 - will be one of the keys to the season.

The changes for 2013 may be minor, but there is still some work to do. Pirelli has modified its tyres, and having had a chance to try prototypes only on the Friday of the 2012 Brazilian GP the teams will have to adjust to the new spec. There's also a clampdown on double DRS systems, a key area of development last year. That comes in tandem with a restriction on the use of DRS: in practice and qualifying its use will be limited to zones where it can be used in the races, whereas before it could be deployed everywhere. DRS is thus less valuable over a lap than it was.

Meanwhile much attention will be focused on Lewis Hamilton and how he fares with new paymaster Mercedes. Many were sceptical about his decision, but Ross Brawn has created an impressive pool of technical talent and this will be the first season when the fruits will be seen. There's clearly a hope that by dropping out of last year's development race early, Mercedes has been able to make a big leap for 2013.

Sergio Pérez's form at McLaren will also be of huge interest as the team adjusts to life without Hamilton, and Ienson Button has a chance to assert his authority. And while there are no line-up changes at Red Bull or Ferrari, it won't be long before the futures of Mark Webber and Felipe Massa both on one-year deals become subjects of debate.

However, the big story will unfold behind closed doors at Brixworth, Maranello and Viry-Châtillon as Mercedes, Ferrari and Renault hone turbo engines for 2014. It's anyone's guess as to who will get it right. Adam Cooper



#### Audi snaps up di Grassi

Former Grand Prix driver Lucas di Grassi has landed an Audi drive for 2013, following his starring performance on his debut the German manufacturer at last year's São Paulo round of the FIA World Endurance Championship.

Audi played down the chances of the Brazilian being contracted for 2013 after what it stressed was a oneoff, which came at the behest of race promoter Emerson Fittipaldi. It subsequently changed its mind and dropped Marco Bonanomi from its line-up to make room for di Grassi, who finished third in São Paulo sharing an Audi R18 ultra with Allan McNish and Tom Kristensen.

Audi Sport boss Dr Wolfgang Ullrich said: "Lucas was really impressive at Interlagos. If you look at what he has achieved up to now, we consider that he has a big future."

Di Grassi's full programme has yet to be announced along with those of Audi drivers McNish, Kristensen, André Lotterer, Benoît Tréluyer, Marcel Fässler, Loïc Duval and Marc Gené.

Romain Dumas and Timo Bernhard, who have raced for Audi since 2009, are returning to sister marque Porsche as it gears up for its prototype return at Le Mans in 2014.



#### Chilton ready for GP chance

Max Chilton's arrival at Marussia ensures that Britain will have four drivers on the 2013 F1 grid, and the 21-year-old from Surrey now has the chance to prove that he's up to the job.

It's no secret that like his

brother Tom a leading light in touring cars - Max has been propelled through the ranks with the

financial backing of his family, and inevitably that has caused some observers to question his credentials.

Although he had a modest record on the way up, Chilton impressed in his third season of GP2 last year, winning the Saturday feature races in Hungary and Singapore and finishing fourth in the championship achievement that more than justifies the opportunity he's landed.

Crucially he also impressed Marussia team principal John Booth, who is taking on his fourth rookie in as many

> years. Chilton has been employed as a reserve driver since the autumn and Booth says

that "his development has been rapid in all aspects".

It's worth noting that this time last year little was expected in similar circumstances of Charles Pic, but once he found his feet the Frenchman gave team-mate Timo Glock a hard time, and had built a solid reputation by the end of the season.



#### ■ SPORTS CARS

### Pescarolo future in jeopardy

Henri Pescarolo's once successful privateer sports car team has gone into liquidation.

Pescarolo Team, which as Pescarolo Sport finished second at the Le Mans 24 Hours in 2005-06, was liquidated at the start of January. The move came after Pescarolo was unable to present a plan to continue the business following a period of court protection from its debtors since last July.

The 70-year-old, who won

Le Mans four times as a driver, has not ruled out continuing his team in some form. He said he was talking to two groups about linking up for an assault on this vear's 24 Hours.

Pescarolo explained that he still owns the team's premises in the Technoparc at Le Mans and has been allowed by the courts to continue, but he said in the wake of liquidation that he had yet to make up his mind about his future.



### WIN A PACKAGE TRIP TO THE 2013 LE MANS 24 HOURS

Don't miss this spectacular opportunity to join Motor Sport magazine at the Le Mans 24 Hours for its 90th anniversary on June 22/23. Motor Sport has teamed up with Speed Chills to offer one lucky reader a self-drive package for two people to this year's race, staying at the Speed Chills Beausejour private campsite.

The prize includes ferry crossing, camping at Speed Chills Beausejour private campsite, Speed Chills Club Membership and two general race admission tickets. Speed Chills Beausejour Private Camping is conveniently located on the inside of the circuit close to the Porsche Curves viewing areas and Speed Chills Club Membership will give the winners access to the Speed Chills private bar, restaurant and entertainment. In addition, your prize gives you access to a whole host of exclusive Motor Sport magazine extras including a dedicated Motor Sport clubhouse where you can mingle with other Motor Sport readers and members of the Motor Sport editorial team and their guests in the pre-race build-up.

With this prize our winner will be at the heart of the action for Le Mans 2013.

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The winner will be drawn on April 29, 2013.

The winner will need to contact Speed Chills by
May 8, 2013. The winner will be chosen at random
from the correct entries.

Competition terms and conditions can be found at
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# The Motor Sport Month

#### ■ HISTORICS

#### Needell back to his roots

Tiff Needell is gearing up to return to where it all began for him by racing a Lotus 69 Formula Ford, the type in which he made his name in the early 1970s after winning the car in a competition.



The 61-year-old TV presenter, who briefly competed in Formula 1 with Ensign in 1980, plans to enter the Lotus in some rounds of the Historic Formula Ford Championship, which regularly features full grids of pre-72 cars.

The car is being prepared by Barwell Motorsport, the team managed by his younger brother Chris. "The car is back in my original 1971 colours and it brings a tear to my eye," said Needell.

#### ■ HISTORICS

#### Jerez date for Masters

A finale in Jerez to replace the Donington Masters Festival is the key change for Masters Historic Racing this year.

Alongside GP Masters, the group will run championships for World Sportscar Masters, Pre-66 GT and Touring, as well as Can-Am Interserie and 70s Celebration. Races for Sports Racing Masters may be joined with WSM.

The Jerez Historic Festival is on October 11-13, other dates including Barcelona, Zandvoort, Nürburgring and Spa, plus the Brands Hatch festival (May 25-27).

#### ■ SPORTS CARS

# Tourist Trophy to return

This season, the 108-year-old Tourist Trophy will be awarded to the winners of a world championship endurance race for the first time since 1964.

The trophy will go to the victors of this year's six-hour FIA World Endurance Championship opener at Silverstone on April 14. That means the likes of Allan McNish, Tom Kristsensen, André Lotterer, Alex Wurz and Nicolas Lapierre

will be fighting for the chance to have their names alongside those of Rudolf Caracciola, Tazio Nuvolari, Carroll Shelby, Stirling Moss, Graham Hill and Derek Bell on the Royal Automobile Club's famous piece of silverware.

Pierre Fillon, president of WEC promoter the Automobile Club de l'Ouest at Le Mans, said: "We are extremely pleased to announce our partnership with the RAC to award the prestigious Tourist Trophy to

the winners of the opening round of the WEC at Silverstone.

"This is a very important year for the ACO because it marks the 90th anniversary of the first running of the Le Mans 24 Hours. To be able to award the Tourist Trophy with its rich history and tradition is a great honour for us in this important year.

"We look forward to seeing which names from the FIA WEC grid will be added to the roll of honour alongside the names from the past such as Caracciola, Shelby, Moss, Hill and Bell, names that also have a great association with Le Mans."

Ben Cussons, chairman of the RAC's motoring committee,

said: "The first race in 1905 lasted more than six hours and it is truly fitting that over 100 years later we have gone full circle back to a six-hour endurance race in 2013.'

Audi driver and two-time Le Mans winner Allan McNish welcomed the move.

"It is fantastic news," he said. "It would be an honour for any driver to have his name alongside all the greats on that

trophy. It also shows that the status of the WEC is steadily increasing."

The TT, which was inaugurated on the Ards circuit in Northern Ireland in 1905, will be awarded again this season after a one-year hiatus. The trophy went to the winners of the main race at the Silverstone FIA GT1 World Championship event in 2010-11.

The TT at Goodwood was a round of the World Sportscar Championship in 1958 and 1959,

and was on the calendar again when it was known as the International Championship of Makes in 1964.

The event, which moved to Silverstone in 1970, subsequently became one of the mainstays of the European Touring Car series (and briefly the World Touring Car series) until the demise of the ETC after the 1988 season.

The TT name was used to promote British Touring Car Championship and sports car races in the 1990s and early 2000s, but the names of the winners of the races were not engraved on the trophy. It was revived for the FIA GT Championship round at Silverstone in 2005.







#### Classes to be unified in US

The top class of the newfor-2014 unified US sports car championship will be made up of Daytona LMP2 Prototypes, prototypes and production versions of the DeltaWing.

Grand-Am and the American Le Mans Series. which announced last season that they were merging, explained that the move was based on a policy of inclusion. They want to allow as many cars as possible from the two series, which will remain separate through 2013, to join the as yet unnamed championship in 2014.

The decision means that the performance of the DPs will have to be significantly increased to bring them up to a level approaching LMP2. At Laguna Seca, for example,

a P2 car is approximately seven seconds a lap faster.

Grand-Am boss Ed Bennett explained that this would likely involve giving the DPs more power and downforce and putting them on a faster tyre than the Continental-badged Hoosier currently used.

The remainder of the class structure for the first two years of the championship has also been announced. The ALMS GT (GTE in Europe) and Grand-Am GT classes will remain separate, although cars from the ALMS GTC one-make Porsche division will run in the Grand-Am category.

The ALMS division for the one-make Formula Le Mans **ORECA-Chevrolet continues** as a stand-alone class.



#### ■ SPORTS CARS

#### Loeb signs up for GTs

Nine-time World Rally Champion Sebastien Loeb's race team is one of 10 to sign up for the new FIA GT Series.

Sebastien Loeb Racing has announced its participation what had been provisionally known as the GT Sprint Series with a pair of McLaren MP4-12Cs. Firm commitments from the French team and the nine others ahead of the January closing date has allowed series boss Stéphane Ratel to rubber-stamp the series that takes over from the FIA GT1 World Championship.

Loeb will share one of his MP4-12Cs with McLaren factory driver Alvaro Parente in what he sees as a year of preparation for a planned move with Citroën into the World Touring Car Championship in 2014.

Other teams to sign up include Michael Bartels' Vita4One squad (formerly Vitaphone Racing), the German Phoenix team and WRT from Belgium.

The FIA GT Series has been trimmed back to six races with only one flyaway outside Europe, most likely at the end of the season in Abu Dhabi. The championship starts at Nogaro in April.

#### ■ OBITUARIES

#### Alex Moulton CBE

One of a few engineers to become a household name, Dr Alex Moulton, who has died aged 92, was known to the public for his revolutionary small-wheeled bicycles, but his greatest impact was with his rubber suspension systems on the Mini and later BMC models.

A born inventor, Moulton built a steam-powered GN in his teens and worked for the Sentinel steam lorry firm before taking an engineering degree. Joining Bristol during the war he worked on the abortive radial-engined car project, then joined the family rubber company. A friendship with Alec Issigonis, who had used rubber suspension on his Lightweight Special, led to the BMC link and the rubber-sprung Mini.

As a consultant to BMC Moulton then developed his Hydrolastic and Hydrogas systems which equipped millions of cars into the BL and Rover eras, while at the same time creating his Moulton bicycle company. He remained devoted to the Jacobean family house in Wiltshire, where hand-built spaceframe Moulton bicycles are still produced.

#### Michael C Brown

The international motor sport community was saddened to learn of the death of respected photographer Michael C Brown, who died suddenly while on Christmas vacation with his family. He was just 55.

Originally from London, Michael cut his teeth working for local newspapers before joining Autosport in the mid 1980s. He later turned freelance and settled in America, initially specialising in Champ Cars and the IMSA endurance series.

A friendly, engaging character with a ready smile and keen wit, Michael was a wonderful photographer and a fine companion. We extend our condolences to his friends and family, particularly wife Jori, daughters Abrielle and Mika and son Seth.

#### Guido Forti

Former Formula 1 team principal Guido Forti died on January 11, aged 72.

The Italian made his mark as a successful entrant in mainstream junior categories during the 1980s, guiding several promising young Italians - including Enrico Bertaggia and Gianni Morbidelli - to the national F3 title.

Forti Corse graduated to the FIA F3000 Championship in 1987, initially with an uncompetitive Dallara chassis, but later became a front-runner. It then committed to enter F1 in time-honoured privateer fashion, with inhouse chassis and customer Cosworth engines. Forti made its F1 debut in 1995, but struggled at the back of the field before a lack of funds caused the team to withdraw halfway through the following season.

Forti never returned to F1, although he later worked as a team manager in the Italy-based Euro F3000 series.

#### ■ SPORTS CARS

#### Lola name to race on in wake of supply deal

The future of Lola prototypes competing in international sports car racing has been safeguarded by a deal for a new group to take over the supply of spares and the provision of engineering support for the failed British constructor's designs.

Multimatic Motorsport, which produced parts for Lola's respective B12/60 and B12/80 LMP1 and P2 prototypes, and Carl Haas Auto, the constructor's long-time US agent, have agreed a deal with Lola Group Holdings. This follows the purchase of the assets of Lola Cars International, which went into administration in June, by parent company LGH, which holds the intellectual property rights to all Lolas and the trademarks to the Lola name.

Under the deal, Multimatic will provide engineering support for Lola's prototypes and Haas will sell the spares.

Multimatic is continuing to develop the P1 and P2 designs and has picked up the windtunnel programme discontinued when Lola Cars went into administration. Haas will be able to sell spares of all Lola models.

# The Motor Sport Month



# Flag falls on FIA F1 series

The future of the FIA Historic Formula One Championship remains in doubt following the decision of the former championship organisers to abandon their plans for at least the 2013 season

Dan Collins of TGP Ltd, the organisation that has managed the championship since 1994, has confirmed its withdrawal, saying that the financial implication of running the championship with small grids is the reason for the decision to pull out. In 2012 many rounds featured fewer than 10 cars from the 3-litre F1 era of the 1970s and early '80s.

"Both Grand Prix Masters and Historic Formula One have had poor grids at some events for the past two years," said Collins. "Crucially, Masters has been able to secure participation at certain Blue Riband events and that has precluded HFO.

"Without these events, the financial viability of the championship has been in question and in an attempt to combat that situation, we were able to secure a support race at the 2012 British GP. This event should have ensured sufficient income to enable us to continue into 2013, but even without the atrocious weather, the logistical challenges that we faced at Silverstone resulted in many withdrawn entries with the result that it did not make a profit."

Meanwhile, Grand Prix Masters, the Masters Historic Racing organisation's series for Formula 1 cars of the same era, continues to be at the centre of speculation that it will take over the FIA tag, although Masters boss Ron Maydon and his team will not be drawn into making comment. However, Masters has already unveiled a seven-race pan-European calendar for GPM cars in 2013.

#### Super Tourers get mini-series

The Super Touring Cars of the 1990s, along with earlier cars from the Group 2 and Group A eras, will have a new four-event series organised by the HSCC this season. It will be for genuine cars with a period history.

The concept builds on the Touring Car Trophy races held at last year's Silverstone Classic, when about 40 cars proved a big hit with fans. The idea has been extended with races at historic meetings including the Silverstone event, the Thruxton Easter Revival (March 30/31), the Brands Hatch Historic Super Prix (July 13/14) and Oulton Park Gold Cup (August 25/26).

Series prime mover Dave Jarman says that interest in the new series is running very high. "I reckon we could have 50 cars at the Silverstone Classic this year," he said.



#### Honours for John Crosslé

John Crosslé, founder of Northern Ireland-based Crosslé Cars, was awarded an MBE in the New Year Honours' list.

The internationally respected engineer established his racing car business in 1957 and although the firm is now owned by marque enthusiast Paul McMorran, Crosslé is still closely involved with the company.

In 2010 Crosslé received an honorary Doctor of Science degree from the University of Ulster for services to engineering and manufacturing.

#### ■OBITUARIES

#### Colin Davis

Former Grand Prix driver and Targa Florio winner Colin Davis has died at the age of 79.

Davis, the son of Bentley Boy SCH 'Sammy' Davis, started racing in the 500cc Formula 3 category in the first half of the 1950s before continuing his career in Italy. He made two Grand Prix starts at the wheel of a Cooper-Maserati T51 entered by Scuderia Centro Sud in 1959.

His biggest successes, however, came in sports car



racing. Davis won the Targa Florio driving a factory Porsche 904 GTS with Antonio Pucci in 1964. He was also a double class winner at the Le Mans 24 Hours, sharing a works OSCA S750 with Aleiandro de Tomaso in 1958 and a Porsche 906LH with Jo Siffert in 1966.

#### Gabriel Konig

British club racing lost one of its most celebrated performers early in 2013, when Gabriel Konig died at the age of 70.

Born in Ireland, Konig's motor sport career commenced in 1962 at the wheel of a Lotus Elite. It was towards the end of that decade that she achieved most prominence, 18 wins at the wheel of a John Britten MG Midget enabling her to finish second in both BRSCC and BARC modsports championships in 1968. She subsequently raced a Chevrolet Camaro successfully and remained active in the sport until fairly recently, competing in historic events and serving as vice-president of the British Women Racing Drivers Club.

#### David 'Salt' Walther

One-time Indycar racer David 'Salt' Walther has passed away at the age of 65.

Walther spent much of his life making headlines for the wrong reasons. During his second Indy 500 start, in 1973, he became involved in a start-line accident that left his McLaren upside down with its driver's legs exposed where the car's front end had once been. He suffered serious burns and disfiguring injuries to both hands, but was racing at Indy again one year later. He recorded his best 500 finish in 1978, finishing ninth.

Walther never achieved any major racing success, either in Indycars or a brief flirtation with NASCAR, and in recent years had become best known for a succession of custodial sentences. The mayhem in his personal life was often blamed on his addiction to painkillers, something triggered while he recovered from that Indy accident in '73.

## Road Cars



#### Convertible Bentley can top 200mph

Bentley has shown its fastest open car ever at the Detroit motor show. The new Continental GTC Speed is propelled by a 616bhp version of its evergreen 6-litre W12 motor, enough says Bentley to push the 2.5tonne car through the air at an impressive 202mph.

Other improvements over the previous GTC Speed include the provision of an eight-speed transmission, said to be the main factor in bringing a 15 per cent fuel consumption improvement, although a combined figure of just 19mpg still seems stuck in another era. As with previous Speed models, the new GTC comes with lowered, stiffened suspension and a meatier feel to its Servotronic power steering.

Of course Bentley's claimed top speed is, like those of all other convertibles, recorded with the roof in place. A few years ago I went to the Nardo test track to see if this car's predecessor would hit the double ton with the roof down. It stopped short at 197mph, due to the convertible's sub-optimal aero profile, but managed 204mph with the hood up. It would be interesting, if academic, to see whether the new GTC was the world's first proper four-seater capable of a genuine 200mph with the roof down.



# Radical coupé breaks cover

Radical, a company hitherto best known for its SR3 and SR8 racing cars, has joined the world's supercar manufacturers. Its new RXC, revealed at January's Autosport show, is a twoseat coupé with styling deliberately reminiscent of a Le Mans prototype.

Radical claims the RXC is faster and more dynamic than anything the supercar sector has seen to date. The car is now available for sale

as either a road or a track machine, with prices starting at £87,500 plus VAT.

The RXC is a complete departure for Radical and is, says MD Phil Abbott, the company's most exciting project yet. Not only is it the first Radical with a roof, it seems set to bring a level of downforce unimagined in the road car arena until now. Indeed Radical claims that it develops around 900kg of downward pressure,

matching the car's own weight and allowing it, in theory at least, to drive upside down. Even McLaren has so far claimed only 600kg of downforce for its forthcoming P1 hypercar.

The RXC is built up around a steel spaceframe with front and rear monocoque crash boxes, which Radical says will make the car strong enough to pass the FIA crash test for Le Mans prototypes. Downforce is provided by airflow over and under the car as well as a GT3-specification carbonfibre rear wing. Bodywork is a mixture of composite and carbon-fibre panels.

Power comes from a 3.7-litre Ford V6 motor, much fettled by Radical

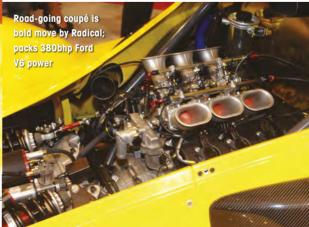
Performance Engines, although the car has also been designed to take the Suzuki-derived 3-litre V8 race motor used in the SR8. The Ford engine produces 380bhp and directs its power to the rear wheels via a brand-new seven-speed paddle shift transmission provided by Quaife. Radical claims a 0-60mph time of 2.8sec and a downforcelimited top speed of 175mph.

Suspension follows pure racing theory, with double wishbones at each corner operating pushrods to act on springs and four-way adjustable dampers mounted inboard to minimise unsprung mass. Ventilated discs are clamped by sixpiston calipers at each corner with ceramic discs as an option while treaded road and slick race tyres are both available.

Despite this extreme specification, Radical has made some concessions to everyday life on the road: it comes with air conditioning, electric power steering (said to be essential because of the downforce capabilities), electrically adjustable and heated exterior wing mirrors and a sliding pedal box so the car can be made to fit the driver rather than the other way around.

Radical says the RXC is aimed as much at the private track day user as someone wishing to take part in domestic or international GT and sports car events.





#### Car sales rise still below par

Figures from the Society of Motor Manufacturers and Traders reveal that more than two million cars were registered in the UK in 2012.

This is a rise of 5.3 per cent on 2011, the fourth successive yearly improvement.

All good news? Not quite. First, these figures are for cars that have been registered, but not necessarily sold. Secondly, the figures need to be seen in a historical context: in 2007, the last year of boom time, more than 2.4 million cars were sold in the UK.



#### Lexus axes its supercar

After some seven years development but just two years on sale, Lexus has shut the order book for its LFA front-engined supercar, with fewer than 500 thought to have been built.

Losses per car are unlikely ever to be made public, but probably dwarf even the £343,000 asking price

Despite fine engineering and a welcome reception from the press, it failed to establish Lexus as a credible alternative supercar maker to Ferrari. Its great claim to fame was lapping the Nordschleife in 7min 14sec, 10sec ahead of the likes of the Pagani Zonda F, Ferrari Enzo, Porsche 911 GT2 RS and Nissan GT-R. It would also have beaten Klaus Ludwig's pole time for the 1982 1000Kms.

#### Power to the people

Whatever else happens in 2013, it is certain to usher in a new breed of supercar, one powered not only by internal combustion but by electric motors, too.

Before the year is out, production versions of the Porsche 918, Ferrari F150 and McLaren P1 will have been unveiled and quite possibly driven. Only the recently canned Jaguar C-X75 will fail to make it.

Firm descriptions of all three are still unavailable, though it's known that the Porsche will have at least 784bhp from a 4.6-litre V8 assisted by twin electric motors, will reach 62mph in 3.2sec and touch at least 199mph. The first figure is no better than the McLaren F1 of 18 years ago, the second rather worse. Then again, an F1 can't cover 15 miles on electricity alone.

McLaren has at least shown the P1, but remains completely mute on the subject of power or speed, only saying that it will produce 600kg of downforce at considerably less than maximum speed. Ferrari hasn't produced more than a teaser picture of the F150, but it is now known it will be powered by a V12 related to the 730bhp unit in the F12. Considerable electrical assistance will be added, so expect 850bhp minimum.

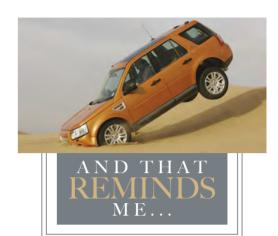
How the market will view these cars remains to be seen. Clearly, despite Porsche's claim that the 918 produces no more than 70g/km of CO2, none of these cars has an environmental leg to stand on. So the electric systems will have to actively enhance the driving experience, to wit the extra power they deliver needs to more than offset the weight penalty those extra motors and batteries bring.

And even if they do prove wondrous to drive, I can't help thinking that the wider world may be more excited by the affordable sporting machines that go on sale in 2013.

Three in particular stand out. There is the new F-type Jaguar, a car that's been driven by celebrities, dealers and delivery drivers, but no journalists. They all say it's wonderful, but then they're broadly allied to Jaguar, so perhaps that's not too surprising. Even so, I like the idea and the look very much, even though I'm disappointed that it's launching as a convertible first and its weight does worry me.

Porsche's new Cayman should be better than the new Boxster, already the best sporting car on sale, so you'll understand why my heart leaps at the prospect. As an aside, we'll also find out if the new 911 GT3 with its paddleshift gearbox, electric steering and an engine no longer related to a Le Mans winner, is as good as the old GT3. If so, miracles will have been achieved.

Finally, the Alfa Romeo 4C, said to be just as pretty and light in the production version as the 2011 motor show concept. I hope so. I rashly told Alfa Romeo that if it turned out to be as good in reality, I might buy one. Within an hour journalists were asking me if I'd really put my name down, and I'm still asked when it's arriving. I might have to order one just to shut them up.



Photographers can lead journos into deep water - or soft sand...

OTORING JOURNALISTS CRASH CARS, IT IS AN occupational hazard. I'd like to say I've not had a significant accident since I destroyed the UK's first Lancia Integrale Evoluzione 21 years ago, but the recent launch of the latest Range Rover in Morocco reminds me this is not true.

In 2006 I was also in Morocco with Land Rover, recceing routes for the launch of the second-generation Freelander. It had gone well. We'd driven up rivers and hopped over rocks I thought might destroy the car, and we'd soon be back at our Essaouria base for well-earned beers. All we had to do was cross the dunes that heralded the arrival of the Atlantic coast. Dunes? I could almost hear the photographer's ear prick up. Performing for the camera is the most likely way for a hack to damage a car and these dunes provided plenty of scope. But with Land Rover experts on hand, we'd be OK.

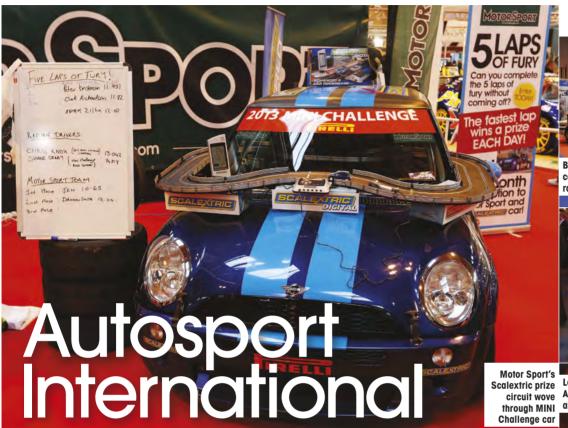
Inevitably, the cameraman wanted a jump shot: car fully in the air, sky above, sand below. So I duly flew from a dune or two, but the Freelander seemed disinclined to fly. "Try harder. Give it everything." Had the words come from the snapper I'd not have been surprised. In fact it was my chaperons at Land Rover egging me on.

So everything was duly given. I remember driving up the dune, seeing my colleagues making encouraging circular motions with their hands, the perfect launch off the top and thinking what a fabulous picture it would make. I then remember my view turning from blue to yellow and thinking this was going to hurt.

Which it did. The Freelander nose-dived into the desert bringing me to an abrupt halt. Because we hit soft sand damage to the car was limited to panels, trim and radiator. Damage to me was restricted to a thumping headache for a day or two. Still, we got a jump shot that was published across two pages. It was the shot taken a few frames later that stayed on the light box. Until now.

TO READ ANDREW FRANKEL'S LATEST ROAD CAR TESTS, TURN TO PAGE 120

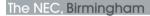
## Event of the Month







Len Terry admires Amalgam Lotus 38; above, new Formula 4



WHEN EXACTLY IS IT TOO LATE TO STOP wishing friends and colleagues 'happy new year' each January? In the motor racing world, it seems the end of the Autosport International Racing Car Show is the unspoken cut-off date. At the NEC, contacts are reconnected after the slumber of Christmas, seasons full of promise are launched and there's a buzz that our sport is about to spring back to life.

You always know what to expect from the show, which ran from January 10-13 this year. It changes little and is endearingly familiar, from the earpopping experience of the Live Action Arena to the halls of colourful stands that all have something to sell, whether it be the highest specifications of engineering technology... or even humble magazines.

Motor Sport enjoyed a successful show, helped in large part by a popular partnership with Scalextric. A layout of everyone's favourite toy, built around and within a MINI Challenge racer, drew kids (of all ages!) to take part in a frantic competition: 'five laps of fury',

for a prize of a Scalextric set of their own. It was won by seven-year-old Jordan Evans who set an incredible time of just 9.67sec on Saturday. Callum Jenkinson was fastest on Sunday, with a time of 9.98sec.

Themed stands this year included tributes to the late Richard Burns, whose incredible collection of rally cars sat proudly on show. A fabulous Tyrrell transporter provided a terrific backdrop to a selection of racers representing Sir Jackie Stewart's career, while the man himself drew





enthusiastic crowds, as he always does Force India Grand Prix driver Paul di Resta was there, alongside World Touring Car Champion Rob Huff, who enjoyed something of a glorious homecoming at the show following the title success you can read about elsewhere in this issue.

The Le Mans theme was strong, thanks to the presence of five-time race winners Derek Bell and Emanuele Pirro, plus Allan McNish and Johnny Herbert. The latter also presented a special karting challenge in memory of the late Dan Wheldon and in aid of the Alzheimers Society. It featured ex-footballer Robbie Savage, double World Superbike Champion Troy Corser and a host of familiar racers.

The NEC complex is hardly the most charismatic place in the country, but for four days each year it is the centre of the motor racing world. We wouldn't be without it. Damien Smith

#### REFLECTIONS

- The strengths and weaknesses of F1's top three
- A trip back in time, the heights of luxury in 1968

arly in the New Year there appeared an interview with Red Bull's Helmut Marko. It attracted an unusual amount of comment, not least because it contained less than complimentary remarks about one of the team's own drivers, Mark Webber.

You don't need to be in a Formula 1 paddock very long to pick up on the fact that Red Bull is not the most popular team within. For one thing, people will tell you, the company spends way more than any other, Ferrari included; for another, they murmur that Red Bull is 'too close to Bernie'; for another yet, there is a perception - not least among other mechanics - that some team personnel consider themselves 'a cut above'...

While these are not impressions one gets from talking with such as Adrian Newey or Christian Horner, the interview with

Marko served only to bolster them - the more so since it appeared in Red Bulletin, the company's house magazine.

Marko sets the tone with a curiously glacial response to an early question: 'You are regarded as very cool and aloof. Does that bother you?' "You'll never make it in Formula 1 if you are only addicted to beauty."

Seemingly the main purpose of the interview was to put across Marko's conviction that Sebastian Vettel is the only perfect racing driver there has ever been. This has long been his mantra, of course: Vettel was picked for Red Bull's Junior Team - which Marko ran - in his karting days and, apart from a brief spell with BMW, has been synonymous with the energy drink company ever since. Helmut has long regarded Sebastian as 'his boy',



and brooks no criticism of him. One remembers the notorious collision between the two Red Bulls at Istanbul in 2010, when he instantly - vehemently - put the blame on Webber.

Not too many agreed with him, but then not too many were surprised, either, for Marko's 'Svengali' relationship with Vettel was already well established, and Webber has never been under any illusions about his status in the Red Bull scheme of things - indeed it is only his excellent personal relationship with Dietrich Mateschitz that has kept him in the team for so long.

Last year Ferrari offered Mark a 2013 drive and he will have been mighty tempted, for few F1 drivers are immune to the lure of Maranello. And whereas the Australian and Fernando Alonso are friends, he and Vettel are not. In the end, though, Webber decided to accept the offer of yet another 'one-year deal' with Red Bull, for he could see what Alonso was coping with, week in, week out, and reasoned that an ultracompetitive car still counted for more than anything else.

Following this interview with Marko, though, Webber might have had pause for thought. At the beginning of last season, you will recall that Red Bull - its 'blown exhaust' advantage greatly reduced by regulation change - was struggling, and at the first three races Vettel was outqualified by his team-mate. This is dismissed by Marko: "We can say that the ideal Vettel set-up had yet to be found. It is quite different from that of Webber. Only with that set-up can you see the incredible 110 per cent Vettel in qualifying..."

Marko is Mateschitz's 'man at the races',

an employee of Red Bull, yet he then proceeds to speak patronisingly of the team's other driver. "It seems to me that Webber has an average two races per year when he is unbeatable, but he can't maintain this form throughout the year. And as soon as his prospects start to look good in the world championship, he has a little trouble with the pressure that this creates. In comparison with Seb's rising form, it seems to me that Mark's form somehow flattens out. Then, if some technical mishap occurs - like with the alternator, for example - he falls relatively easily into a downward spiral.

"For much of his career Mark was never in a top team, but he was always regarded as a high flyer if only he could get into the right team. Then Red Bull puts him in a car - a possible winner - and suddenly

# Nigel Roebuck

along comes this kid, and he snatches the booty from under Mark's nose. Psychologically it's not easy, of course; this would gnaw away at anyone's confidence."

Back to the blue-eyed boy – and perhaps we shouldn't be surprised, for the making of Vettel, after all, has also been very much the making of Marko, who at one time was not taken terribly seriously.

"In 2012 Sebastian's driving was virtually flawless, but he is a phenomenon - it is always like that. After the summer break, his performance curve shoots up. I don't know how he does it, but to keep doing it cannot be a coincidence. That brings us back to his method of preparation, the way he shuts himself off from the rest of the world, so that he can still call on reserves that other drivers might not have: Fernando Alonso, for example, who is busy with politics and funny comments."

Ah yes, now it's Alonso's turn. "I believe," Marko went on, "we saw the stress he was under towards the end of the season. Saying things like, 'I'm competing against Hamilton, not Vettel', and 'I'm up against Newey', these psychological skirmishes. We said, 'Just ignore him'."

Alonso, predictably, declined to rise to the bait, wryly commenting on Twitter that Marko's remarks made him feel 'flattered'.

It was not the first time that Helmut's cage had been rattled by Fernando. Towards the end of last season, as the championship battle entered its decisive phase, he went on about his 'political games', as if it were somehow underhand to suggest that Newey's post-Monza improvements to the RB8 might have contributed to putting Ferrari on the back foot. Over lunch with Martin Brundle, the subject came up.

"Yep," he laughed, "the smart thing would have been to keep quiet, wouldn't it? Marko goes on about Alonso's comments, saying he's told Vettel to ignore them – but clearly he can't do that himself! When I heard what he'd said, I thought, 'Mission accomplished, Fernando!' He'd got under their skin, hadn't he? All part of the game, and always has been - that's the way sport is at the highest level."

It is a fact that Alonso considers Lewis Hamilton his number one rival (and vice versa), because "Lewis can win in the best car - and also not in the best car..." The implication is not lost.

"I think both Fernando and Lewis think Sebastian is over-rated," said Brundle. "They think he's just had the best car. I saw you rated the top three in 2012 as Alonso-Hamilton-Vettel - actually, I think I'd have gone Alonso-Vettel-Hamilton..."

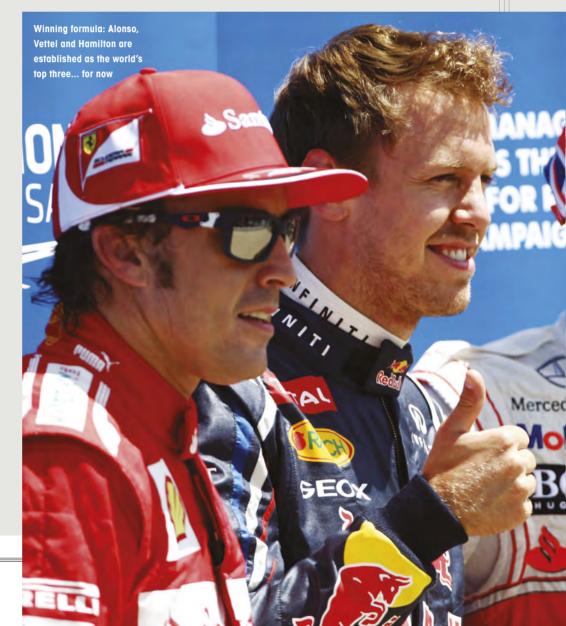
Well, I said, taking them in order, Alonso was clearly number one, and what I admired most was that, in what was often a very ordinary car, he never once compromised his effort.

"Yes, absolutely," said Martin. "He's number one for me, no question. A defining moment was an interview Fernando gave towards the end of the season. He'd had a struggle in qualifying, and he was only

eighth or something - and he said, 'No, that's good - last week I was there on the grid, too, and I finished on the podium...' I was so impressed - if he was one of those American preachers, I'd send him some money! I don't know how he does it - he was convinced he was going to win that World Championship, and so convincing in the way he spoke about it. I thought that was absolutely extraordinary - and he bloody nearly did win it, didn't he?

"I thought the moment of the season came in parc fermé after the race in Brazil, when Fernando was just staring at Vettel. It summed up the year for me. He wasn't standing there in disbelief - he was gathering energy from the experience, already fast-forwarding to the moment when he was the one jumping off the car, with his arms up in the air... Absolutely remarkable.

"I remember once being on a podium



with Schumacher, when we were Benetton team-mates - it was at Monza, and Senna had won, with me second and Michael third. He was jumping up and down and I was thinking, 'He's pretty pumped up for a bloke who's been beaten by his team-mate' - and then I realised that you've got to maximise the good days, because in sport there are so many bad ones. I thought, 'Yeah, that's right, don't be pissed off at finishing second - be happy with it, and use it...'

absolutely wanted him to win the title. I don't know him that well - I know Seb better - but leaving that aside, I wanted him to be World Champion because he did an absolutely extraordinary job. Had he won, we would have been discussing, 'Is this one of the greatest World Championships of all time?""

In terms of what Alonso had to work

"I really admired that in Fernando, and I

with, I said, his season seemed to me among the greatest any driver has had. His starts and opening laps were invariably stunning, and what impressed me, too, was that his overtaking moves were so clean: he wasn't always clattering into other cars. "Absolutely right," said Brundle. "He

took his risks when he had the chance - but if he had to yield, he yielded. I think his only mistake all year long was the first corner at Suzuka, where he squeezed Räikkönen and paid a very high price.

"Having said that, I drove an F1 car last

year - the Ferrari at Fiorano - and, believe me, you can see virtually nothing out of the thing. All the cars are the same. So here you are, heading down to turn one at Suzuka - believe me, it's not as easy as it looks from an overhead camera - and suddenly your race is over. The rest of the year I thought Fernando's decision-making process was absolutely sublime. OK, what about Lewis?"

Well, I said, after an occasionally appalling season in 2011, it seemed to me that Lewis was fundamentally back on it last year, driving beautifully, really enjoying being a racing driver again. That was never more apparent than in Austin, where I

thought he drove a fantastic race, hard and relentless after Vettel for lap after lap.

"Yep," said Martin. "That was personal! Actually, what I decided through the latter part of 2012 is that I like the real Lewis Hamilton. For so long I never really 'got' Lewis - I didn't get the 'cap down, permanent sunglasses, sucking on the energy drink, ignoring people around him' thing - but I don't think that's him. I think the genuine Lewis Hamilton is a really nice kid, and hopefully that will come to the fore. His problem last year was reliability, wasn't it?"

True enough, I said - but even that he coped with remarkably well, even though it cost him several races. By contrast, I wasn't that impressed with Vettel's behaviour when Red Bull was relatively off the pace at the beginning of the year, and Webber was outqualifying him. It seemed to me that Seb had a bit of a shock suddenly it wasn't a matter of simply showing up and winning the race...

"I think," said Martin, "the happy-golucky kid, coming into the paddock with his rucksack on, disappeared in 2012 - and the real Seb stepped forward. You're right - he doesn't cope very graciously when things go wrong on the track and I thought

> he made quite a lot of mistakes in 2012.

"On the other hand, the bloke's just won World his third Championship - at 25 and he's got a great team-mate: I wouldn't want to go into battle against Webber in an F1 car, but he's been comprehensively seen off by Vettel.

"Mark's like Jenson, isn't he? On his day he's got all the skill of the top three, but I think his emotions get involved in his racing. In a small way, actually, I see myself like that - in the same car, on my day, I beat Senna, Schumacher and Häkkinen, but the key phrase there is 'on my day': they could deliver like that every day.

"I see Vettel as a sort of mix of Alonso and Hamilton - Fernando's head and Lewis's foot. As well as that, after Abu Dhabi and particularly Brazil, 'lucky' must be his middle name!"

The first lap at Interlagos was indeed extraordinary. First, Räikkönen drove off the road to avoid hitting Vettel; then Sebastian cut across Bruno Senna - and was not investigated by the stewards; in the contact the Red Bull received a sizeable clout; finally, proceeding backwards down the middle of the track, it was avoided by all the following drivers.

"Yes," Brundle said, "he was unbelievably fortunate to get away with all that. The coming-together had



"I see Vettel as a sort of mix - Fernando's head and Lewis's foot"



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nothing to do with Bruno - he'd started well and was making a great move when Vettel hit him. Seb absolutely screwed up there - he should have left a car's width on the inside of the corner, as Alonso would have done - but where he was brilliant, on the other hand, was letting the car freewheel backwards. How on earth, though, did his right rear suspension survive that bash from the Williams?"

How indeed, but it did, and Vettel duly collected enough points for another World Championship. What, I said, of the perception that Red Bull was 'too close to Bernie', not least Sebastian? As the owner of four cars - 20 per cent of the grid -Mateschitz is undeniably a very powerful figure within the sport and Ecclestone has long admitted to a soft spot for Vettel. All a bit too cosy?

"I hear what you say," said Brundle, "and don't disagree with a lot of it. I think some in the team have cultivated Bernie pretty successfully, and Vettel's a smart boy, no doubt about it - on Bernie's birthday he'll have a present for him, for example. All the clever drivers I know have always engaged Bernie: Niki, Nelson, Ayrton, Michael... They work the system to their advantage, and if my boy were coming into F1, I'd be saying to him, 'Go and see what Sebastian's doing.

"As for Red Bull the team, they've managed to cut a financial deal, second only to Ferrari, in the new hierarchy ahead of McLaren, and way ahead of Mercedes. And that's bloody clever, however you look at it: if I were running a team, that's what I'd be trying to do. I know Red Bull are seen as arrogant, and sometimes I think that's deserved. Longestablished teams see them as 'New World' - and, as well as that, they're winning.

"I must make the point, though, that I'd be extremely disappointed for F1 if people like Mateschitz and Vijay Mallya took their train sets away, because they're stakeholders in their F1 teams - and how many people are stakeholders in their teams these days? Not many.

"If next week Vijay had to pull out, or



Dietrich said, 'You know what, I think we've now maximised our marketing possibilities in F1', what would we end up with? A third McLaren, a third Ferrari, maybe a third Mercedes - which would wipe out Williams and Sauber, particularly at a time when everyone's got to spend \$22m on the new V6 turbo engine. Three or

four years from now we'd have four teams running four cars each - maybe five, who knows?

"How many teams have we seen come and go? I think it's 70-odd and that will continue to happen. One day Red Bull Marketing will say, 'Right, done that what's next?', and when that happens I hope there's somebody waiting to fill the space. Something that really struck me during the summer break - at a critical time, during the Olympics - was that Red Bull had show cars around the world. In those five weeks, no other team did a thing to promote F1..."

All excellent points made by Martin, all of them irrefutable. Mention of PR, though, inevitably put the Kimster into my thoughts. By resolutely ignoring it, I have long thought, Räikkönen actually brings

good press to himself and his team: most folk are so bored to tears with political correctness, which confronts them in every aspect of their lives, that when they encounter someone like Kimi, not surprisingly they cheer.

"Yes, the F1 teams are not smart on this sort of thing, are they?" said Brundle. "People are

bombarded with boring PR sound bites and flick them away - in the end they will only absorb the characters, and Kimi is a perfect example. That whole Abu Dhabi radio thing - which is already legendary was positive for him, but also for his team, because it gave them exposure. If you let the guys be themselves, in the end you will get a positive fan reaction. And Lotus had a great season. If Grosjean hadn't been so accident-prone, and if Kimi had been on it the whole time, the team could have won one of the championships."

The biggest news story of the year - of course - concerned Hamilton's move to Mercedes, which some thought understandable, others unfathomable. Before getting on to that, though, there was the question of Lewis's replacement at McLaren. I was surprised, I said, that, with Nico Hülkenberg available, the team had gone for Sergio Pérez.

"I was, too," said Martin. "In fact, I was also surprised that Ferrari didn't go for Hülkenberg - it pleased me to see Felipe Massa back on form towards the end of the season, because I love the bloke, but in all honesty I wouldn't have re-signed him.

"I like Nico - I like his attitude. He's calm, he seems intelligent, no bullshit. All right, I know he eventually blew it in Brazil, but the thing is, he was in a position to blow it. He was right there at the sharp end. At Interlagos two years ago he was on pole in the Williams and, all right, you could say he lucked into it because of the changing conditions, but the fact is he

delivered. I think the kid's got it, no question.

"As for Lewis, what does one say? In Singapore I said to Martin Whitmarsh, 'From everything I'm hearing, you guys believe Lewis is going to stay with McLaren. I'm about to go on air - if I say that, will I look stupid?' And he said, 'No, you won't look stupid, Martin,

because they're indicating to me that Lewis is staying...' A few days later, of course, he signed for Mercedes, and at the next race I said to Whitmarsh, 'You told me I wouldn't look stupid!' and he said, 'Martin, I've got the email, saying he was going to stay...

"The fact is that Lewis had Ross Brawn, Niki Lauda, Simon Fuller - and probably Bernie, probably his father – in his ear, saying 'Jump!' I honestly thinks he looks at it like this: 'Right, in three years I'll be €100 million better off – if it works, great, if it doesn't, I'll get another roll of the dice, because I'll still only be 30'. I think he's taken a gamble he didn't need to take, from a career point of view, but... then again, I didn't think Jenson was right to go to McLaren and he was! Let's wait and see.

"What I do think about Lewis is that he's come up with the wrong reason for leaving -he should have been more straightforward. To say he wants to make a struggling team into winners... I mean, do that at McLaren. Why not make a great team into winners again? Why not think, 'Right, what I see around me is a lot of excellence, and some

things that are not right - I'll make it work'? Instead, Jenson's nicked his team from him and the concept of him making another team great doesn't add up.

"I don't think that's Lewis's skill: I believe, since Senna, he's the most gifted guy I've seen in a racing car, and undoubtedly the quickest - although not the most complete: that's Alonso. I don't think Lewis is the most intellectual, either - I think he is pure speed, and he should be put in an environment, like Mika Häkkinen, of 'This is what I do, this is what I want give it to me.' The thought of Lewis being part of some master plan to make Mercedes better... it just doesn't add up to me.

"That's not where his abilities lie.

"You could

triple Alonso's

worth and he'd

still have the

hunger"

Nothing wrong in that you are who you are. Lewis's skills, like those of Gilles Villeneuve, lie in driving a racing car at speeds - and angles beyond belief, so isolate that: 'We don't want to see you until Thursday night - and then, boy, will we be ready for you...' I think Lewis has jumped for the wrong reasons, quite honestly,

but let's see if it works out. Luckily, Ross is mature enough to engage his skills, and minimise his weaknesses - provided he's allowed to do so ... "

A few months ago Martin Whitmarsh spoke to me of the importance of 'hunger' in a racing driver. "I never knew Gilles Villeneuve," he said, "but it's evident from everything I've heard that he had it in spades, and so also did Ayrton. They had that hunger to the day they died, and it had nothing to do with how many Ferraris they had in the garage, or any of that stuff. To me the hungriest driver out there today is Alonso: you could triple his net worth, and he'd still have that hunger - it's in his makeup. I'm sure Ferrari pays him well, but Fernando is actually not someone who would be moved by money..."

"Well, the proof's in the pudding, isn't it?" said Brundle. "He's moved back home to Spain - obviously he thought 'I'm only on this earth for a short time', and he gave up the tax-free thing. I can see what Whitmarsh is getting at - I don't think Fernando's driven by money. Absolutely not. They're all different, aren't they?"

As we finished lunch, with coffee and a Macallan or two, it seemed only appropriate to discuss the great success story of the 2012 season, this the return of F1 to the USA - and a spectacular new venue. I fell in love with Austin's Circuit of the Americas on sight and Martin felt the same wav.

"It was huge, wasn't it? Couldn't have been better. I arrived there on the Thursday and a couple of people said to me, 'This is Adelaide...' They were absolutely right, too - it's just the right size and the locals are delighted to have the sport there. Austin and F1 are a perfect fit.

"People at home watched it on TV, heard the fans going 'Yee-ha!' saw the drivers wearing Stetsons on the podium and thought, 'This is brilliant - I want to be part of it...' It couldn't have been more different from a place like Korea, where the paddock's like a prison camp, there's no one in the grandstands and viewers are going to think, 'Well, they're not interested - so why should I be? I've got my remote control - I'll use it to watch something else..."

ack in May 1968 I went to my first Monaco Grand Prix, courtesy of Page & Moy, and so, I discovered years later, did Maurice Hamilton, who was to become a lifelong friend. Maurice's trip, in fact, was a little more elaborate than mine, for after Monaco it went on to the Nürburgring 1000Kms, and in the course of it he got to know another fervent fan, one Neil Oatley, who went on to have a distinguished career in Formula 1 and works for McLaren still.

Oatley, quiet and reserved, has a complete passion for the sport, with an encyclopaedic knowledge of its history. If I'm quite proud of my collection of racing books, it bears no comparison with his: to his wife's despair - from a space point of view - Neil buys virtually everything, often on subjects esoteric even by my standards. Invariably, as I wander around the memorabilia stands at Goodwood, I find him there, struggling to carry his latest acquisitions.

# Nigel Roebuck

What Oatley has, too, is an eye for the offbeat, and routinely he emails me quirky racing photographs and links to movies he has come across here and there. If I eschew such as Twitter and Facebook, I am not totally in the dark ages and have long been addicted to YouTube. Start delving, and an afternoon is gone in a blink.

Neil's latest email, though, revealed a film clip new to me, although logic suggests I must at some point have seen it long ago. How could I not? Made by the BBC in 1968, it is a 35-minute profile of Anthony Colin Bruce Chapman and I savoured every second.

This was the year, of course, of the trip to Monaco, and the year, too, in which I was considering buying my first Lotus Elan, which was duly delivered - in kit form, to avoid purchase tax, the forerunner of VAT - in January 1969.

More significantly, it was also the year in which two Lotus drivers died: Jimmy Clark at Hockenheim on April 7, then Mike Spence at Indianapolis a month later. A catatonic time, then, for the team and overwhelmingly - for its proprietor, who briefly considered getting out of the sport.

It didn't last long, though, for Chapman had racing in his veins. He once told me he had never felt quite the same about it since the death of Clark - his closest friend, as well as his supreme driver - but fundamentally it was part of him, an essential in his life. As he says in the film, shot that summer: "Basically, Lotus go motor racing because I like it..."

My, how the world has changed since 1968. As a fan, I was of course going to races at the time, and saw it all first-hand, but even so one loses sight of just how different everything was, crystallised forcibly in the moment when the film's narrator observes that, "No one can make much money out of racing..." Bernie Ecclestone, then managing Jochen Rindt, was starting to think maybe he could change that.

A focus of the film is that Chapman just might be a millionaire. In spite of the tragedies of the very recent past, Colin is at his relaxed best during the interviews, shrugging off suggestions he is worth a million - "Oh, I wouldn't know about

Even so, the narrator tells us that, "Chapman doesn't spend with a millionaire's abandon - his one big new venture is the £40,000 house he's building. Until it's finished, the Chapman family lives simply, if comfortably: no servants, just an au pair girl..."

Given that 'no one can make much money out of racing', Chapman's wealth, we were told, was coming from his road car operation. The new factory in Norfolk was but two years old, but Lotus would sell '3000 cars this year, and perhaps 5000 in two years'.

As anyone will tell you, Chapman was a remarkably charismatic man, urbane with his David Niven moustache - and a natural showman. When he was in the mood, he could make you laugh like few people I have known, and had a natural gift for sliding out of a tricky situation.

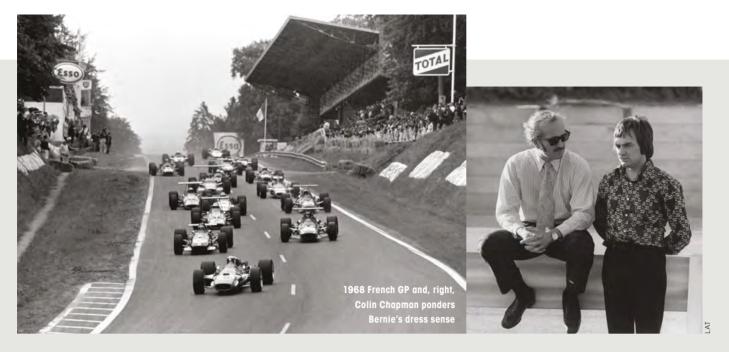
In a paddock somewhere in 1971, I murmured that my current Elan seemed to be using a lot of oil. "Of course it does,"

Colin responded vigorously. "What d'you think's lubricating it? What you need to worry about," he added darkly, "is the engine that doesn't use oil..." I felt I should apologise for raising the matter.

For all his charm, Chapman had a reputation for ruthlessness when the need arose, but in the interview he said he thought that the wrong word. "I don't think you have to be ruthless - I think you have to be prepared to make some unpalatable decisions at times, because frequently you're faced with making a decision between two evils, and you're going to hurt somebody. This is the tragedy of trying to run a business - you do end up making unpalatable decisions sometimes, but frequently there's no way out..."

The times, they were indeed so different. In the film there was great excitement, for example, at the fact that Chapman had his own aeroplane. A modest twin-engined propellor 'plane, rather than the executive jets that are ten-a-penny in the F1 of today, Colin used it for a variety of purposes, one of which was to fly to the Grands Prix - the great majority of which were then run in mainland Europe.





The BBC sent a crew to Rouen, there to film Chapman in racing mode, and some aspects of the weekend's footage take your breath away. As I say, by then I'd been a frequent spectator for years, but, even so, found myself thinking, 'Ye Gods, was this really how it was?'

Anyone familiar with Rouen Les Essarts will need no reminding of how magnificent

a circuit this was, but still - although I have

driven around it countless times - I was taken aback by the narrowness of it, in a racing context. At the start of the race, the cars - in 3-2-3 grid formation - seem almost to be touching, and the pit scenes, with engineers and mechanics squatting down to talk to their drivers, with no protective wall between them and the track, are extraordinary.

There was, of course, no pit lane speed limit - that wasn't introduced, remarkably, until 1994 - but then there was no clearly defined pitlane: it was simply the bit of tarmac at the side of the track. There sat Graham Hill in the Lotus 49 – no seat belts (Jackie Stewart alone was using them at that time), and a roll-over bar lower than the top of his head - while Chapman suggested that now he do a quick run with the rear wing, described as 'the revolutionary aerofoil', which was lying against the pit wall. It was the work of a moment for the mechanics - including a youthful Bob Dance - to bolt it on, and one shuddered at the flimsiness of the absurdly high struts on which it was mounted.

Most sobering of all, though, is the sight of Jackie Oliver's 49, utterly destroyed indeed almost bisected - in a practice accident. This was one of racing's more miraculous escapes, for Oliver was completely unhurt, if shaken. No routine medical checks in those days.

"Are you all right?" Chapman says to his driver. "You were pretty white 10 minutes ago. I think you ought to sit down in the chair..."

What had caused the accident - which occurred when Oliver was at full speed, in a straight line? "You didn't hit anything, did you?" Oliver says not, and Chapman's first thought is that the gearbox bellhousing broke: "You see, the suspension's hung on that gearbox - so if the gearbox breaks..." He goes over to McLaren, sitting in his car. "Hey, Bruce, I think I'd better tell you, the gearbox bell-housing broke, and the whole of our rear suspension's hung on the gearbox, same as yours. It's just broken in half in the middle. You'd better have a look, and see if there are any cracks in your bell-housing. I'm bringing Graham in..."

In point of fact, the Lotus's failure proved to have nothing to do with the gearbox, and now, as the narrator put it, "Chapman had £18,000 worth of junk metal to examine..." "Any idea what might have caused it?" "Haven't a clue at the moment. There are so many things that can go wrong with a racing car - the unusual one is the one that finishes..."

This is a fascinating film, to be found at youtube.com/watch?v=oEFSGcdAAzA, and I'm indebted to whomever put it up there, for it's a memorable snapshot of an era long gone. "In fact," comments the narrator after the Rouen segment, "the race was something of a disaster and Hill broke down again..." There is no mention of the fact that Jo Schlesser was killed soon after the start, the fourth consecutive driver to die on the seventh of the month. Innocent, deadly, times.

• Don't miss our podcasts with Nigel and the team - plus special guests on www.motorsportmagazine.com

### Rob Widdows

#### DISPATCHES



#### SMOKE AND MIRRORS

O BORROW A PHRASE FROM NASA, WE ARE IN THE MIDST of the 'launch-and-test' phase. This is the time when the curtains are drawn back on a new racing season and a series of underwhelming 'reveals' take place around the world. We are invited to take our seats while champagne is served, speeches are made and a new Grand Prix car appears in a blaze of flashing lights, a puff of smoke or a cloud of dry ice.

The drivers, in freshly laundered overalls, sit on the wheels and tell us how their new car will be a world-beater. The sponsors sip their drinks and hope the drivers are right. A few weeks later the cars will appear in Melbourne looking totally different because testing exposed the chinks in their carbon armour.

Neither launches nor testing tell us much because we are not privy to fuel loads or tyre compounds on any particular day. Fastest in the final test can be fourth on the arid in Australia. Sensible teams do not make wild claims amid the smoke and lights of a launch. They just show us a car and get on with building the one they will actually use. Time was when a 'launch' involved trekkina up to Silverstone on a freezing day in January to witness - well, not very much. I well remember the first appearance of the Lotus 79 in 1978. Yes, I know, it was confusing. Anyway, as the black and gold machine came down the ramps of the transporter, it began to snow. Most people shuffled off to the greasy spoon at the back of the paddock for a mug of tea. But I hung around, stamping my feet, waiting for a chance to speak to Colin Chapman. But he, too, had taken shelter, in the back of a black and gold lorry. I watched as the mechanics wheeled the car to the pits, its skirts scraping along the frozen ground. Mario Andretti appeared, looked up at the grey sky and said something that made the mechanics laugh. I approached with my tape recorder. "Where are you from?" asked Mario. I told him I was from Radio Victory. "Victory, huh? Hive right on Victory Lane back home," he drawled,

smiling, and told me all about his new F1 car. Not a uniformed young lady in sight, nobody recording me recording him. Things were simpler back then.

Later on Mario did a few laps, the sound of a lone Cosworth echoing around the vast emptiness of the old Northamptonshire airfield. Eventually he spun and called it a day. I waited three hours to speak to Chapman, frozen to the spot outside his motorhome. Taking pity, he beckoned me inside.

"How long have you been out there?" he asked. I told him. "Sit down lad, what do you want to know, you have as long as you like," he said and carefully explained the ground effects of his new car, asking me guestions at the end to make sure I'd understood. It was dark by the time I made my way home.

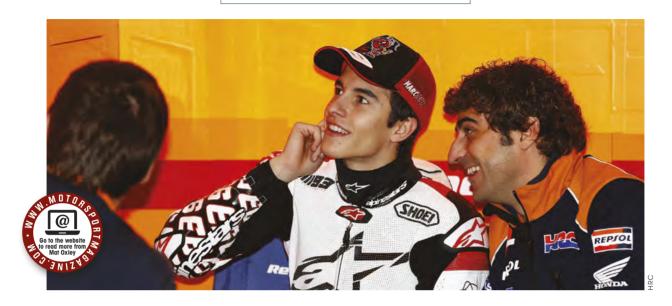
A Williams launch was always equally low-key, a new car shown to us over a cup of tea at Didcot, or at a windswept Silverstone. Stuffy hotels, nightclubs and flashy shows were still many years away. When the FW07 was rolled out in the spring of 1979, the season was already under way, too late for much fanfare. But Patrick Head's car just looked right, neat and compact, and so it proved, giving Williams its first World Championship in 1980. The best cars, it seemed, had no need for smoke and mirrors. Alan Jones certainly didn't care for endless photoshoots with happy, smiling team-mates in newly laundered overalls.

Excellent food, and wine, were features of a Renault launch. No flabby canapés from a distant hotel kitchen, these were handcrafted for our delectation by a French chef. The yellow cars looked a bit clunky, there was nothing the finest Chablis could do about that, but by 1983 designer Michel Tétu had got it right and Alain Prost missed the title by just two points.

By the time you read this teams will be testing and launches long forgotten, but the big test comes when the lights go out in Melbourne on March 17.

# Mat Oxley

#### ON TWO WHEELS



#### THE MARC OF GREATNESS

OTOGP HAS LOST TWO OF ITS MOST EXCITING exponents in the last year and a half: Marco Simoncelli to a fatal accident and Casey Stoner to a desire to spend more time at home with his family

Whenever a great racer exits stage left, it's difficult not to wonder whether we will see their like again. But, as always, the world keeps turning and new heroes soon swim into view.

This time it's a young Catalan, already a double World Champion, just as Valentino Rossi was when he graduated to the premier class at the turn of the century. I don't make the comparison liahtly. Marc Marauez is more than just the latest product to roll off Spain's MotoGP production line. His reputation is such that most of the MotoGP grid dreads his arrival - and not only because he's so fast.

Marquez, who turns 20 on February 17, happens to combine the otherworldly talent of Stoner with the raging aggression of Simoncelli. During 2012 he cut a swathe through the Moto2 World Championship, a kind of Formula Ford on two wheels notorious for its viciously close racing. Marquez nearly always had the speed to win, which was impressive in itself, considering the category's control engine, ECU and tyres, but it was the manner of those victories that caught his new MotoGP rivals' attention.

Like Simoncelli, Marquez is a fighter, though he is brighter and more devious than the much-missed Italian. While Simoncelli went into battle with a scream in his throat, Marquez is more likely to sneak up behind his prev.

Some moves have been beyond the pale, but others are works of genius. On the racetrack he is committed to making things happen and takes real joy in administering the coup de grâce.

His worst crimes have rightly attracted punishment, though the penalties imposed have merely allowed him the opportunity to highlight his talent. At last year's season-ending Valencia GP,

Marquez was sent to the back of the grid for knocking off a rival during practice. The race started in the damp, a narrow dry line appearing as the laps counted down - far from ideal conditions for overtaking 33 rivals. Marquez was unfazed by the treacherous asphalt and waltzed his way to the front. "When I saw the leaders so far ahead I didn't expect to beat them," he said afterwards. "But I rode on the limit every corner - OK, if I crash, I crash..."

It is rare these days for a rider to admit such determination to win at all costs, though in fact Marquez doesn't crash very often and - despite what happened during practice at Valencia there's evidence that he has exorcised his most evil tendencies. During the Valencia race he made one of his most crucial moves at the same corner where he had committed his practice misdemeanour, this time graciously allowing his rival a few extra thousandths of room.

Marquez will surely have a more challenging time in MotoGP. He might even fail to conquer the class of kings, but I doubt it. He has everything he needs: intelligence, talent, aggression, bravery and brilliant racecraft, as well as a brace of factory Honda RC213Vs. Honda only signed Marquez to its Repsol-backed MotoGP squad last summer, but even before Stoner announced his retirement the Spaniard was destined for a slot within its factory team. Honda has nurtured him for several years and sees him as its future.

The Japanese aren't usually ones for talking big, but Honda Racing Corporation vice-president Shuhei Nakamoto recently announced that he expects Marguez to finish on the podium at his MotoGP debut in Qatar on April 7. No pressure, then.

Marquez seems up to the burden of carrying Honda's hopes. After breaking the Sepang lap record during his first dry-weather outing aboard the RCV, he returned home and ordered his first set of Repsol leathers, complete with elbow sliders. No wonder the others are worried.

# Gordon Kirby

#### THE US SCENE



#### NEW KING ON THE BLOCK

RAD KESELOWSKI SURPRISED MANY PEOPLE WITH his powerful run to last year's NASCAR Sprint Cup championship. Keselowski won the championship in only his third full season in the Cup series with Roger Penske's team. In many races the 28-year-old looked like an old hand, often employing keen pitstop strategy to win five races and establish himself as the man to beat over the year's final 10 races.

Keselowski's first championship was also the first Sprint Cup title for Roger Penske's NASCAR team after more than 20 years of trying. It turned out to be the most elusive goal of Penske's celebrated career in racing and it was even more satisfying for Penske to do it with Keselowski, "He's terrific," Penske says, "He's the kind of kid who worked on his race cars and slept on the back seat of the truck on the way to the track. That's where the raw talent comes from in some of these kids who are so good today."

Keselowski is a third-generation racer from southern Michigan, just outside Detroit. His grandfather John raced motorcycles and cars and Brad's father Bob started racing when he was six. eventually winning the ARCA championship in 1989. Brad started racing when he was 14 in quarter midgets before moving up through local stock cars. In 2004 he moved into NASCAR's Truck series with the family team and ran the full schedule in '05 before the operation ran into serious financial trouble early in 2006.

The Keselowski family had to sell its race shop and assets, but as they struggled financially Brad's career began to take off and in the last few years he has been able to settle family debts. Dale Earnhardt Jr recognised Keselowski's ability and hired him in 2008 to drive in the second-tier Nationwide series. The following year Keselowski finished third in the points table and scored his first Sprint Cup victory at Talladega, driving James Finch's car.

Meanwhile, Penske had been winning races, but not championships, with the likes of Rusty Wallace, Ryan Newman

and Kurt Busch. Roger says he wasn't unhappy with the situation, but woke up one day with a fresh view. "I said, we'd better get some young guys in this team and I started to watch some of the drivers in the Nationwide Series. I saw Brad when he was driving for Earnhardt Jr. That brought him a lot of attention and he had success in that car. So I contacted him and we talked about what his future was going to be when he became available.

Keselowski was committed to both JR Motorsports and Hendrick for another year, but 12 months later neither team was able to offer him a full-time ride in the Nationwide or Sprint Cup series. "So we offered him a full-time programme in both series and he came with us," Penske says, "That was really the start, He's a total team player. He's always at the shop working with the crew. He's a great kid and an excellent driver.

In 2010 Keselowski ran both series and won the Nationwide championship, thus taking Penske's first NASCAR title. "We got Paul Wolfe on board as Brad's crew chief," Penske says. "We put the team together and he won the Nationwide in the first year. We weren't that successful on the Cup side but he was getting his feet on the ground with us and we were starting to build the team. Then we moved Paul up to the Cup team last year and Brad just took off like a rocket."

Penske's team has switched to Ford this year, after Dodge decided to pull out of NASCAR, but Roger believes there's a chance Dodge could return to NASCAR in 2014. "I can tell you the Dodge people put in extra effort with people and technical support that really helped us get to the finish line," he says. "I hope this championship will give Dodge's senior management a chance to take a look at NASCAR and think about getting back in with both feet in 2014."

For America's most successful racing team, now number one in NASCAR, the beat goes on.

#### A long way from Holmes

With regard to Snetterton and the ADO16 (Austin 1100) race, I was there taking photos. The cars that were loaded back onto the transporters afterwards were not the same shape as the ones that arrived! I recall the fun the drivers had on the grid, putting on their handbrakes and easing out clutches, forcing the cars into a synchronised porpoising motion on their hydrolastic suspension. Then came the long, lonely dark and cold but happy ride back to Surrey on my Lambretta...

Martin Holmes, Pyrford Green, Surrey



#### Straight and narrow

Doug Nye's recent article about the 1962 Autosport 3 Hours brought back a few Snetterton memories.

I attended the meeting, spectating by the hairpin at the end of the old Norwich straight. The race for Austin 1100s was an unbelievable spectacle. The sight of all those brand-new cars barrelling into the hairpin was quite something - it amazed me that they all got around. It was certainly entertaining.

At the time I believe BMC was hoping to sell these cars after the race. What a silly idea!

In the main event Jim Clark was in a class of his own, but it was a shame his Lotus broke down. I also recall watching Mike Salmon in the new Aston Martin Zagato, accelerating away from the hairpin with the back of the car snaking from side to side.

Terry Fletcher, Standon, Herts

#### Hill street blues

Sir,

Doug Nye's comments about interview responses remind me of one I cherish from way

Graham Hill had been presented with some major award - I can't remember what, it might have been the Grandstand Sports Personality of

the Year. In the media scrum afterwards a microphone was shoved in Bette's face and she was asked if there were times when she regretted being the wife of a racing driver. Back came the response, "What, like now for instance?" There were no further questions!

Martin Roche, Colac, Victoria, Australia

#### Bare necessities

Your recent article about Denny Hulme provided an insight into something that has puzzled me for more than 50 years.

Michael Stahl revealed Denny's liking for driving road cars in bare feet. In 1960 I lived in Mitcham in the southern suburbs of London and used to cycle with my brother to watch two racing drivers working on their cars in a nearby road. These drivers were Denny Hulme and George Lawton. On one occasion, when a spare part was needed, Denny leapt into his Ford Zephyr to go to the local garage, and drove off with bare feet. I was 12 at the time and quite amazed by this behaviour, but the article has now shed some light on where this

I often wish I had owned a camera in 1960 - I missed the chance to obtain some unique pictures. Thanks for a great article that gave some new insight into a quiet champion.

Roger Hoyle, Camberley, Surrey

#### A borrower and a lender B

Your website piece 'The Best of MG' shows a works MGB barrelling down a village street on the 1966 Targa Florio, a picture that features my bumpers!

I'd taken myself down there in my MGB and, following 'our' late Continental Correspondence's advice, had driven the whole way and not cheated by using the Naples-to-Palermo ferry as the teams did. (And yes, he was right: Naples was about halfway from London in terms of driving effort.) Once there, I found a wee note stuffed under my wipers

#### LETTERS TO THE EDITOR

Write to: Motor Sport, 38 Chelsea Wharf, 15 Lots Road, London SW10 0QJ or e-mail: editorial@motorsportmagazine.co.uk

(Please include your full name and postal area)

stating that Stuart Turner 'needed' to see me at the Albergo Lido. The Bs had failed scrutineering due to their lack of bumpers, so that picture shows my bumpers barrelling towards us in that hot Italian setting.

Margot Healey was a very welcoming Chef

de Camp and I slept (under my tonneau) in their car park for the duration. I also enjoyed a hilarious evening with the whole BMC/ Healey troop on the bumper cars at the Palermo fair, plus a memorable practice lap of that tremendous course, on open roads,



with Richard Bond in EJB 806C - the '65 Healey in which Timo Mäkinen so nearly won the previous year's RAC Rally. This was Ted Worswick's practice car, because he'd entered his ex-Sebring lightweight Healey 3000 and was also part of the BMC family at the Lido.

En route home I caught up with the BMC barges north of Naples, where they quickly replaced my glowing brake pads at the side of the autostrada, and then asked if I'd drop Timo off at Rome airport. He promptly postponed his flight and we subsequently propped up the bar. I then needed to borrow 15 quid off him for petrol home to the UK, but I repaid it on a subsequent visit to Abingdon...

Pieter Thoenes, Canada

#### Wizard of Oz?

I have just finished reading the Gordon Kirby story on the IndyCar Series' search for a new CEO. I'd like to put forward the one man I believe has not only enough runs on the board with regard to his CV, but also the nous and acumen to deal with the Penskes and Ganassis of the pitlane. He has a vast knowledge of the sport, its history and promotion. He dragged the Australian Touring Car Championship from a walking corpse, which it was in the early 1990s, to become arguably one of the top three touring car series in the word.

Gentlemen, I give you Tony Cochrane, who is just out of work and looking for a new challenge. Oh, and he got Frank Sinatra to come back to Australia after that, er, incident with the press in the 1970s...

Andrew McKenzie, by e-mail



#### Continuation racing drivers

With reference to Gordon Cruickshank's article 'Revive, Recreate' (Jan 2013), the debate regarding how far to go when restoring or simply maintaining a historic car will surely never achieve consensus. The following comment might help, but probably won't!

It's general knowledge, I believe, that most of the cells in the human body are replaced during a normal lifetime - often several times over. Apparently the human skin is gradually replaced every five to seven years. So you can preserve/replicate/revive old cars as much as you like, but old racing drivers are, without exception, anything but the original. Stirling Moss and his ilk are, literally, not the men they once were. But the important thing is, we love to watch them having a go at Goodwood and accept them for who they are. Or were.

I also wanted to say how much I loved 'Lunch with Rick Mears'. What a driver - and what a great magazine.

Richard Tudor-Owen, Ixworth, Suffolk

#### Peace haven

In December 2012, I visited the Hotel Panamerica, Buenos Aires, to see a Juan Manual Fangio exhibition that had cars, trophies, gloves and one of the great man's helmets.

Currently Argentina and the UK are not on friendly terms and to young Argentine people it has always been that way. I showed several of them the 2011 Motor Sport issues which documented that Fangio proudly had a Falkland Islands driving licence.

Once the young folks read and translated the English they realised the situation between the two nations had once been far better than it has for the last 30 years. I hope the copy they made of your short notes is distributed.

Robert Rowland, Indiana, USA

#### Missing ingredients

Sir

Peter Wright (Letters, January 2013) makes the case for the Balance of Performance approach to racing, which, as he says, has become the norm. I'm afraid much has been lost by that approach. It used to be understood that racing was between types of cars; if you built or ran a car that was faster, you would have an advantage. An equal driver in the best car

would win. That's the way it was for the first century of motor racing. To put it simply, in the 20th century we had car racing; in the 21st century we have driver racing.

In the 20th century, one of the excitements was a superior driver compensating for an inferior car and winning anyway - eg Stirling Moss and his Lotus sometimes beating the much more powerful Ferraris in 1961. Another excitement we've largely lost is the drama of a superior car coming along and knocking the previous champ off its pedestal, such as Ford taking Le Mans dominance from Ferrari.

The most important thing that's disappeared is character. A GT Ferrari, Porsche and Lotus didn't just look different from one another: they were different in their attitudes and capabilities. Sometimes a car came along that was just plain superior - such as the Ferrari GTO, Porsche 917, Porsche 962, or Jaguar XJR-14 - and racing had a new star. Note that those are the cars that are revered in racing history, the cars that draw the crowds at historic events and concours - cars that were allowed to be individual and superior.

Fortunately those days are not gone completely. In Formula 1 and WEC, Balance of Performance has not been allowed to take over completely; some cars are still better than others. We still have the drama of Alonso almost compensating for a slightly inferior Ferrari in 2012, and Vettel dominating in a superior Red Bull in 2011. It is no coincidence that these are today's most exciting series. Steve Bieler, Trumansburg, New York, USA

#### Unjust deserts?

As we move from reviewing the last season to previewing the next, I think we must consider again whether motor sport's association with

#### KEEP IN TOUCH

The Motor Sport website is the place to discuss motor racing past, present and future. Don't miss the opportunity to comment on blogs, video and audio podcasts, and read Nigel Roebuck's newsletter and the editor's monthly letter. To get involved in the discussion simply log on to www.motorsportmagazine.com and tell our writers exactly what you think! Also, don't forget that if you have any images which would be suitable for our You Were There feature in the magazine, please send them to the office (address on p42).

Bahrain is appropriate. Although it has slipped from the mainstream news, it seems precious little progress has been made to improve human rights in the country.

As well as the human rights concerns I think we need to ask why the Bahraini ruling family has so much influence with the FIA. There is no motor racing tradition in the country and I doubt any sponsors would have significant interest going there, because only about 500,000 people live in Bahrain - the vast majority of them in poverty. We all know that Formula 1 is run solely for the benefit of its shareholders (and would not expect any decisions concerning the series to be made for reasons other than financial gain), but the FIA is supposed to be a non-profit organisation. Why, then, is Bahrain routinely awarded world championship events?

I really do think our sport's continued relationship with this regime does it nothing but a disservice, and only reinforces the impression that it is morally bankrupt, with no consideration for anything other than dollars. Mark Bowley, Whitwick, Coalville, Leicestershire

#### Keep on runnin'

Further to Doug Nye's mention of Alfa Romeoengined boats, I recently discovered a book about the wartime bomb- and mine-defusing exploits of my uncle, Commander Edward Woolley, GM and Bar. Veteran car owners might remember him as the owner of an 1897 Daimler, the oldest British production car in existence, and a 1923 Renault 45.

The book, Mines over Malta, is interesting in its own right, but in particular there is an account of the recovery of an Italian motor boat abandoned off Malta. It was powered by a six-cylinder Alfa Romeo 2300cc twin overhead cam engine, still in running order. Thomas Woolley, Rothley, Leicester

#### All roads lead to roam

I was interested to read about the Nash Metropolitan at Goodwood. For another reason why this model is famous in motor sport history, read about Stuart Lewis-Evans going down to the 1957 Pescara Grand Prix, as told in The Last Road Race by Richard Williams. It's fascinating stuff.

Roger Stead, Sheffield, Yorks 🕥



#### ON THE FORUM

#### F1 RULES AND THOSE GEARBOX PENALTIES

 $\ensuremath{\mathsf{DIEGOORUIZ}}$  There is something that bothers me about the grid penalty rules for engine and gearbox changes. Do you like them? JOHN.JV.VINECENT They are frustrating, but I'm not sure what the alternative would be. If you choose a monetary fine then the big teams will just pay up. ROBBO I have a fairly simplistic view of the current F1 sporting regulations. Namely, that there are too many and that they are applied inconsistently. BORRANI The grid penalties have a farcical feel to them when several cars are demoted, including ones already on the back of the grid. However, I can't think of a better way of enforcing the cost saving rules about gearboxes and engines.

#### LATEST POLL

#### WHO WAS YOUR FAVOURITE **CHAMPION OF 2012?**

Sebastian Vettel (F1) 15.43% (174 votes) Jorge Lorenzo (MotoGP) 10.02% (113 votes) Fässler, Lotterer, Tréluyer (WEC) 5.59% (63 votes) Sébastien Loeb (WRC) 17.91% (202 votes) Graf, Luhr (ALMS) 1.51% (17 votes) Ryan Hunter-Reay (IndyCar) 7.89% (89 votes) Brad Keselowski (NASCAR) 5.41% (61 votes) Gordon Shedden (BTCC) 7.27% (82 votes) Other: 18% (202 votes) (Most of these were for British Hillclimb Champion Trevor Willis!)

What we're all talking about @ www.motorsportmagazine.com



#### PODCASTING PLANS FOR THIS YEAR By the time you read this we will

have recorded our first audio podcast of 2013 with 1970 Le Mans winner Richard Attwood (go to the Multimedia tab to have a listen). He's the first of another 12 podcasts this year and although we'll be keeping the format the same there will be a new addition to the usual team of Roebuck/ Smith/Widdows/Foster, Simon Arron - a familiar face from F1 paddocks,

windy stock car meetings and just about everywhere else in between - will be joining us to add another voice of authority after more decades

than he'd care to admit trudging up and down the pitlanes of the world. We will, of course, still be asking star guests to come and join us and

the only reason why we can't tell you who we're currently trying to organise a date with is because we're still trying to do exactly that organise a date! As soon as it's confirmed you'll be the first to know.

#### TOP TWEETS

@dariofranchitti Great news that @ FirestoneRacina will be staying with IndyCar until at least 2018!

@paulpunter Those who appreciate John Surtees and understand all he has done consider him a kniaht already. That's surely better than an overdue 'gong'

@Andrew\_Frankel It reminded me of the greatest line ever uttered at a track day. "How'd vou get here?" "Spitfire. "Triumph?" "No, Supermarine.

@Damien Smith Norbert Haua leaves Mercedes after 22 years of service. Something had to give after the 2012 season.

@Ed Foster Great news that @suziperry will be fronting the #BBC #F1 coverage next vear

@Andrew\_Frankel Suzi Perry is new Jake for BBC F1 in 2013. She'll be really good at it, but I doubt good enough to offset EJ. I'm staying with Brundle/Sky.

@matoxlev No surprise here: Monster confirm backing of Yamaha MotoGP team. If I'm not mistaken, it's Yamaha's first title sponsor since Rossi left them. Funny that.

@dariofranchitti Sad to see Norbert Haug leaving Mercedes. Many drivers (me included) had massive help from him and @ Mercedesbenz at one time or another.

@matoxley Finally got round to looking at 2013 entry lists. 24 starters in MotoGP - blimey, that's almost a full grid. 12 protos & 12 **CRTs** 

@Fd Foster If Alonso got 11 more points over the years 2007, 2010 and 2012 he would be a five-time World Champion... The same as Fanaio.

@Damien Smith Great visit today to Mercedes in Brixworth for sneak preview for 2014 powertrain. Didn't get to hear it! But I'm sold. It's going to be good.

@DarrenTurner007 Just sat down in favourite room in the house to read about @olivergavin in @Motor\_Sport. Disappointed to see only one empty pint of Guinness on the table!

#### ONLINE WITH OUR WRITERS

#### PAUL FEARNLEY Fifty things I love about motor sport

- 1. Dario Franchitti's passion for its history. 2. Chris Amon's crash helmet – particularly when it looked sandblasted, i.e. most of the time.
- 3. That Adrian Newey still uses an Oxford A4 pad, a full-sized drawing board, French curves and (probably) set squares, a protractor and a propelling pencil
- 4. Matra's V12 'Vélizy wail'

#### **NIGEL ROEBUCK** The life of Achille Varzi

"The outstanding man," Enzo Ferrari said in the early 1930s, "was Nuvolari, but he found a worthy adversary in Varzi, who surpassed him in his cool, perfect style...

In character, the two could hardly have been more different. Nuvolari was an uncomplicated hero of the people, his rival was a creature of mystery, uncommunicative and aloof.

#### **GORDON KIRBY** The only time Dan Gurney was fired

A rock had damaged the car's fuel tank and fuel was leaking out of it. "Somebody's been off the road!" Parravano yelled. "Who's been off the road with my car?" Honest, as ever. Dan admitted he was to blame and as Michael Green writes, Parravano spared him no quarter, telling Dan he was fired and admonishing him to get out of his sight.

Rainey vs Schwantz: an unforgettable duel

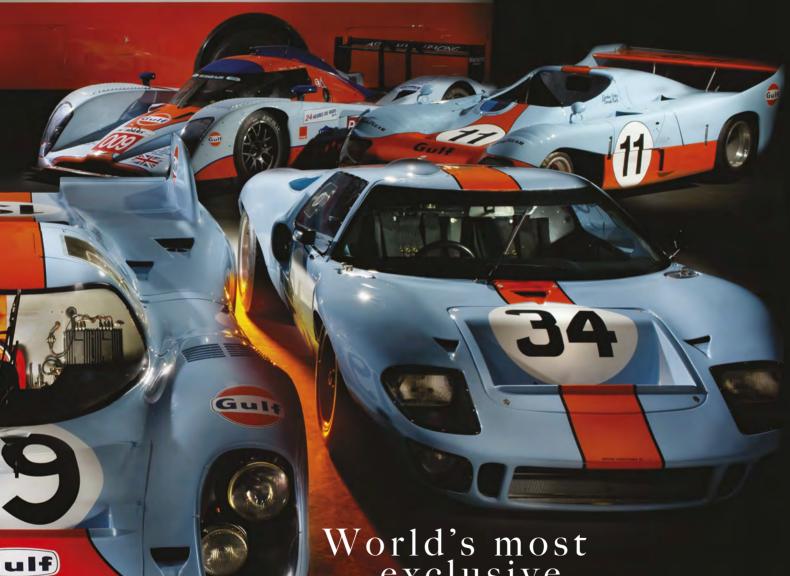


"I don't know why I disliked him," says Schwantz. "Except that I knew how much he disliked me, so I figured I'd dislike him just as much." The pair's full-time GP careers began at exactly the same time, in 1988, By 1993 Rainey had won three titles, Schwantz none

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TIVE ENGINEERING LIMITED





World's most exclusive

A keen collector craved a Ford GT40, but passion sometimes knows no bounds

BY ANDREW FRANKEL

#### Their names are

# TANGERINE

### and on their own are just a couple of colours.

But put them together with art and skill, apply them to the flowing surfaces of an aerodynamically honed racing car and something extraordinary happens. Mouths fall open, fingers point and young boys dream about one day owning such a car. For these are the racing colours of Gulf Oil.

One young German lad did more than just dream. His name is Roald Goethe and he was transfixed by the liveries of the Gulf GT40s he saw race in the 1960s. He determined that, one day, he would have more than just a model on his bedside table. He would have the real thing. It took 40 years but in 2008, and by now a wealthy man, he approached Adrian Hamilton to help him find one. Little did either know that Hamilton's sourcing of an original JW Automotive Gulf GT40 would simply be the first step on the road to what is now probably the most important single-theme collection of cars in private hands. It was Hamilton who suggested his client build up a unique gathering of Gulf machinery and, using his unrivalled contacts in the world of historic racing, spent four years scouring the planet for examples of every significant Gulf racing car.

It's called the ROFGO Gulf Collection and comprises 25 cars. Actually, it has 24 cars plus one very large and quite fabulous truck, of which more in a minute.

The list starts with that 1965 GT40 but stretches right up to the present day with the McLaren MP4-12C GT3 that Goethe races. In between these poles are some of the most delectable and important racing cars ever made. There are F1 cars here and Can-Am machines, too, but the focus is very much on those classic sports-racing cars. All are 'live' and Goethe intends to use them. Indeed the 917 only recently returned from the bodyshop having been damaged at Le Mans Classic, when Vern Schuppan hit a barrier avoiding someone else's accident.

We could have dedicated the whole magazine to the collection, but in the end elected to take eight machines that we thought represented the best of the spirit of Gulf Racing including, of course, the rather large beast in which some of them travelled.



HERE IS NEITHER THE SPACE NOR. I FEEL. THE NEED TO EXPLAIN TO Motor Sport readers how the GT40 came to be. But even once it had been conceived, designed, built and raced, it was a car that took a long time to get right. The less said about its debut at Le Mans in 1964 the better, but 1965 was scarcely an improvement: six entered the race, none finished. It wasn't until 1966 and the arrival of big-block 7-litre power that the full potential of the design and some much needed reliability were finally found.

Back in the 1965 race, one of the entries was a private Rob Walker car. Driven by Bob Bondurant and Umberto Maglioli, it managed barely two hours of racing before succumbing to head gasket failure. It was returned to Ford Advanced Vehicles, dismantled and forgotten about for two years.

For any normal racina car that would be time enough to render it obsolete.

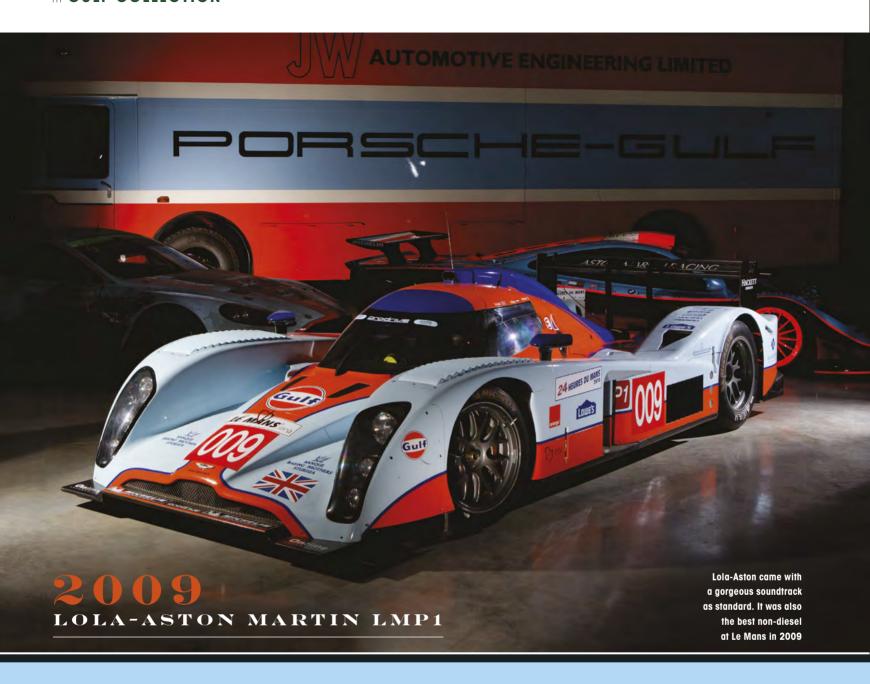




but not the GT40. New rules for 1968 mandated a 25-car run for any wishing to compete with an engine of more than three litres - and that played perfectly into Ford's hands. While in time younger, purpose-built machines like the Porsche 917 would spoil the party, in the short term there was hay to be made.

The old Rob Walker car was recreated in Gulf colours, given a new identity (P/1084) and sent out to race. To be fair it was its sister P/1075 that captured all the headlines, winning Le Mans in both 1968 and the near photo-finish in 1969, but P/1084 was good enough for fourth at Spa, driven by David Hobbs and the great Paul Hawkins.

Its greater significance here is as the first member of the Gulf Collection, the car that inspired Roald Goethe as a child and a machine that set the ball rolling for the collection as it is today.



IKE SO MANY OF ITS FOREBEARS DOWN THE years, Aston Martin's first full prototype since the AMR1, some 20 years earlier, was destined to earn its keep as a best-of-the-rest car. However, unlike those other Astons that promised much and delivered little, the LMP1 prototype did as well as could conceivably be expected, usually proving the fastest petrol-powered prototype in the field.

Unfortunately when that field turned up at places like Le Mans, it also included diesel prototypes with rules so heavily stacked in their favour there was nothing any petrol car could do other than to hope that they broke. But with works Audi and Peugeot teams investing the kind of money that only vast global multinationals can muster, failures were the last thing that tended to happen.

Three LMP1s were made, Lola building the cars, Prodrive running them and Aston Martin providing its road-based 6-litre V12. Sadly the cars are probably best remembered for the unseemly spat between Lola and Aston over its naming: Aston wanted it called the DBR1-2 to evoke the memory of the only Aston ever to win a top-level championship, Lola pointing out that the car was, in fact, an Aston-powered



Lola. It's a shame because, unfairly favoured diesel opposition aside, it was usually the class of the field, winning the 2009 LMS series outright against only occasional diesel opposition.

At Le Mans in 2009 two LMP1s qualified first and second in the unofficial petrol-powered contest, one car running as high as third outright until dropping out of contention after an altercation with another competitor, the other coming home fourth behind two Peugeots and an Audi. It was Aston's best result at the race in half a century. At Sebring the following year, one actually made the podium in third place behind two Peugeots.

The collection's car is the second chassis, usually raced by Darren Turner and recording a best result of second place at the 2009 Nürburgring 1000Kms.



#### 1971 PORSCHE 908/3

HAT BETTER MEASURE OF A CAR'S brilliance can there be than to know that of all the cars he raced in his long career, the Porsche 908/3 is Brian Redman's favourite? "It's a jewel of a car," he says. "You look at that non-existent wheelbase and think it must be twitchy as hell but nothing could be further from the truth. It was fast, friendly and with that torquey flat-eight motor, wide tyres and no downforce, it was an absolute dream to drive on the Targa."

Ah yes, the Targa Florio, one of the races (along with the Nürburgring 1000Kms) for which the 908/3 was specifically designed. Of course Porsche already had the 917 at its disposal, but understandably felt its brutal power would not be put to best use in the Sicilian hills. As for the 'Ring, computer simulations suggested there would be little difference in lap time between the two cars, but Porsche rightly figured the 908/3 would be far easier to drive and therefore less likely to go punching holes in the Eifel scenery.

Actually that 908 title is a little misleading. Its 3-litre engine aside, the car actually owed very little to the earlier 908s and rather more to the astonishing beryllium-braked, titanium-sprung sub-400kg 909 Bergspyder hillclimb car of 1968. With the bigger engine and the need to be reliable for hours on end rather than a few seconds at a time, the 908/3 was never going to be that light, but its 545kg kerb weight still made it a quarter of a tonne lighter than the already flyweight 917. And with 360bhp under the driver's foot, it was no slouch.

A Gulf 908/3 opened the account by winning the 1970 Targa with Redman and Jo Siffert while the rival Salzburg car of Kurt Ahrens and Vic Elford took care of the Nürburgring 1000Kms. In '71 all three 908/3s crashed out of the Targa Florio, leaving victory to Alfa Romeo, but the model went out in style with a total podium lock-out at the 'Ring, with first and third going to Martini cars and second place to the Siffert and Pedro Rodriguez Gulf entry.

The car seen here is none of the above. In fact chassis 12 was built for the '71 season but only did one race in Gulf colours, with Siffert and Derek Bell qualifying fifth for the Nürburgring race but retiring from second place with a broken chassis frame. It was sold to Joest Racing in 1974 and continued to race for a further four seasons.



#### 1971 PORSCHE 917 T MIGHT NOT HAVE WON LE MANS (DESPITE what the McQueen film would have you believe, no Gulf 917 ever did), but if there is a jewel in the collection's crown that's a little bit bigger and shines a touch brighter than all the others, this is surely it. The story of 917/26 starts in 1969 when it was used as a test car, but got properly interesting the following year when it took part at Le Mans driven by David Hobbs and Mike Hailwood. The latter crashed it sufficiently badly for the car to be given a new frame, number 31, and it then raced to victory at both Imola, driven by Brian Redman, and in the last world championship race of the season at the Osterreichring, where Jo Siffert shared with Redman. Siffert and Bell came fifth at Sebring in 1971, before Richard Attwood and Herbie Müller produced the best result for a Gulf 917 at Le Mans when they brought it home second, two laps behind the rival Martini car of Gijs van Lennep and Helmut Marko. The winners averaged 138mph for the 24 hours, an unprecedented achievement in the history of the race. It raced on in Interserie and other events for Powder and the glory: some years, but has rightly been restored to **Redman and Siffert** its glorious Le Mans specification. This includes guide Goethe's 917 short-tail finned bodywork, a 5-litre engine, to victory in the 1970 five-speed transmission and that inimitable WSC finale at the livery, the best specification for arguably the Osterreichring most revered car in endurance racing. www.motorsportmagazine.com 155



AVING WON LE MANS FOR ASTON MARTIN in 1959, doing it again in the '60s with Gulf-sponsored GT40s and rampaging to win after win with the Gulf Porsche 917s in the early '70s, by 1975 John Wyer had little left to achieve. But as nine years of Gulf sponsorship drew to a close, it would be nice to go out on a high. The Mirage GR8, this actual Mirage GR8 to be precise, provided it.

Mirage came into being as a marque with the Ford GT40-based M1 in 1967 and raced on into the mid-70s with varying degrees of success. Two GR8s went to Le Mans for 1975 (the other is in the collection, too) to face a field that wasn't perhaps the strongest to assemble in north-west France. Opposition came from Ligier and Lola as well as an army of RSR Porsche

911s contesting the GT category. This GR8 was the first car to be driven by the endurance dream team of Jacky Ickx and Derek Bell, the Belgian already with one of his six La Sarthe wins under his belt, the Brit still looking for his first.

The Mirages were powered by Ford-Cosworth DFVs detuned not only to make sure they lasted 24



hours but also because the oil crisis had resulted in the ACO mandating a minimum 20-lap gap between fuel fills. According to Bell, that meant the GR8s had to manage 7mpg. Even so they qualified first and second, with Vern Schuppan and Jean-Pierre Jaussaud in the sister car. The latter pairing led early on, but were delayed by electrical problems in the evening, Bell and lckx picked up the baton and ran with it. They built up a sufficient lead to change a cracked exhaust manifold on Sunday afternoon and, despite loud bangs and thumps from what turned out to be broken rear suspension, came home first, a single lap ahead of the best Ligier.

For Wyer it was the perfect retirement present, for Ickx and Bell merely a sign to things to come.

## 1997

#### McLAREN F1 GTR LONGTAIL

OR A CAR THAT WAS NEVER DESIGNED TO race, it has to be said the McLaren F1 did rather well. In 1995 it made McLaren the first marque since Ferrari in 1949 to win the Le Mans 24 Hours on its debut and it swept to victory in both years of the BPR Global GT Series, Thomas Bscher and John Nielsen winning in '95, Ray Bellm and James Weaver taking the title in '96.

But it was all change for 1997: the BPR was out and the FIA GT Championship was in, for which Mercedes designed the CLK-GTR, a purpose-built racing car of which a few technically road-legal derivatives were offered for sale. It placed the F1, with its long-travel, high camber-change road suspension and three-seat cockpit blocking the airflow to the rear wing at a massive disadvantage.

Complaining wouldn't get them anywhere, however, so Gordon Murray knuckled down and

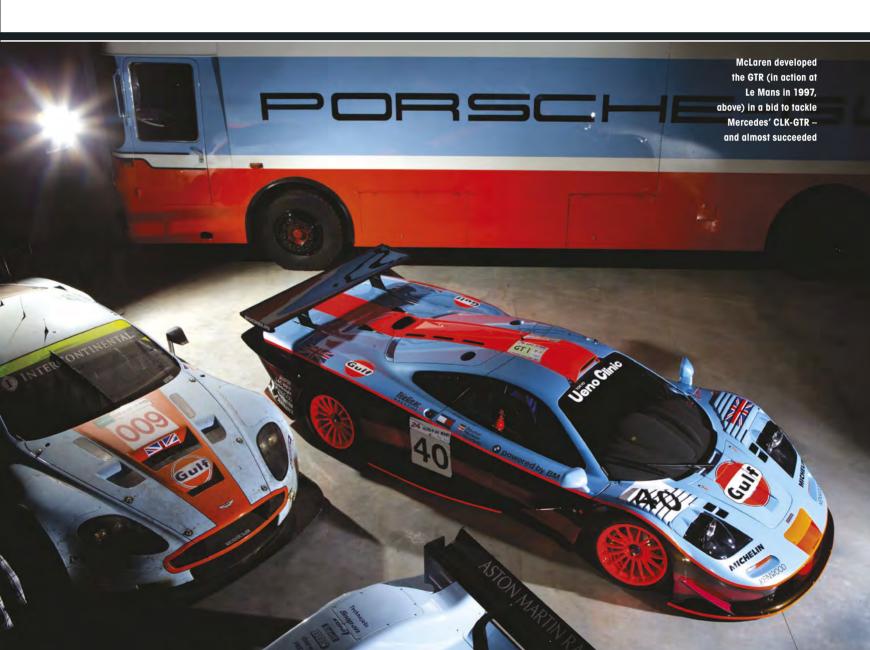
adapted the F1 as best he could. The result was the F1 GTR 'longtail', its most obvious attributes being bodywork extended dramatically at the front and rear to find some of the downforce the earlier GTR so clearly lacked. Other changes included the fitment of a sequential gearbox (addressing the GTR's one major mechanical weakness) and dropping the

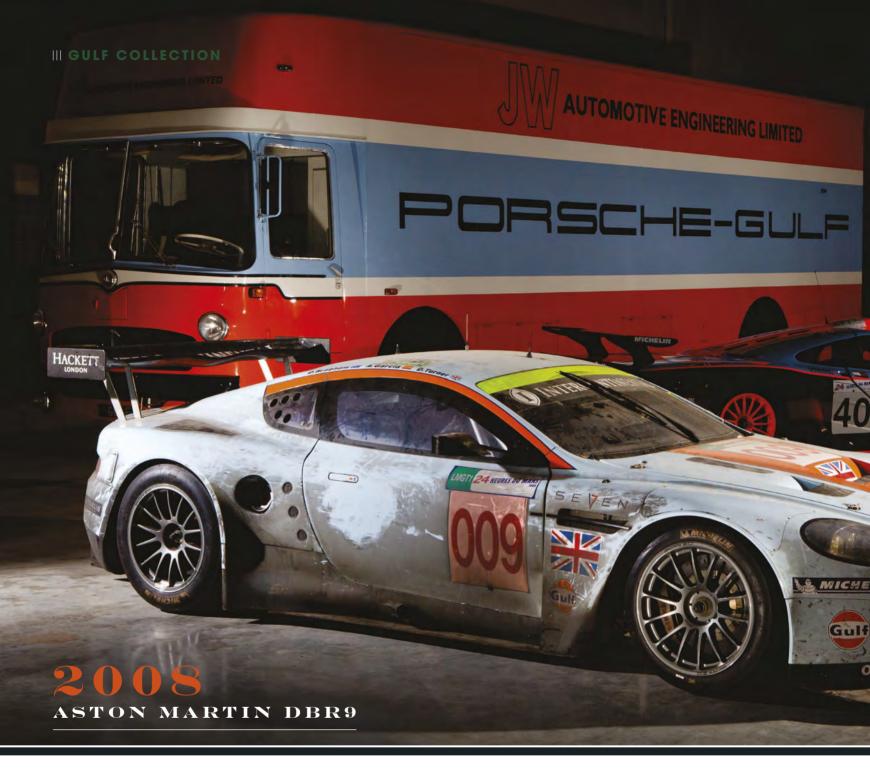


engine capacity to just under six litres.

Extraordinarily, it seemed at first that the plan might work, that an adapted production GT would beat what was effectively a works prototype. At the first three rounds the longtails took a hat trick of victories, but often only by outlasting the new Mercedes that were still in the troubleshooting stage of their development. Mercedes then won at the Nürburgring, McLaren at Spa before it was Mercedes' turn to take three on the trot. In the end it came down to the Laguna Seca finale. Mercedes won and its driver Bernd Schneider took the title, with McLaren team-mates Steve Soper and JJ Lehto tied in second place.

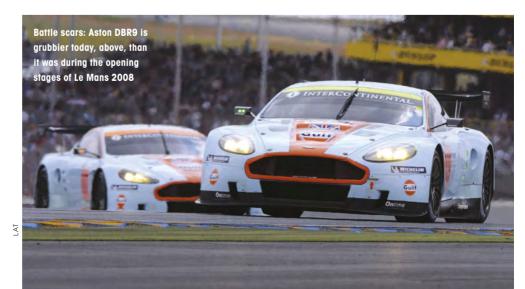
The collection's Gulf car was run by the 1995 BPR champs Bscher and Nielsen. It came third at both Hockenheim and Helsinki and in 1998 Bscher used it to win the Monza 1000Kms, sharing with Geoff Lees.





OR HALF A CENTURY VARIOUS PROJECTS have aimed to return Aston Martin to the success seen in its 1950s racing heyday. There were the Project 212, 214 and 215 cars of the early '60s, the Group C Nimrods of the early '80s and the AMR1 of 1989. All failed even to approach what had been achieved even by the beautiful little DB3S that came second at Le Mans three times in the 1950s, let alone the DBR1 - still the only Aston actually to win it.

But the DBR9 got close. True it was racing for GT rather than outright honours, but from the very beginning it began to rack up victories, starting with a class win in the 2005 Sebring 12 Hours. But of course the main aim was to taste success at Le Mans once more. And just as in the 1950s, that success was a long time coming. In 2005 it was third in class behind two Corvettes. In 2006 the DBR9 was





an impressive sixth overall, which would normally be enough to secure GT honours, but once more there was a Corvette ahead, having been driven out of its skin into fourth place.

It was only at the third time of asking that Aston Martin finally climbed to the top step of the podium, with the DBR9 of Darren Turner, David Brabham and Rickard Rydell finishing fifth overall and a lap clear of the negrest Corvette.

In 2008 Brabham and Turner did it again with Antonio Garcia in none other than the car you see here, still wearing all the mud, dirt, oil, rubber and bug squash it accumulated. It had started life in 2006 contesting the American Le Mans Series, and BMS Scuderia Italia raced it in the following season's FIA GT Championship before the car returned to the factory team.



## 1967

#### MERCEDES 0317 TRANSPORTER

HIS IS THE ACTUAL TRANSPORTER IN WHICH THE COLLECTION'S Porsche 917 travelled to and from Le Mans in 1971. Only three were ever built as Porsche transporters: one is believed lost, another is in the US painted in another livery and this the only survivor wearing those familiar Gulf colours.

Hamilton found it in Florida, still in the Rothmans configuration it wore when last used as a working tool, but in such terrible condition that "It looked as if had spent the last 30 years on the floor of the ocean."

Once it was back in the UK, Hamilton sent it to Yorkshire-based WHF Ltd which supplies support trailers and hospitality for race teams and whose clients include Red Bull and McLaren. Fourteen months and a full mechanical and bodily restoration later, the transporter was once more fit to be filled with Gulf Porsches.

Any amount of time with the vast transporter – based on a chassis for a Mercedes coach and powered by a 10.8-litre straight-six motor producing about 210bhp – will dispel any doubts as to the value of the restoration. The transporter is perfect, the detailing simply breathtaking and the use of the Gulf livery more striking than on any Porsche 917.

You climb up into the cabin, sit in the gently sprung driver's seat and start drinking in the details: the near-horizontal steering wheel, vinyl door cards, immaculate chrome-edged sun visors and perforated boarding behind the two immaculate bunk beds. So dedicated were they to getting the truck just right, the correct fuel gauge had to be sourced from Russia. "It cost £300,000 just to restore and a whole lot more to buy," says Hamilton, "but the collection would not be complete without it."

Like every other member, the transporter is regarded as a working vehicle and will next year be loaded with the 908/3 and 917 and driven to the Le Mans Classic, a sight likely to be as astonishing as any seen at La Sarthe in recent years.  $\blacksquare$ 



any years ago I asked Frank Williams if he still considered Formula 1 a sport, and he paused before replying. "Mmm, I'd say yes it is - between the hours of two and four on a Sunday afternoon. All the rest of the time, quite honestly, it's just commerce..."

This was some time before Max Moslev had gone to the FIA, so therefore long before Bernie

Ecclestone was able to acquire the commercial rights from the governing body. At the time this news was received with some incredulity in the F1 paddock: for all his contributions to the sport (not least in the matter of safety), still, in the eyes of many, Mosley will stand forever condemned as the FIA president who sold off the family jewels to Ecclestone not only for a preposterous 100 years, but also at a bargain-basement price. The not unreasonable assumption was that the commercial rights would be 'sold on' sooner rather than later - and there was great concern about where that might be.

As ever Max blithely swatted away all criticism: not to worry, he said, steps had been taken to ensure that Bernie couldn't sell the rights to some party whose motivation might be other than the good of the sport. An asset stripper, for example.

'The Don King clause' Mosley called it, this a reference to the notorious boxing promoter, and it gave the FIA the right to veto any sale of the commercial rights it considered 'inappropriate'. To many of us it has never been clear quite why this was not invoked before Ecclestone did the deal with CVC Capital Partners. For going on seven years F1 has been 'owned' by a venture capital company, and in the fullness of time CVC will doubtless leave F1 greatly enriched; less certain is what it will leave in its wake.

What, after all, is of interest to a venture capital outfit save keeping its investors happy? CVC's current portfolio lists no fewer than 60 companies - 'Formula 1' is situated alphabetically between 'Flint Group', a German printing inks company, and 'Fraikin', a French truck rental outfit - but not all its investments have proved wise: last October, for example, CVC ceded control of Nine Entertainment, an Australian broadcasting/publishing conglomerate (previously owned by the Packer family), and dropped a couple of billion dollars in the process. Sums like that take a bit of making up.

F1 is doing its bit, though. In 2006, when

Nigel Roebuck:

...or how the schedule might look if it were driven by sport rather than commerce

Bernie and CVC did their deal, there were 18 races on the Grand Prix calendar, and a majority of them – 10 – were in Europe. In 2013 there will probably be only seven, and ever increasingly the schedule is based on who can pay how much: if that means tossing aside the traditional heartland of F1, well, feel the width...

Thus, in recent years there has been a spawning of new, invariably soulless, 'autodromes', where absurdly elaborate paddock buildings afford a perfect view of largely empty grandstands. Not all, I should perhaps make clear, have been built in countries controlled by despotic regimes.

As 2013 beckoned, I found myself quietly

day-dreaming about an alternative World Championship, one that would have little appeal for CVC but might find greater favour with F1 fans such as myself. Just for a little New Year fun, I started jotting down lists dropping some places, bringing back others...

Back in the mid-90s there were 16 Grands Prix each season, and this was reckoned to be the ideal number - indeed it was then that Bernie told me he would never, ever, put on more than that: "I couldn't if I wanted to - the teams would never stand for it..." At the same

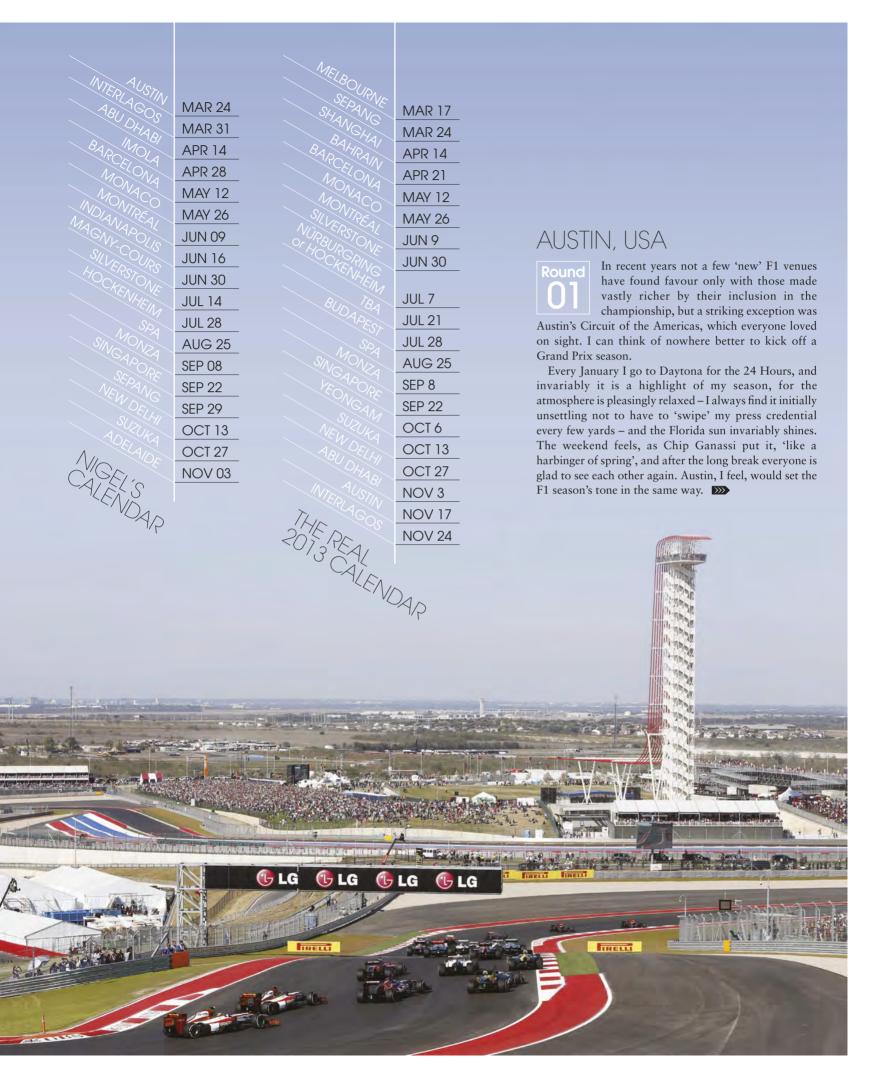
> time, though, he added that longterm planning was a nonsense, and then he muttered darkly that it wouldn't be long before Europe was 'Third World'. At that time there were 11 races in Europe: I should have paid more attention, should I not?

> As I considered a 2013 World Championship I would prefer to see, it was important first to establish its parameters. Tempting as it was on aesthetic - and sometimes sentimental – grounds, I concluded there was little point in including circuits (save Monaco, of course) that would be rejected out of hand on safety grounds. It was necessary to retain a kernel of reality, after all, and I decided, too, to keep a certain amount of faith with the world aspect of the championship.

Years ago Flavio Briatore told me he would like to get rid of 'all this bloody testing, which costs millions, and gives the public

nothing', and instead put on more races. I could see his point about testing (although I think the subsequent blanket ban was a step too far), but I had my doubts about more Grands Prix, not least because of the toll this would take on those who work in the business. Not too many, I reminded him, have access to a private jet.

As well as that, it's my feeling that a season of too many races has a dilutionary effect, detracting from - rather than adding to - the grandeur of the most important motor racing series on earth. Ideally, I'd stick with 16, as Bernie suggested in the '90s, rather than the 20 he aims to schedule these days, but let's meet him halfway, and go for 18.



#### **III ALTERNATIVE F1 DATES**

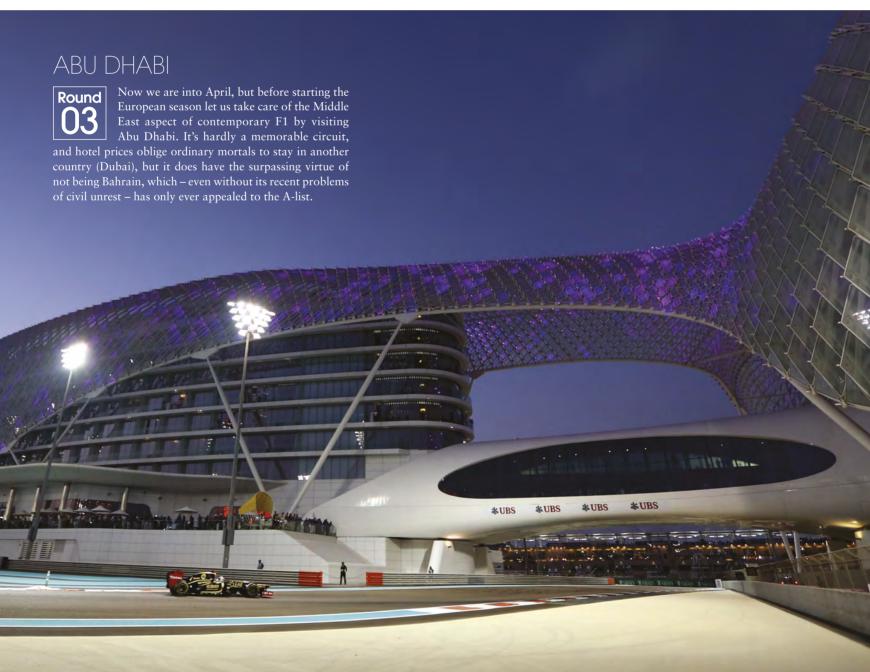


## INTERLAGOS, BRAZIL

Round 02

For countless years – until 2003 – the Brazilian Grand Prix was always run early in the season, and I'm going to move it back there. Although, through his

endless years of dispute with Silverstone, Bernie somehow contrived to turn a blind eye to Interlagos's primitive infrastructure, the circuit itself is a classic and must remain on the calendar, not least because the locals' enthusiasm for F1 has always been extreme. As in 2012, the race could be run the weekend after Texas.





## IMOLA, SAN MARINO

Round

It is at this point that CVC and I begin firmly to part company, where sentiment gets the better of gelt. In today's financial climate it

would be impossible, I know, for Imola to scrape together even the deposit for a 2013 race fee, yet back the place comes in my World Championship, because I always thought it the perfect venue for the start of the European campaign. No one ever needs an excuse to go to Italy, after all, and Imola in the spring was always beguiling. There have been changes to the circuit since F1's last visit seven years ago, but the essentials remain, including the flat-out blast towards Tosa.



# BARCELONA, SPAIN

Round

After a succession of dreary processional races, Valencia unaccountably gave us one of the best Grands Prix of last season,

but its race has never made any financial sense and is unlikely to feature on the championship calendar again. In Barcelona, too, they are up against it - the days of sell-out crowds evaporated after the darling bankers pitched the world into fiscal chaos - but a Grand Prix in Spain should figure on the schedule, not least because adoration of Fernando Alonso will always guarantee a decent turn-out.

### MONACO

Round

At this stage I am keeping very much with the traditional pattern of the season, which means that after Barcelona comes Monaco. After experiencing the circuit for the first time, Phil Hill commented that, "If it were anywhere but in Monaco, it would

be considered out of the question – but I guess it's a little different, being where it is..." That was in 1959, and although there are guardrails where once there were straw bales, and more chicanes have been inserted, the place is essentially as it was, because that's the way the roads in the Principality go.

Logistically, Monaco is a pain if you have a job to do, but if you can overlook the place's preening self-importance, and accept that overtaking is nigh impossible, still the race should stay - a glorious anachronism, as well as an unequalled opportunity to watch the Grand Prix car at close quarters. The way to keep sane is to stay in a hotel down the coast, en France, away from the hysteria and the over-booked restaurants.







## NEW JERSEY OR INDIANAPOLIS, USA

Round

For 2013 the hope had been that a week after Montréal we would find ourselves at a street circuit in New Jersey, right across the water from Manhattan's mesmeric skyline. Unfortunately the race has been postponed a year, but if it

all eventually comes together, assuredly it would find a slot in my championship. Bernie has dreamed of a 'New York Grand Prix' for as long as I can remember, and this is as close as ever he will get.

Should the project ultimately flounder, still it would make sense to 'twin' Montréal with another race in North America, in which case I suggest a return to Indianapolis. I know the infield section of the F1 track was uninspiring, but what made the race important was that it was at the Speedway, in a town historically imbued with racing. By 500 standards the crowd might have been paltry; in F1 terms, it was colossal. As well as that, there was always the opportunity to visit the museum, of which I never tire – and to catch a sprint car race, one of my great passions.



## MAGNY-COURS, FRANCE

Round

Back to Europe. It has always seemed absurd to me that there should be no Grand Prix in France - where the whole thing started, after all – and in my ideal calendar it would return.

Many were lukewarm about Magny-Cours, but I was fond of it, not least because I enjoyed the drive there, and we would stay at a wonderful 'secret' hotel, some distance from the circuit, buried deep in the countryside. As for the circuit itself, it might not bear comparison with French masterpieces of the past, like Rouen Les Essarts or Clermont-Ferrand, but it's better than many other contemporary tracks. In the regime of the wretched François Hollande, government patronage is unlikely to come the way of a French Grand Prix any time soon, but I'm not CVC and I'd have the race back.



## SILVERSTONE, GREAT BRITAIN

In my youth I would daydream about running the British Round Grand Prix at Oulton Park, which I thought incomparably the best circuit in the land. Now Oulton is festooned with chicanes, sadly, and is anyway nowhere near 'F1 spec', as is always said of Brands Hatch, smart as the place is these days. No one took Bernie seriously when he said he was taking the race to Donington Park, and quite obviously Silverstone is the only British venue capable of staging a Grand Prix in the 21st century. I can't claim to have unbridled enthusiasm for the 'new' Silverstone – as at so many circuits,

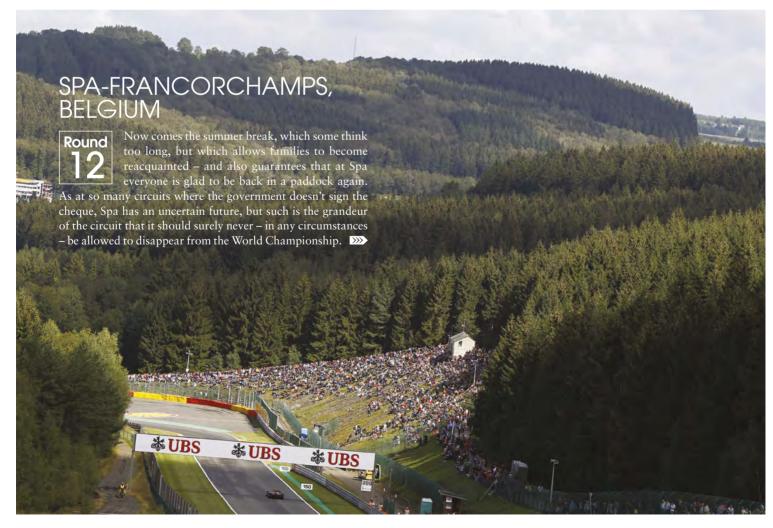
I think the money has been spent on the wrong things – but the track, for all its revisions, remains one of the best, and Becketts will for ever

be Becketts. Just pray to God it doesn't rain.



## HOCKENHEIM, GERMANY

As I write, the venue for the German GP has yet to be Round decided, because they're short of money at Hockenheim and very short of it at the Nürburgring. That said, Germany has always been an F1 staple and its race must remain, although it has to be faced - even in the Vettel era - that the days of massive crowds are gone. Personally, I was affronted that a rather nondescript thread of tarmac built alongside the wondrous Nordschleife should be referred to as 'The Nürburgring', and the financially ruinous attempts to turn the area into some sort of theme park heightened my distaste. Shortening Hockenheim - robbing it of those long, narrow, straights to and from the Ostkurve - has removed, its individuality, but still I find it the better of the German venues.



## MONZA, ITALY

Round

If you have any feel for the history of motor racing, indeed, this is a high point in the season, for Spa is followed, in early September, by Monza. I've always said that if I were restricted to a single race a year, it would be this one, where you unfailingly feel you are somewhere important, at

a Grand Prix. Yes, there are greater circuits (although the Lesmos remain breathtaking),





## SINGAPORE

Round

Now to Asia. Singapore's novelty night race has quickly become something of a cult event and pulls an immense crowd. It's an unusually long race, something of an endurance test for the drivers, and the circuit layout

militates against overtaking, but it belongs in the championship and also keeps the money men smiling.



## SEPANG, MALAYSIA

Round

I would 'twin' Singapore with Sepang, because although humidity here is even more of a problem, it is one of Hermann

Tilke's better circuits and over time local enthusiasm has gradually increased.

## NEW DELHI, INDIA

Round

Bureaucratic hassles of one kind or another are a feature of the Indian Grand Prix that F1 personnel could do without, but I'm including it in my

championship as a 'New World' race because it's not a dead venue like Shanghai or Yeongam - and anyway I like Narain Karthikeyan!





## SUZUKA, JAPAN

Round

How do we bring the season to a close? In times gone by, the year would end with Grands Prix in Japan and Australia, and that's a tradition I would like to revive. A few years ago Bernie was financially tempted towards Toyota-owned Fuji, where a couple of races were run, but the Japanese Grand Prix has only one true

home. Ask an F1 driver to name his favourite circuit and chances are that he will go for Spa – or Suzuka. The place might be fairly inaccessible, but the narrow old track has an aura all its own and must remain a fixture in the World Championship.

## ADELAIDE, AUSTRALIA

Round

We finish in Oz. It was in 1985 that F1 first made the long trek down there and I can still remember the euphoria of the

weekend, which was not dissimilar from the prevailing atmosphere in Austin last autumn. In the Texas paddock a friend said the feel of the place made him think affectionately of Adelaide, and he could have paid the Circuit of the Americas no greater compliment.

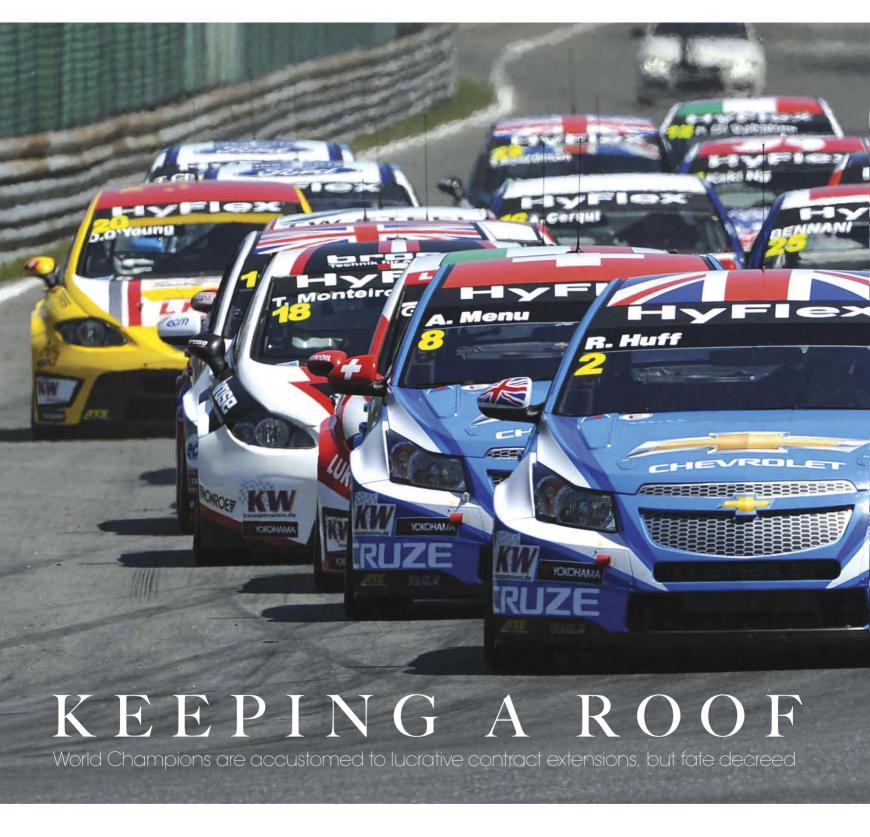
In 1996 - money again - the Australian Grand Prix transferred to Melbourne, another place everyone likes, but Adelaide was different again. Major sporting events are commonplace in Melbourne, and the F1 race is just another such, whereas Adelaide has a test cricket ground, but that's about it. A smaller city by far, more friendly and intimate - and one that was absolutely thrilled to bring F1 to Australia. In Grand Prix week the place literally became the race, which was always a sell-out. Throw in that 'end of term' feeling that inevitably accompanies the final race of the year, and you had as close to a perfect race weekend as ever you will find. Austin and Adelaide...the ideal bookends of a more appealing Grand Prix season. For NSR, anyway, if not for CVC.



# What do

Log on to the Motor Sport website to tell us what you think about the ideal 2013 Formula 1 calendar. As Nigel explains, we've kept within the parameters of reality with our alternative calendar. Do you agree with our editor-in-chief? If not, what would you change? And exactly how many races would you choose? While we're at it, forget about reality - how about your dream calendar? Let your imagination run riot, reviving circuits long since extinct or ruled out of modern F1 because of safety!

Join the debate at www.motorsportmagazine.com



t is a good name, is it not? Rob Huff. Tight, snappy and neat. And memorable. More memorable now, because he is the World Touring Car Champion, the man to beat if you race with a roof over your head.

What is also good about the man known in the trade as Huffy is that he knows his history, loves historic racing and finds the time to take part despite his hectic WTCC schedule. Motor Sport appreciates racing drivers like this.

Not everything in the garden is as rosy as it

seems, however, because at the time of writing Rob Huff does not have a drive for this season. Chevrolet, with whom he won the WTCC, has pulled out of the series, leaving its driver kicking his heels. Not a good situation for a newly crowned World Champion.

Huff worked hard and long for his title, the ultimate prize coming after years of graft and consistency as he rose to the top of the pile.

"Everybody worked so hard all year," he says. "When I wasn't training in the gym - I took my fitness very seriously all season - I was working with the team in the simulator and I want to thank them for the effort they put in. It was such a great year for British sport in 2012 and I was just so pleased to take the World Championship back to Britain for the first time since 2007. It took some time to sink in, especially with all the drama and tension of those final two races in Macau at the end of the year."

The early years with Chevrolet, a newcomer to the WTCC back in 2005, promised a great deal once the lessons of testing and developing a new car had been learnt. But the ultimate goal



proved elusive, Huff taking third in the overall standings in 2010, second in 2011 and the title in 2012. The glory, the day of all days, the reward for believing in Chevy, came at the end of a highly dramatic finale in Macau last November. A crash in the first of two races threatened to snatch his championship away just as he had one hand on the trophy. But some quick work by Ray Mallock's RML Chevy team got him back out on the streets in time to chase that title. He could hardly have realised his ambition in more dramatic circumstances.

"Yeah, I still don't know what happened," he says. "It was pretty tense between the two races but the team did a brilliant job to get the car back out there. Macau has always been my favourite circuit and I've won five of the eight races I've done there. I'd been through what I call the toboggan corners so many times before, but never once in eight years have I had oversteer there. It's pretty much flat, short shift to fourth, hold the throttle down and through you go, but this time the car oversteered, went sideways and that was it. I haven't had time to

study it in any detail with my engineer, but we will, because it was just so unexpected to get that huge, sudden oversteer moment. But I wasn't the only one to come unstuck there so maybe there was oil, or perhaps I just made a mistake. I don't know.

"Anyway, the car got away from me after I'd passed [team-mate] Yvan [Muller] into the hairpin. I didn't really mean to pass him there but he braked incredibly early and I just reacted, went up the inside of him.

"In the second race, I was happy in \text{\text{\text{y}}}

seventh, which was enough to win the title, but the world began crumbling around me. Everyone started falling off and I was up to second.

"The last four laps I was driving erratically, too aggressively, and I shouted out loud to myself 'For God's sake man, sort it out, just drive the car, concentrate, don't think about the championship'. Problem is, when people are crashing around you, you can get drawn into it and go off in sympathy. Macau is all about smoothness, concentrating 100 per cent, so during the last two laps I reeled in Alain [Menu], though I wasn't really trying to.

"I don't think Yvan was overly happy about me winning the championship... but hey, he's won it three times. Another one wasn't going to change his life, but my first has changed mine. He always told me how hectic his life was when he won his titles and I used to think this was just the typical 'whining Frenchman' that everyone else seems to think he is... I tell you, I now know where he was coming from. My feet have hardly touched the ground since Macau, it's just been manic, full on every day. And I still don't have a job for 2013. Lots of people are talking to me, but I don't think anything will be fixed until at least the end of January. That's just the way it is these days, tough times for the manufacturers and money is not easy to find.

"I don't have a manager, my dad and I make all the decisions, but there is just not a lot out there at the moment. I'd like to stay in touring cars, I've been so well looked after over eight years at RML. They took a big gamble signing me as a young driver and to win the title with them was such a great way to finish. We'll see what happens next... when it happens."

uff's rise to the top was not what might be described as meteoric. It is more a story of dogged determination, consistency and an enviable natural talent in the driving seat. Significantly, he won every championship he entered along the path to a world title.

"There was never really a path, no grand plan," he says. "We started with karting, it was something we did as a family, and my dad, who's a huge racing fan, supported me. He didn't have real 'motor sport money' to throw around, but we loved racing as a family outing as much as anything else and did it for fun. You might not think that Croft in winter, in pouring rain and freezing temperatures, is fun, but it was. We just wanted to be racing, to do the best possible job with what we had. In 1999 I won two scholarships at the Jim Russell school and that enabled me to race in Formula Vauxhall Junior. From there we went to Formula Renault, but ran out of money halfway through the season and that was that.

"But we never gave up. I knew I had the







Road to the top the diverse phases of Huff's junior career [1] Racing in Formula Renault until the money ran out [2] Tin-top success in a Clio [3] Winning the 2003 SEAT Cupra Championship [4] BTCC graduation with SEAT in 2004



talent and my dad found us a huge amount of support from lots of small businesses in and around Cambridge. Something always came up and we won the Tim Sugden scholarship, which led to the Renault Clio Cup. Then we somehow raised the money to do the SEAT Cupra championship [in 2003], which I won, and since then I've led a more sheltered life. supported by a manufacturer, cocooned in Ray Mallock's team. There are literally thousands of people I need to thank for getting to me where I am now."

o, did he ever have dreams of Formula 1? Was that the target he was secretly aiming for in those early single-seater days?

"No way, not at all," he says. "I had the use of a flat in Monaco as part of the prize for winning the SEAT championship in 2003, sharing with Jason Plato, and Jason very quickly put me off living in Monaco... OK, we had a lot of fun and it was a great experience. But, as I said to my boss at SEAT, 'How the hell am I supposed to live in Monaco on a 30 grand salary?' I agree with my friend Gordon Shedden, who won his first BTCC title last year and

essentially a fan like the rest of us. "For me, there are two parts to my motor sport," he says. "There's my job, which I love and wouldn't change for the world, and then there's what I call club racing. I absolutely love it. It's fun, it's where we started as a family and it's all about the pure love of racing. I race a friend's

MGB, he looks after it. keeps it in his showroom, and I pay the costs. That works really well.

"Then of course there's Goodwood, just the best event in the world. I won the St Mary's Trophy in an Austin A40 last year and that was a dream come true, beating Anthony Reid in a MkI Iaguar, Iackie Oliver in a BMW and Kenny Bräck

in another A40 in front of 130,000 people. That was not far off winning a World Championship for me. I think my dad was more proud of his son winning at Goodwood than he was of him getting the WTCC title. That's how much of a fan he is. And it was

with the newly crowned King of WTCC is his passion for the sport. And that's so refreshing.

"Yes, it's simple," he says. "I love driving and racing and have been blessed with a gift. There are things about driving racing cars that you cannot learn. You've either got it or you haven't. Nobody can teach you. And for me it's

"You might not

think Croft in

freezing winter

temperatures is

fun, but it was"

all about putting on the best show you can, whether it's 130,000 at Goodwood, or 90,000 in Macau, the job is to entertain them, put smiles on their faces, and give them what they came for - a bloody good show. That's what matters, as well as the winning, whatever success you have along the way."

What, then, are his

resolutions for the 2013 season? Champions are by nature ambitious, are they not?

"Well, I don't have any, really," he says. "I seem to have done so much over the past 15 years. And last year I got married, gave up smoking and won a World Championship. I'm





started at the same time as me: he's quite happy living in his native Scotland and I'm quite happy in Cambridge. Touring cars are competitive, great to race, and there's a skill in getting the best out of a front-wheel-drive car. Most people seem to think that a touring car driver could never go anywhere else anyway, because he only knows how to race a car with front-wheel drive. But that's not true; a good racing driver can be fast in any type of car they can adapt their style."

As mentioned earlier, Huff loves his historic racing, has a feel for what went before, and is special, stepping out of the car at the finish, being handed a cigar and a beautiful trophy, then doing the parade lap with Spitfires and a Lancaster flying overhead. What a wonderful weekend. That's how racing used to be. People come up to me and say, 'Oh yeah, you're Rob Huff, the bloke who won at Goodwood in that Austin A40'. They say sod all about the world championship."

He's a happy man, is Huff. And so he should be. He might be out of a job as I write, but I sense you won't be watching this space for very long. What really comes across in conversation

not sure I can do much more, except win the national lottery, so I'm not making any big plans. This year will be what it will be; we've never followed a path before. Whatever path is laid before us now, we will follow it or we won't. We'll just see what comes."

So there we are, that's a snapshot of the life our latest British World Champion. The word on the street is that Rob Huff won't have too much trouble keeping a roof over his head this year. And remember, when you chase him for an autograph, he's the bloke who won at Goodwood in an Austin A40...



## FORMULA 1 CHARITY AUCTION

An exclusive collection of special F1 items will go under the hammer at our awards evening on February 25

HE Motor Sport magazine Hall of Fame, in association with Audi, returns for a fourth successive year on Monday February 25, taking place for the first time at the world-famous Royal Opera House in Covent Garden. It is always an awards evening with a difference, eschewing black tie formalities in favour of a more stylish and relaxed atmosphere. But this year there is an extra ingredient that will allow anyone in the world to play a part in a very special occasion.

In addition to introducing new members to the Hall of Fame, a Formula 1 auction will be held to raise money for a cause that will be close to the hearts of many Motor Sport readers: the Grand Prix Mechanics Charitable Trust.

A unique collection of F1 memorabilia has been gathered and will go under the hammer at the Royal Opera House. The lots consist of original F1 parts sourced directly by teams and, fittingly for bespoke works of art, they will be displayed on elegant plinths. These special artefacts, plus a number of once-in-a-lifetime 'experiences', are expected to raise significant sums.

Sir Jackie Stewart established the GPMCT in 1987, in partnership with his old team boss Ken Tyrrell and Ford's Walter Hayes, with the sole purpose of providing medical and financial aid to F1 mechanics and their families who have fallen on hard times. Trustees include ex-F1 drivers David Coulthard and Martin Brundle, and Williams co-founder Patrick Head.

Donations have been submitted by Red Bull Racing, Vodafone McLaren Mercedes, Scuderia Ferrari, Mercedes AMG Petronas, Lotus F1, Williams F1, Bernie Ecclestone, Silverstone Circuit, charity trustee Jo Ramirez, Pirelli and Motor Passion. Bonhams auction house will host the sale on the night, but bids will also be accepted online, allowing all Motor Sport readers to take part. Here, we present the lots in turn.









#### LOT 1.

#### KIMI RÄIKKÖNEN'S WHEEL AND PIRELLI TYRE

This is one of the wheels used by Kimi Räikkönen during his 2012 Formula 1 campaign. He defied the critics by coming back to Grand Prix racing after a two-year sabbatical and winning in Abu Dhabi en route to third in the championship. Supplied with a certificate of authenticity.

#### LOT 2.

#### LOTUS HYDRAULIC MANIFOLD

A manifold used on Kimi Räikkönen's Lotus during the 2012 Formula 1 season, when the Finn scored one win and six podiums. Mounted on a bespoke alloy plinth with a descriptive plaque and supplied with a certificate of authenticity.





#### LOT 3.

#### WILLIAMS DIFFERENTIAL GEAR

This differential gear was fitted to the Williams FW34 of Pastor Maldonado in the 2012 Spanish GP, when he started from pole and went on to score his maiden F1 victory. Mounted on a bespoke alloy plinth with a descriptive plaque and supplied with a certificate of authenticity.





#### LOT 4. JENSON BUTTON'S RACE SEAT

Carbon-fibre seat from McLaren MP4-27. Used by Jenson Button in the first four Grands Prix of 2012 – Australia (which Button won), Malaysia, China and Bahrain. Mounted on a bespoke alloy plinth with a descriptive plaque and supplied with a certificate of authenticity.





#### LOT 5.

#### MERCEDES SUSPENSION UPRIGHT

Blank casting for a wheel upright from the Mercedes WO1, as driven by Michael Schumacher during his return to Formula 1 in the 2010 season. Mounted on a bespoke alloy plinth with a descriptive plaque and supplied with a certificate of authenticity.





#### LOT 6.

#### FERNANDO ALONSO'S FERRARI CYLINDER HEAD COVER

A cylinder head cover from the Ferrari V8 engine fitted to the F10 used in the 2010 season, when Fernando Alonso challenged for the World Championship. Mounted on a carbon-fibre plinth with a Cavallino Rampante badge and supplied with a certificate of authenticity.





Donated by Stefano Domenicali team principal of Scuderia Ferrari



#### LOT 7. SILVERSTONE DRIVING EXPERIENCE

Half a day's driving and tuition from former Grand Prix drivers Derek Warwick and Martin Brundle, followed by a private lunch in the BRDC clubhouse.

Donated by Silverstone Circuit



### LOT 8.

#### SEBASTIAN VETTEL'S STEERING WHEEL

Used by the German during the first of his three F1 title-winning seasons in 2010. Mounted on a bespoke alloy plinth with a descriptive plaque and supplied with a certificate of authenticity.





#### LOT 9. 2013 F1 BRITISH GRAND PRIX VIP PADDOCK CLUB AND PADDOCK PASSES

These premium passes for two guests include exclusive access to the VIP luxurious tented village with fine food and wine, pit walk and access to the circuit from Friday June 28 to Sunday 30 June, 2013.



Donated by Bernie Ecclestone





### LOT 10.

#### AYRTON SENNA'S RACING GLOVES

A pair of Ayrton Senna's racing gloves from 1991. This was the year that he drove the McLaren MP4/6 to seven victories and his third world championship. Supplied with a certificate of authenticity.





#### LOT 11. FERRARI FACTORY TOUR AND DRIVE AT MARANELLO

An exclusive visit to the Ferrari factory at Maranello including a drive around the Fiorano test track, travel, accommodation and transfers.

Factory tour and track drive donated by Ferrari. Travel and accommodation donated by Motor Passion



#### Jackie Stewart on the Grand Prix Mechanics Charitable Trust

"If I hadn't had the best mechanics in the world when I was racing, I wouldn't be here today. I think mechanics are the only true professionals in the business, totally dedicated to the sport. It is not just a question of helping Grand Prix mechanics though hardships they must face, but a question of access to the right help, for example helping them with recovery from injury.

"What Motor Sport is doing, in connection with their Hall of Fame night, is aiming to raise enough money to help the Trust significantly by also allowing the public to bid on the auction items that have been donated. It's perhaps the most spectacular auction I've seen of F1 jewels that could never be bought anywhere else."

Online bids can be made until midnight of Sunday February 24, 2013 www.motorsportmagazine.com/halloffame/charity-auction







ow difficult is it to win in Formula 1? Ask Toyota. For the eight seasons and 140 races that the world's largest car company contested between 2002 and 2009, not once did it manage to place a driver on the top step of the podium.

I mention this only because it puts the achievements of the car you see here into some kind of perspective. It's a March 701, its name denoting the year and formula in which it ran. When March made its F1 debut, at Kyalami in March 1970, Jackie Stewart put his Tyrrell-run car on pole and led for the first quarter of the race until his Dunlops started to wilt in the South African heat, letting Jack Brabham's Goodyear-shod BT33 and then Denny Hulme's McLaren M14A through before the flag. Still, it was a podium for a brand new constructor.

A fortnight later at the Race of Champions, the same car and driver took pole and scored March's first F1 victory. Stewart could only manage the front row at Jarama for the Spanish



GP, but won the race and lapped the entire field in the process. Its next race was the Silverstone International Trophy, but while JYS won one of the two heats, overall victory went to Chris Amon in another 701. Two more Grands Prix followed, at Monaco and Spa; it would be hard to imagine two circuits more different in character, but Stewart's 701 made no distinction. He claimed pole in each, although in both races his DFV let him down.

And that was that. The March, chassis number 701-2, retired. In two months it had done six races, scored four poles, two wins, a second and a third. After Spa the car was

returned to Tyrrell's base at Ockham in Surrey and sat in the workshop until it was sold to Eoin Young in 1977. It then found its way to the York Motor Museum in Perth, Western Australia. Thirty years later it was repatriated by Andrew Smith and, after two painstaking years of what's best described as preservation rather than restoration by WDK Engineering, it was raced again at last year's Monaco Historic Grand Prix. Smith put the car on pole and was leading by 45 seconds when he nudged a barrier, burst two tyres, crept back to the pits, changed the wheels - and still finished third.

Smith believes he was only the second person to drive the car and, after he let his Ecurie Ecosse team-mate Joe Twyman do a few laps, that makes me the fourth. Donington Park is cold but dry, 701-2 looking and sounding like it means business. The car is as original as it can safely be: the DFV had to be replaced, because the one used at Spa blew itself to bits (though its cam covers have been retained), and you'd not want to race on the original wishbones today, even though Smith still has them. Otherwise everything - the



bodywork, tub, wings, gearbox and uprights - are the only ones it has ever had.

e were really quite lucky," says the unmistakable voice of Max Mosley, the man who provides the 'M' in March and found the money to make the 701 happen. "The general view was that no one would start a venture like ours without a huge amount of money. One journalist speculated we must have had about £500,000 to play with. In F1 terms that's like having a budget of £500 million today. I didn't start these rumours but nor did I think it was really my place to set them straight. It meant suppliers were very relaxed about getting their bills paid because they thought we were sitting on a huge pile of cash..."

Nothing could have been further from the truth. The four founders - Mosley, Alan Rees, Graham Coaker and Robin Herd - stumped up £2500 each, but even with a derisory budget of £113,000 for the first season that left a mountain to climb. "In September 1969 we had 10-20 people working in one unit," Mosley

says. "We had, I think, one metal bending machine and a lathe. That was it. But they were outstanding people."

The source of the next tranche of cash was surprising. "Porsche gave us £30,000 to provide a seat for Jo Siffert. He was about to do a deal with Ferrari that would cover both sports cars and F1. To keep him in its sports cars, Porsche had to put him in somebody else's F1 team."

The bulk of the remaining money came simply from selling cars: the works kept two but sold three to Tyrrell initially for £6000 each minus engine and gearbox, which Ford's Walter Haves then told Mosley to raise to £9000 and

'not worry' about the difference. The Blue Oval would cover that. Mosley remains convinced to this day that March wouldn't have survived its first season without those extra funds. "Staying with Matra meant using its new V12, which Ken rightly refused to do," Stewart says. "He'd tried to buy cars from Lotus and Brabham, but both refused, I guess because they didn't want to risk being beaten by one of their own cars. So March was really the only way to go."

Other customers included Andy Granatelli, who bought one for newly crowned Indy 500 champion Mario Andretti, and Colin Crabbe's Antique Automobiles team, for whom a talented young Swede called Ronnie Peterson would make his F1 debut.

"The 701 was a simple car," says Robin Herd. "It had to be, really, because we had neither money nor time. It seems unthinkable now, but in November '69 we had nothing but a few sketches. Then Max goes and announces to the world's press that we're going to launch the team at Silverstone in February. We had 10 weeks to design and build a Formula 1 car. All hell broke loose. I lost a stone and a half,

but on that cloudless day we had two cars, a red one for Amon and a blue one for Stewart."

Mosley takes up the reins. "I think most people thought we'd have one car parked there. We turned up with two and both ran. Then we announced we'd sold another to Granatelli: that really got people's attention."

The simplicity of the 701 is easy to see. It had a monocoque tub to which a DFV was bolted as a fully stressed member, but by 1970 so too did most cars on the grid. Suspension was by wishbones, brakes outboard at every corner. Those inverted aerofoil sidepods are interesting, though: Peter Wright was in charge of the 701's bodywork and was clearly trying new ways to exploit airflow. "We didn't have the money or time to do what we wanted with the suspension or bodywork," Herd says. "It could have been the first ground-effect F1 car." Instead Wright would need to wait until he was at Lotus at the other end of the decade before he could perfect the technique.

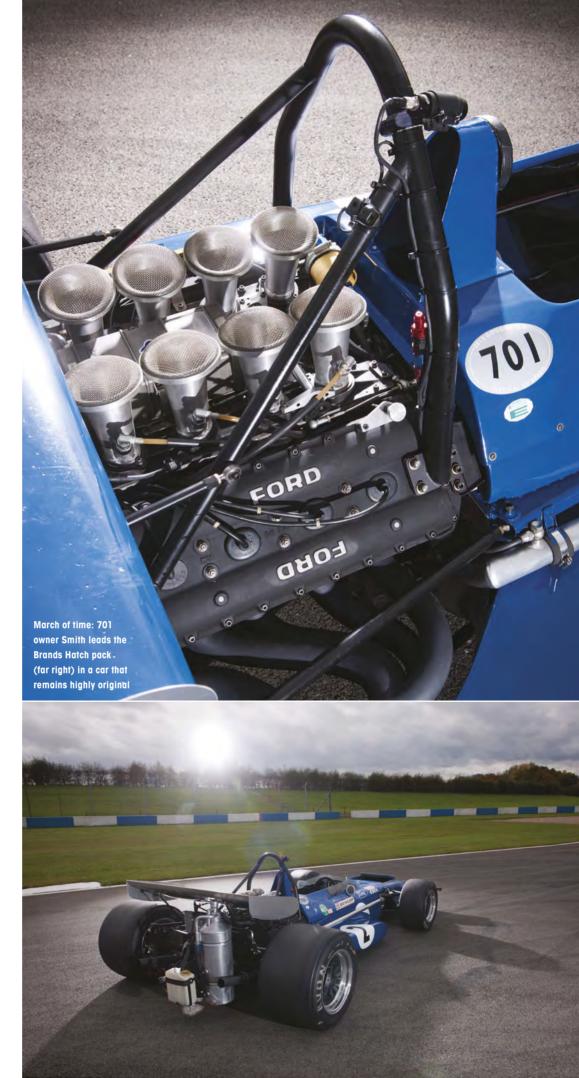
Simple it might have been, but the 701 was quick. Walking down the pitlane at Kyalami, Mosley could hardly believe his eyes. "I was there with Robin and saw our cars first and second on the grid. I was 29 years old and on top of the world."

The car had flaws, though, and Stewart for one was not shy about saying so. "I have massive respect for Robin," he says, "and the car he built was robust and clearly very fast, but it was not easy. In fact I'd say it was the most difficult F1 car I drove. The H16 BRM had all sorts of issues but was very manageable compared with the March. On jounce and rebound the 701's responses were incredibly fragile. I think Chris and I were able to go quickly because we were probably the two smoothest drivers around at the time, so therefore did least to upset it. But I had to stretch my personal elastic much farther than I cared to get the lap times. The Tyrrell was very straightforward, even with its short wheelbase. And as for the Matra - I could have slept in that and still been competitive."

The problem was weight distribution. Herd: "We had this big, heavy radiator at the front, which I balanced by putting the big, heavy oil tank at the back. But having these masses at either end gave a high polar moment of inertia that made it unpleasant to drive, although the problem was mainly in slower corners."

Herd admits there was a more fundamental issue, too: "Because the car was so simple, it didn't leave much room for development. While our rivals got quicker throughout the season, we stood still."

If you look at 701-2 in close detail, you'll see all sorts of unique Tyrrell modifications, including adjustable front aerofoils, a steering damper and different pick-up points for the rear suspension.



he engine is warm now. It's a strong DFV built to modern regulations, if not to the ultimate specification, but it still gives better than 500bhp at a very safe 10,500rpm, compared to the 430bhp it would have had when new. In a car weighing little more than half a tonne I am under no illusions about what is about to be unleashed.

I'd feared the cockpit would be so small as to deny me access, but the only real problem is that the top of the surround is too narrow to accommodate my shoulders. Happily this can be detached with the loss of only the headrest and some purity of line. As a car designed mainly for customers, I guess Herd knew it had to be able to take a wide range of physiques.

Clearly no efforts have been made to vary the driving environment from the norm of the day. A simple central tacho is flanked by combination

dials providing the temperatures of water and oil, plus oil and fuel pressures. Everything is in slightly the wrong place - the gearlever too far back, the elbow slots cut into the body sides too far forward, which says nothing about Herd's interior design and everything about the difference in forearm length between Jackie and I.

The DFV blasts into life. There's never much theatre with such motors: no little coughs, splutters, bangs or rasps to build expectation before treating you to the full choral magnificence of its voice. This is a DFV, the Mike Tyson of racing engines: not nice, not pretty, but capable of hitting harder than anything else of its era.

That said, a modern DFV is far easier to manage than those of 10 or 20 years ago, which could be made to give more than 500bhp but only with that power concentrated into a tiny band somewhere between 8500-11,500rpm. They don't exactly run like road car engines even now, this one requiring a steady foot and 3000rpm just to maintain an uneven idle, but it's tractable enough to pull out of the pits and onto the track without making you look like the out-of-depth amateur you really are. Donington Park's wide open spaces, smooth surface, quick corners and long straights are the perfect place for this.

I'd expected the steering to be finger-tip light but it's not; even gently easing my way into the experience the car feels brutish, physical and intimidating. The tyres have been in warmers, so at least there's grip on this not-quite-freezing day, but if I don't get my foot down and start to make the car work, it won't last long.

So I do exactly that: on the long straight after Coppice, I press the throttle as far as it will go. And lift. It wasn't something I'd planned in advance, nor even something I intended at the time it happened: it was an instinctive, involuntary reaction to a force which some subconscious, primitive part of my brain saw as a clear threat to my ongoing wellbeing. The acceleration felt like standing still while all the world you could see was pulled towards you.

But it is amazing how quickly you adapt even to forces as alien as this. Next time around I could keep my foot there and hurtle through space, time and gears until 10,000rpm showed in top, probably 170mph or more, and still leave the braking margin of a true coward.

In fact it is above 100mph or so that the March is at its most explosively extraordinary. Even by the standards of other DFV-powered F1 cars I've driven, it gathers momentum at a surreal rate. You might remember that last year I drove a Lotus 92 from the other end of the DFV's long and illustrious career. But while the 92 clearly started to slow above 150mph, the



701 charges madly on. The reason is simple: it has no drag. Smith reckons that even its considerable rear wing is so far forward and so compromised by the position of the driver's head that it makes little or no difference.

To test my theory I do an impromptu back to back with a Mercedes-Benz SLS GT3 race car that happens to be circulating at the same time. It's 42 years younger than the March, has an engine of more than double the capacity, with more power and a doubtless preposterous torque advantage. It thunders out of Coppice spitting fire only for the little old March to drive past as if it were a diesel-powered E-class.

The brakes, by the way, are not nice. The pedal travel is long and soft, which not only fails to reassure when you most need reassuring but also makes crucial heel and toe downshifts both difficult and painful. It slows well enough, but shows its age compared with modern machinery that will let you hit the pedal as hard as your thigh will allow from top speed all the way to the turn-in point.

And what of that Wild West handling? I couldn't find it and, more relevantly, neither can Smith, who drives as hard as I've seen someone handle an historic F1 car. The 701 clearly likes to understeer, but as long as you're prepared to take charge and are not shy about correcting any loss of grip at the front, it feels composed and even quite faithful, especially in quicker curves where you need it most.

I was surprised by how firm its springs are: of course it feels soft by modern standards, but compared with other 3-litre F1 cars of a similar vintage (those that didn't need much spring rate because they had no downforce), it maintains its ride height remarkably well. But I expect the real difference is partly down to JYS driving on an entirely different level to even its current owner, and of course the immense variance between a 1970 treaded Dunlop and a 2012 Avon slick.

he light of the 701 burned brightly, but briefly. Although Herd maintains that a little reliability might have made the 701 a title winner in Stewart's hands, the car

> having taken pole in three of its first four World Championship races and won the other, there were no more firsts in qualifying or racing for the rest of that year. Lotus finally started to extract the potential of the 72 while Ken Tyrrell. who had always viewed the 701 as a stop-gap while he built his own car, immediately put his top driver in the Tyrrell-Ford 001 as soon as it was ready, before the season's end. The Scuderia woke up too, scoring a hat trick of late victories with its 312B.

What Herd says about the car lacking development potential is entirely true, but there was something else going on, too, and Mosley doesn't hesitate to put his finger on it.

"At Kyalami I really thought we'd done it," he says, "but I was too young to realise it was only going to get harder from there. Realistically we were lucky. We caught F1 when it was halfasleep. At some races in 1969 you'd only get 13 cars on the grid. And then we came along and made the F1 establishment look stupid. We were, if you like, the most enormous wake-up call and stung a lot of very talented people like Colin [Chapman] into action. It was always going to be hard after that."

Quite so. But you make a lot of your luck, and the fact is that four young men, penniless in F1 terms, came together and in 10 weeks designed, built and delivered a Grand Prix car good enough for a talent like Stewart's to score pole in its first World Championship race and lap the field en route to victory in its second. Formula 1 has always provided a rich seam of stories but few that are more extraordinary or less widely acknowledged than this.

Our thanks to Andrew Smith, WDK Motorsport, Donington Park and Christopher Tate for their help with this feature.





It's green on the outside - and the same applies beneath the skin. Meet Drayson Racing's potent, pioneering sports car

BY ED FOSTER

ord Drayson couldn't wipe the smile off his face. He'd just got back from driving up the hill at the Goodwood Festival of Speed in his new electric Le Mans prototype and, despite the fact that it had run for the first time only three days before, it had gone without a hitch. "It's really fast!" he said as he looked around, a little wideeyed, at the green machine that would later in the weekend climb the course in 53.91 seconds. It was the 11th-quickest time of the weekend and the fastest yet seen for an electric car on the hill. An impressive performance for something powered by 2500 laptop batteries.

It hasn't been a simple creation, of course, and as well as advanced

#### III DRAYSON'S SPORTS CAR

battery technology this one-off, time-attack racer is showing the technological way in almost every area of its LMP1 Lola chassis. Its aim is to show that electric cars can be fast, exciting and viable as genuine racers. It's also a timely project considering that the FIA Formula E (Electric) Championship will start in 2014. The racers will differ from this one - series bosses have just ordered 42 cars from Spark Racing Technology, all using an electric drivetrain from McLaren - but a head start in understanding how the technology works will stand Drayson Racing in good stead when it enters the category.

Paul Drayson set up his eponymous team in 2006, campaigning in the British GT Championship with Barwell Motorsport, and by the following year it had dipped its toe into green technology with a bioethanol-fuelled Aston Martin DBRS9. Come 2010 and the DBRS9 had morphed into an LMP1 Lola-Judd. which also ran on bioethanol.

That's the car you see here, only now it's powered by four YASA motors in two pairs rather than an eight-cylinder Judd. "When I joined the team in July 2011," says Angus Lyon, chief engineer on the electric drivetrain, "Paul's first question to me was, 'Can we do an electric car faster than the 750bhp Lola-Judd?' He gave me a week to work out whether it was possible and when I said that we could make it work he replied, 'Right, go and do it'."

Six months later the car was displayed at Autosport International and six months after

"The plan this year is to travel the world, setting fast lap times at famous tracks"

that it was breaking records at Goodwood. Not bad considering its chassis partner, Lola, went into administration before the car was finished.

The plan this year is to travel the world, setting fast lap times at famous tracks. "We want to advertise the fact that this is an electric car and make it exciting," says Lyon who used to work in F1 for Honda, Brawn GP and Renault. "We've got a few tricks up our sleeves and we're looking at those to enhance the experience rather than disguise it. The last thing we want to do is to put a V8 noise over this and pretend it's a Judd. It isn't. It's a next-generation technology - it's part of what we see as the future and it's better if we celebrate that."

**INSIGHT** 



Spared the tight regulation that governs most race series, the electric Lola is a showcase for free thinking



#### **BATTERY**

The Nanophosphate® lithium battery has an energy capacity of 30kWh, and where this car differs most from conventional electric vehicles is that the battery is part of the car's main structure. "People are just throwing batteries in wherever they can fit them on a lot of electric cars at the moment," says Angus Lyon. "Quite a few have them down their sidepods, which isn't great from a weight distribution or safety point of view."

The battery lasts for six or seven minutes flat out when you use all 850bhp, but that increases when you ask for less power. Still, it's not a long time if you want to race it. "The car was designed with a fairly small battery, really," Lyon says. "It was designed as a lap-attack car. We wanted to go out and show that the car was faster than rivals with an internal combustion engine. It wasn't about range, but then again it could race for up to 15 minutes at a very acceptable pace."

Battery technology is the big limiting factor with any electric car at the moment, but "it's coming" according to Lyon. What's more, a battery like your phone uses will have very good 'energy density' - it will last for hours (unless you have an iPhone5, which will last for minutes). However, a battery powering a racing car will need very high 'power density' - the rate you can extract power - and will therefore, for the moment, sacrifice its length of life.

The two are not easily combined.

Although the power in the Drayson Lola comes from heavily modified laptop batteries, combined to make one large, power-dense unit, bespoke automotive batteries are startina to emerge. "The problem is that the manufacturers are quite a conservative bunch when it comes to battery technology," Lyon says. "They just want to make something that works - look at the Nissan Leaf or the Chevy Volt... They're both good cars, but they're reasonably conservative, they don't push the boundaries because the last thing they want is a car that fails.

"This is where we come in - when there's a technology that's ready, but not ready to be used on a road car, we can race it. Testina batteries in motor sport is like an accelerated life test because we take them to their limits in terms of state of charge, we push them with temperatures and we want to charge them really quickly, which can damage them.

"A lot of the battery design direction in the short term is about optimising the packaging, in the mid-term it's optimising the chemistries and in the long term introducing new chemistries."



#### INVERTERS AND CENTRAL CONTROL SYSTEM

In order to get the electric power to the motors it must first be converted from DC to AC, which is what an inverter does. "The battery is just a big DC lump, while the motors are AC." says Lvon.

"How it works is that we have a centralised control system that sends messages down to each of the liquidcooled Rinehart inverters (there's one for each motor). It just sends a message saying 'give me this much torque'. They do the processing, monitoring the temperatures and speeds of the motor and decide how actually to control the DC supply.

"The central control system acts a bit like an engine management ECU on an F1 car. It does the basics of turning the system on, powering it up and down in a safe manner, monitoring everything



from the voltage to the motors, the temperatures and the chassis for detecting failures.

"It also manages the dynamics: when the driver puts his foot on the throttle, what is he asking for? And what does that really mean in terms of power distribution and power figures?

"The inverters are fairly dumb in that all they get is a torque demand and they deliver that demand and give a whole load of information back in terms of their state of health, temperatures and actual torque delivery."



#### **MOTORS**

"Almost none of these components come off the shelf, because we've worked with suppliers to improve them. The motors were 95kW, but we've pushed them up to 160kW," says Lyon.

"There are four of them in two pairs and each pair drives a rear wheel. There are two basic maps to what we have. One is the basic drive distribution, which in a straight line is 50:50. That gives a car that drives in a normal way. Then there's the torque vectoring distribution, which actively enhances torque split. Let's say the driver is negotiating a right-hand bend; it will put more torque to the left wheel to help push the car around.

"The dynamics of the car are not as good as they were because the weight distribution has moved back a bit and it is a bit heavier, but using tricks like that can help get the handling back to where it was before.

"The other good thing with torque vectoring is that you can compensate for variables such as changing tyre characteristics. You can make a car handle more consistently throughout an entire stint, something that can be changed from the cockpit or done automatically by the car."

The electric drive certainly packs a punch, as Lyon reckons that you get the same acceleration as you would by dumping the clutch with the Judd engine in the back. "It's the same initial pull off the line, but the power just continues. With an internal combustion engine you lose power every time you

change gear, but this thing just keeps going. When you leave the line you think 'this is quick', then at 50mph it's 'blimey' and then at 100mph 'bloody hell'."

The two motor pairs each have agars linked to a drop gear on the driveshaft - it looks like a differential externally, but there's no link between the wheels. The drive goes into the centre, where the drop gear is located, and then comes out via the driveshaft to the wheels.



#### **MOVEABLE AERO**

"Currently there are three moveable aerodynamic surfaces on the car: the biplanes at the front, the gurney at the bottom of the rear wing, which is similar to DRS on an F1 car, and the upper flap on the rear wing," says Lyon.

"At the moment it's the driver that activates these with paddles on the steering wheel. We could control it automatically, but we decided that it would be better not to add the extra layer of complexity. Losing 30 per cent of your downforce and drag at the wrong time isn't good so we've concentrated on getting the drivetrain right."

HE TECHNOLOGY ON THE B12/69 EV is staggering, and as well as everything mentioned above it uses wireless charging which can be done in 15 minutes, energy-recovering dampers which power the rear lights, and brake energy regeneration.

You could argue that the car isn't competing on a level playing field with the standard LMP1 machines because of the moveable aero and torque vectoring, but that's not the point of the programme. The car exists to showcase what can be done with electric power and drive those technologies forward. It did the former during the Goodwood Festival of Speed and the latter will be proven in the next few years.

None of us wants to see motor racina become all-electric, and neither does the team at Drayson Racing. What this car offers, though, is a partial glimpse of the future.

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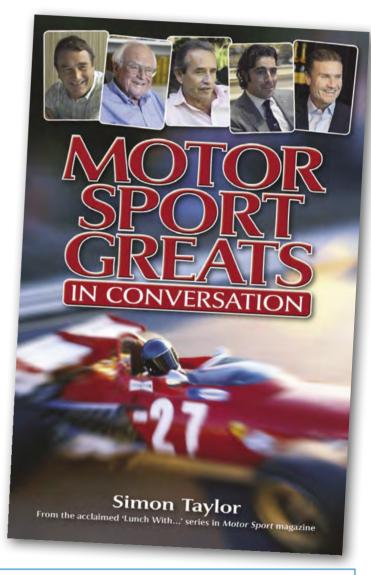
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Innovator, improviser, impecunious... The founder of a famous British racing institution has been all three, but right now he's flying high once again

BY SIMON TAYLOR

otor racing is dangerous: it's a truism that doesn't need repeating. And motor racing can be dangerous commercially, too. On the balance sheet as well as on the track, risk can reap huge rewards but can also result in huge crashes.

Witness the fate of our racing car industry. Four months ago Britain's longest-lived racecar builder, Lola, laid off the last of its staff and closed its doors. Previous big players such as March, and before them Cooper and Brabham, have disappeared into history, and smaller specialists from Anson to Tiga have come and gone. The only big single-seater maker that still seems to thrive is Italy's Dallara.

It's not long since being the world's largest racing car manufacturer was the proud boast of Reynard. The firm's roots go back to 1973, and through the 1980s it became extremely successful. In 1991 an attempt to move into Formula 1 brought the company to its knees; yet by 1996, having moved into Indycar racing, it was making massive profits again. But in early 2002 it went bankrupt. No company history better demonstrates the volatile nature of the motor racing business.

However the Reynard name hasn't disappeared completely; and it certainly hasn't disappeared in the energetic shape of the man who gave his name to the company. Now 61, Adrian Reynard is as busy as ever, heading up the Auto Research Center in the USA and doing technical and design work for major road car manufacturers around the world. To pin him down I had to wait until he flew in to Heathrow on a Sunday morning red-eye from Detroit, and then drove up to Oxfordshire to meet me at one of his favourite pubs, the Nut Tree at Murcott. Landlord Mike North, once the youngest chef



in the country to earn a Michelin star, served us a proper Sunday lunch: English roast beef and Yorkshire, preceded by Loch Duart smoked salmon, and sticky toffee pudding for afters. Adrian's choice of Argentinean Tupungato Malbec made a fine accompaniment.

Cars, motor sport and engineering are in Adrian's genes. His great-grandfather was a 19th century blacksmith who moved into horseless carriage repairs at the dawn of motoring. His grandfather and great-uncle were motorcycle racers in the 1920s: Great-Uncle George was a works rider for Royal Enfield, and came fourth in the 1927 Junior TT. His parents met in 1945 at one of the wartime De Havilland aircraft factories, where his father was an apprentice and his mother, remarkably for those days, worked on Mosquito upgrades in the drawing office.

When Adrian was nine Great-Uncle George gave him a 49cc four-stroke Mercury Mercette moped, and he wore a groove in the family lawn doing endless laps. "I found that by undoing two 7/16th nuts I could take the rocker cover off and watch the tappets working. I thought I was stripping the engine down. By now my dad was working for BP on fuel systems and used to bring home all sorts of exotic cars - Daimler Dart, Alfa Sprint Veloce, Aston DB4. Then he was posted to New York as BP's US racing manager, and we lived in Connecticut for two years. He took me to the 1963 US GP at Watkins Glen. Thirty years later, when Jim Hall bought his first Reynard Indycar chassis, I showed him a picture of his Lotus-BRM on the grid that day, with a 12-year-old boy standing beside it - me!

"I mowed lawns for a dollar an hour and saved up enough to buy my first kart. That came back to England with me and I raced it in Cambridge Kart Club events at Kimbolton and elsewhere. I was always taking old cars to bits, hauling out engines and gearboxes and trying to find out how they went back together. I wanted a Saturday job, and almost opposite the gates of my school was the workshop of George Brown, the great motorcycle record-breaker renowned for his exploits on his huge Vincents, Nero and Super Nero. I was 15 and he was pretty dubious about hiring me, but in the end he let me spend my Saturdays there for nothing, unpacking crates and sweeping up. He taught me how to weld, and I earned some cash making some not very brilliant garden stands in the evenings and then selling them to the local ironmonger. Eventually George took me along as a helper at his speed-record attempts.

"In my A-levels I did well in physics and engineering, but failed maths. I didn't have a good maths teacher and I never really understood it. Even today I have a problem with the intricate stuff: it's always been the empirical side that got me through. So I



was lucky to get a four-year HND sandwich course with British Leyland - half the year working in Morris Motors at Cowley and half the year at Oxford Polytechnic, which is Oxford Brookes now. I loved that apprenticeship, it was magic for me.

"When I was 19 George sold me an old 250cc Royal Enfield GP5 racer and I attacked some records myself at Elvington. I made up a detachable sidecar, so I could run in two classes and get twice as many runs, and broke five world records. The following year I built my own ultra-low frame with horizontal riding position, and I sprinted and drag-raced that. But back at Elvington I was plagued by a misfire on the longer runs. I couldn't figure it out. The timekeepers were packing up to go home, but Denis Jenkinson of Motor Sport was there and took pity on me. He persuaded the timekeepers to wait while I found the trouble: over the longer distances the fuel pipe wasn't big enough to fill the float chamber. I rigged up a bigger pipe and did my runs just as it was getting dark. And I got another bunch of world records, including the flying mile and flying kilometre.

"At college my welding bottles came in handy, patching up students' rusty bangers in the car park for £1 an hour. I also started a car club, and one of the activities I organised was a visit to March at Bicester." March Engineering was then only in its second full year. The little group of students was shown around by Bill Stone, the New Zealand ex-racer who'd been March's first employee, and Bill took a liking to the bright, enthusiastic youngster. A few months later, when Adrian got a good price for one of his sprint bikes and decided to go fourwheel racing, he asked Bill's advice.

"Bill steered me towards Formula Ford, so I bought a Ginetta G18B for £600 including trailer. But when an accident at Brands Hatch bent the chassis I rebuilt it and sold it, reasoning that it'd be cheaper to build my own car. My final-year college project was meant to be a lateral strain gauge accelerometer, but instead I built up my car in the apprentice school at British Leyland. I told them it was a Formula 3, because I didn't think BL would approve of something with Ford in its name! I presented the first Reynard car at the Poly to much acclaim, but of course I got zero marks because it wasn't what I'd been instructed to make."

In February 1973 Bill Stone decided to leave March and set up his own company manufacturing racing car components. And he approached the still 21-year-old student to come in with him. "I couldn't believe my good fortune. It's one of the best things that ever happened in my life. Here was this brilliantly talented engineer, an ex-racer who knew everybody in the business, wanting to go into partnership with me. We called the firm Sabre - for Stone, Adrian, Bill, Reynard and

Engineering - and Bill was initially the sole employee because I had to continue with mv BL sandwich course. He found an ex-undertakers' shed in Bicester, with the coffin-making machine still sitting there, and Sabre started doing fabrication work."

drian's self-built car, the Reynard 73F, had its first outing at a nonchampionship Silverstone race late in 1973. And it won. This was the start of a remarkable Reynard tradition that translated to FF2000, Formula 3, Formula 3000, Indycar and even to sports cars: in its first race in a new formula, a Reynard has always taken victory. It's a unique record.

During 1974 Adrian raced his Formula Ford until the money ran out, whereupon he passed the car on to his friend Jeremy Rossiter. His apprenticeship finished, he did a year in BL's Prototype and Build Development department, and then enrolled on an MSc course in Vehicle Dynamics at Cranfield. For 1975 he updated his FF design for the new Formula Ford 2000, with shovel nose and side radiators, and Rossiter persuaded his employers, Spax Shock Absorbers, to sponsor a two-car team for them both. Meanwhile Adrian got to know Rupert

Keegan, who was earning a reputation as a fast but wild Formula Ford driver, backed by his father Mike, the wealthy boss of British Air Ferries. When Mike Keegan bought controlling share in Hawke, he decided that Rupert, and Hawke, should have a Formula 1 car, and reckoned that young Reynard was the man to design it. "Sabre still couldn't afford to employ me full-time and it sounded like an interesting opportunity. So I left Cranfield without completing my Masters." But Adrian got the letters after his name in the end: some 20 years later Cranfield awarded him a Professorship, and Oxford Brookes gave him their first Honorary Fellowship.

"I started laying out the F1 car - a pretty standard DFV/Hewland set-up but Rupert was now leading the F3 championship in an old March. Fortunately Mike decided that the F1 should go on the back burner, and told me to design a monocoque F3 car, quickly. After weeks of 18-hour days it was ready for Brian Henton to test. It was as quick as the March but no quicker, so Mike bought a

Chevron for Rupert, my car was set aside and Mike fired me. He also fired one of his British Air Ferries air hostesses, a girl called Gill, because I'd taken her on holiday when she was meant to be working. She became Mrs Reynard."

In 1978 Bill decided to return to New Zealand and Adrian became Sabre's sole owner. That season he scored his first FF2000 win, and in 1979, while David Leslie dominated FF2000 in the UK in his Reynard, Adrian tackled the European Championship. He was victorious at Zandvoort, Jyllandsring and Nivelles and won the series. "I still entertained ambitions of becoming a full-time racing driver, but the next rung on the ladder would have been F3. I was already 28, and I had to accept that it was too big a step for me. So I made a conscious decision: from now on my career had to be as designer, engineer and businessman.

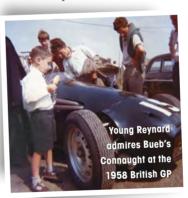
"As well as our own cars – in 1979 we'd sold our 70th chassis – we were making parts for March, Royale, Van Diemen, Chevron and others, and we had 12 employees. It was impossible to stay in the tiny coffin works, which cost us just £39 a month in rent. I took on a new 7500 sq ft factory in Telford Road, Bicester, and to do it I had to take out a £90,000 bank loan. That's the trouble with young

> companies: they can't grow gradually, they have to go through step-changes. We had a good reputation now in FF2000, but the trouble was, the 1980 car was a dog. It understeered in the corners and was a brick down the straights. I'd always been fascinated by aerodynamics, but at that stage I'd never ventured inside a wind tunnel. I

designed a car based on what other successful cars looked like, but you can't take individual elements and transpose them onto another car without understanding the thinking behind it. It was a big mistake, and I've never since looked at another car to copy it. It was a difficult time. I had to sell everything I had and put the staff on a twoday week. Frank Bradley, whose main business was

jellied eels, blamed me because his car was uncompetitive. I couldn't give him his money back, so to keep him happy we made him hundreds of whelk pots instead. For 1981 we updated the old '79 car and just broke even making parts, from oil tanks to quick-lift jacks.

"In 1980 I did some work in Formula 1, engineering the RAM Williams that John



"It was a difficult time. I had to put the staff on a two-day week."



Macdonald was running for Rupert Keegan. Rupert was having trouble qualifying, but we made a few changes, and at Watkins Glen he qualified 15th – ahead of Villeneuve and Scheckter in the Ferraris! - and finished ninth. Then in 1981 the works Marches were failing to qualify, so I was called in to help. The car was never exactly going to be a leading contender, but we improved it a bit, and Derek Daly was seventh in the British GP after a pitstop. For 1982 March hired me as chief engineer on the F1 team, and my fees helped keep Sabre alive. I'd put in a manager, Ivan Deacon, to run things day to day and March was only a two-minute walk from our factory."

The 1982 F1 March, with a lot of input over the winter from Adrian, was much better, and lighter, than the 1981 car. But Jochen Mass and Raul Boesel both had a miserable season, and relations between Adrian and John Macdonald became strained. Then Colin Chapman summoned Adrian to Ketteringham Hall to discuss a job at Team Lotus. "I remember sitting at a big boardroom table, with the great Colin Chapman the other side grilling me, and I was so nervous I left big sweaty hand-prints on the polished mahogany. Chapman told me he demanded 110 per cent, and I'd have to give up Sabre if I joined him. I said I was sure I could give him what he wanted, but I couldn't give up Sabre, and that was that. Perhaps I wouldn't have got the job anyway - it went to Nigel Stroud - but no regrets, it was the right decision for me. And three months later Chapman was dead."

By now the general economic climate was improving and, having had some proper wind tunnel experience at MIRA for March, Adrian designed a very slippery new FF Reynard, with inboard suspension and side radiators. James Weaver put the prototype on pole at the

Formula Ford Festival in late 1981 and finished third. In 1982 45 cars were sold, including 15 to the United Arab Emirates. A driving force behind this success was new employee Rick Gorne, who'd been a successful Reynard racer in FF2000 and then had a big Formula Atlantic accident that ended his cockpit career.

"As fellow racers, Rick and I had had some major altercations on the track, shaking fists, rows in the paddock. Then I began to appreciate his enthusiasm and his charm. But I had to work hard to persuade him to join me. He said he'd only come if I focused entirely on my job, designing racing cars. The deal was that I would make them and he would sell them. And he became the most successful racing car salesman ever. I'd cringe at some of the deals he'd do, because it might involve getting the best driver

"I had to tell Colin Chapman I couldn't give up Sabre"

into one of our cars regardless of profit, but it worked brilliantly. He'd go anywhere to root out a prospect, and once he had a lead he'd never let go: he'd pester them, entertain them, convince them. It was easy for him, because he really believed in the product."

Reynard was now selling a lot of cars and winning a lot of races. And in racing you always look for the unfair advantage. "The rules said the car had to race above the minimum weight limit, but they said nothing about practice. So for 1983 we built an ultra-light FF2000 car for Tim Davies, and he'd go out to qualify 60 to 80 pounds underweight, which on most UK circuits translates to 0.5 to 0.8sec a lap. He'd get pole position by a big margin, completely demoralising the opposition. Then we'd add

ballast before the race so he was legal. In the race he was on equal terms, but psychologically the others were beaten already." The same year Maurizio Sandro Sala, having been persuaded to switch from Van Diemen to Reynard, won the Esso FF Championship, while in the FF Festival the Reynards of Andrew Gilbert-Scott and Andy Wallace finished first and second.

In 1984 Reynard sold more than 170 cars. Paul Owens, ex-Chevron, joined from the ATS F1 team: "Paul brought us carbon-fibre experience and his contribution was fantastic. Up to then carbon-fibre had only really been used in the upper formulae, but for 1985 I wanted to build a carbon F3 car and got an £80,000 government grant to do it. We bought

a load of 2kW cooker elements and built an oven." And of course Reynard's first F3 car, driven by Andy Wallace, won its first race. It went on to break Ralt's stranglehold on Formula 3, although by the end of the season Ron Tauranac's cars were back on top. But in 1986 Wallace dominated F3, while Bertrand Gachot and Mark Blundell ruled FF2000. And now Reynard had a key new designer.

"A young chap called Malcolm Oastler sent me the best CV I'd ever seen. These days you're only meant to do two-page CVs, but Malcolm's was reams and when I read it I thought, 'I've got to get this guy'. He'd raced and won in Formula Ford in Australia, he'd built his own stuff, he'd engineered everything from minibikes to buses. I'd delegate my ideas to him and he'd take them further and improve on them. A very fine engineer, and so down to earth. For 1987 he designed probably the finest FF1600 we ever made, in terms of stiffness, simplicity, performance and driveability."

nd now came the move to Formula 3000. It was a big step: Lola, Ralt and March had the market pretty well tied up. Once again the potential rewards were big, but so were the risks. "The chassis was basically the F3 with extra fuel and extra crash protection, but the aerodynamics were completely different because of the bigger tyre sizes. Malcolm and I did the wind-tunnel testing together." So to the opening F3000 of 1988 at Jerez: the Eddie Jordan-entered Reynard started from pole and won. There was yet another maiden victory. During the season, as other teams switched cars, a total of 22 F3000 chassis were sold. Herbert, Martin Donnelly and Roberto Moreno won rounds for Reynard, and Moreno's five victories made him clear champion. Meanwhile II Lehto's Reynard 883-Toyota won the British F3 title and the British Class B, European and German F3 titles were all won by Reynards.

In 1989 Oastler came up with a totally revised F3000 car. Reynard sold 36 and Jean Alesi, driving for Eddie Jordan, won the title despite moving into F1 mid-season with Tyrrell. Every round of the British F3000 series was won by a Reynard. In 1991 Reynard swept the F3000 Championship, winning nine of the 10 rounds, and by now profits were soaring.

"It was 1983 before I bought my first new car, a Golf GTi. Until then I'd been running around in £300 shitboxes. Now Gill and I had moved with our kids into Hailey Manor, a listed 18th century house with eight acres and two cottages. I was seriously into aircraft, too. I got myself a Cherokee, then a helicopter, and I bought a Spitfire, plus the remains of another Spitfire as a box of bits I was going to rebuild. I also had a WWII Harvard fighter/trainer: that caught fire in mid-air and I had to crash-land it in a field, but my passenger and I got out OK. So a lot was happening. As a company we were trying to keep our feet on the ground, investing in new technologies, looking after our customers, and hiring talented young people.

"Because I was an apprentice myself, I believe that apprenticeships are vitally important, and I've always tried to give as much opportunity as I can to young people. I used to get 250 letters a year from youngsters wanting a job, and we usually hired about 10 of them a year. I interviewed all the likely sounding ones myself. Rocky, Guillaume Rocquelin, who's Sebastian Vettel's race engineer at Red Bull, was one of

my apprentices. There are several people high up in F1 now who started with me. One Australian lad was really persistent, but had no qualifications and I had to tell him we couldn't take him. He kept phoning from Australia and in the end I told my secretary not to put him through any more. A week or so later she said, 'It's that Australian boy again.' I said, 'I told you, I can't speak to him.' She said, 'But he's

sitting in reception.' So I saw him, and I hired him. He turned out to be really good."

In 1989 March was in trouble, and Adrian, in concert with American team owner and race car dealer Carl Haas, came very near to buying the firm that he'd first seen as a student 18 years before. "I thought it would provide a short-cut into Indycar, and it got to the point where I'd agreed to buy March Engineering for an initial payment of £1 million. But when my accountants really got into the books it didn't smell quite right, so I walked away.

"Next, we made a serious effort to get into Formula 1. We were making annual profits of more than £1 million, which seemed a lot in those days, and I thought, 'Well, the product's not that different. I'll put two years' profit into an F1 project and the rest will happen, just like everything else has happened'. So I put together a team of really good people like Rory Byrne, Pat Symonds and Dave Wass, and we designed an F1 car. We did all our wind tunnel testing at Imperial College and devised what was then a unique shape with a high nose, to get better flow under the car. I designed a factory and, using my own money, bought the land. It was all looking pretty good. But I couldn't get an engine deal. In the end I had to give it up.

"By the time I pulled the plug on the F1 project I was personally almost £3 million in debt. It was time to regroup and survive. I managed to sell the 15 acres I'd bought at Enstone for the factory, plus the designs for the building, to Tom Walkinshaw, and Benetton

[now Lotus] is still there. Most of the personnel, from Rory down, went to Benetton. I sold the design drawings and the wind tunnel model to Ligier. I sold everything I possibly could, planes, helicopters, the lot. I had to sell Hailey Manor, and our family of six moved to a three-bedroom rental with no carpets next to Toys R Us in Oxford. It was tough on Gill, but she kind of liked the simplicity of it, taking the washing down to the local laundrette. As for the company, although I lost Rory and the other F1 guys, I still had the core team. I felt we would eventually dig ourselves out."

The prime route to achieve that was Indycar.

"In 1992 I spent a lot of time in the USA engineering Russell Spence's Formula Atlantic car, and it was a perfect way to spy out the land. I tried very hard to get in with Carl Haas, but he was entrenched with Lola. Then I came across Chip Ganassi, a former Indy racer and team owner who was looking for further success. I'm still not sure why Chip made the ballsy leap of faith to go with us, because we

had no record in Indycar. But he agreed to invest in Reynard North America, which we based at Indianapolis, and he ordered 12 cars for 1994. In fact we'd sold 13 by the end of April. Malcolm was chief designer, assisted by Bruce Ashmore who'd moved across from Lola, where he'd been chief designer on their Indycar chassis and also Mario Andretti's engineer."

It was a season dominated by the Ilmor/ Mercedes-powered Penskes. Yet once again Reynard scored a story-book maiden victory, when Michael Andretti won the opening round at Surfers Paradise. In the Indy 500 Jacques Villeneuve, in only his fourth Indycar race, finished second and took Rookie of the Year. And in 1995 Villeneuve won the Indy 500, and the championship. With 15 cars on the grids, Reynard easily won the Manufacturers' Cup. It was the same story in 1996, with Jimmy Vasser champion in his Chip Ganassi Reynard. In the USA Reynard ruled, now more profitable than ever before. And once again F1 raised its head.

"We'd obviously built up a good relationship with Jacques Villeneuve, and his manager Craig Pollock was talking about moving into F1. That was superseded by Jacques' move to Williams and his World Championship, but Jacques and Craig had an appetite to do more. Then Craig was able to get the ear of British American Tobacco, and the plot was hatched: BAT would provide the money and Jacques would be No 1. Renault were keen because Jacques had already got them a world title. And the car would be called a Reynard.



"But soon, far from being the dream team, it became clear that we were required to put in a considerable amount of money. And Renault dissipated its interest by becoming involved in Flavio Briatore's Supertec operation, and everything was delayed by a year. Then it emerged that the car would be called not a Revnard but a BAR, which wasn't a brand that anyone could relate to. Finally BAT insisted that, rather than using the available funds to start a fledgling team as Jackie Stewart had done, we had to buy Tyrrell."

BAR was a horribly public disaster. In its first season, 1999, the team posted 24 retirements out of 32 starts, and scored not a single point. In 2000 there was some improvement, and equal fourth place in the Constructors' Championship, but in its entire four-season existence BAR scored but one podium, Villeneuve's third at Hockenheim in 2001. "There were other demotivating things. I found it hard to work with Craig and I disagreed with a lot of budgetary decisions. I passed most of the design responsibility over to Malcolm and,

although he's a fantastic intuitive engineer, you need to be tough to cope with the politics in F1, and Malcolm's one of the nice guys. The Honda engine we had for 2000 was meant to have 800bhp, but actually it wasn't any better than the Supertec, and it was rather heavy. At the end of the day none of it was good enough. Craig and I weren't gelling and I resigned as technical director, although I was still actually a shareholder when it all folded.

"By now all our focus at Reynard was on the USA. We'd been very successful in Indycar, we were doing the Barber Dodge cars and the Chrysler touring car programme, and consultancy work for some major manufacturers. My main challenge in terms of resources, staffing, factories and development was how to keep on growing. I brought

in Alex Hawkridge, former Toleman Motorsport managing director, as CEO with the aim of turning Reynard public, and we spent a lot of money reconfiguring the company. To keep our expansion process going, we invested \$10 million in buying the American race-car maker Riley & Scott.

"In August 2001 I made the decision to lay

down 50 Indycars. In the previous three years our sales had been running at that level and we knew all the teams, we knew what their needs were going to be. Then on September 11, 2001 I was coming out of a BAT board meeting when I heard what had just happened in New York and Washington. I realised the huge significance of it all, but I'd been through crises before. I knew the series, I knew the teams, I knew the sponsors. I made the decision to carry on.

"On November 3, when we arranged to deliver our first 2002 car, the customer didn't want to take it. That was a surprise. Soon we had four cars sitting on the shop floor and nobody had paid for them. The dot.com bubble had burst, the US stock market was shrinking, everything was going soft. I'm not saving it was all down to Nine-Eleven, but it would have helped if we'd been able to deliver those cars at the agreed prices. We realised that the race car manufacturing world was shrinking, and we started down-sizing as fast as we could, keeping our core competencies but economising on functions we could do without. Soon, from 375

> staff, we were down to about 160. By February we were distress-selling the cars we had, because we were running out of cash. I tried everybody I could think of to put some money into the company, but in the end I had to accept there was no way forward. We were bust. Everything we'd worked for over 29 years: it had all gone.

> > "The liquidator put

everything up for sale, but I couldn't bear to go to the auction. There were no takers for the company, which a year or so before was going to be valued at £100 million. A few bits and pieces sold, tools, metal in the racks. Zytek bought some sports car drawings, Derrick Walker bought some Indycar drawings. I had to decide what to do next.

"I did inherit the Auto Research Center, which was effectively a wind tunnel in a shed in Indianapolis with

eight staff. It was owned 10 per cent by Honda, 31 per cent by [team owner] Bruce McCaw and 59 per cent by me, because I'd loaned Reynard Motorsport the money against those shares. Over the past 10 years I've built it up, doing work for major road car manufacturers. They have to achieve 54.5mpg by 2015 to meet the US government's CAFÉ (Corporate Average Fuel Economy) targets, and they're using our aerodynamic expertise. Concentrating on the underneath of the car and the rotating masses, we're finding an 8 per cent fuel saving, which equates to about 3mpg. Trucks too: we're now the biggest truck aerodynamicists in the US. We're up to 50 people. We've added an extra 35,000 sq ft to the original building and we have another facility in North Carolina."

here have been many other Reynard projects. The Panoz GTR-1 was designed by Adrian in answer to Don Panoz's ambition to build a modern sports-racer with a big American V8 in the front, and good weight distribution. The Reynard 2KQ was a VWengined Le Mans car that, remarkably, won the LMP675 class at Le Mans three years running, finishing fifth overall in 2001. There was the Patriot turbine-electric hybrid sports-racer developed with Chrysler in 1993; the Chrysler Stratus touring car racer; the Ford Indigo sports car. And, just recently, the Reynard Inverter.

"Just for fun, I decided to do a sports-racer with a motorcycle engine, complying with the 750 Motor Club's Bike Sports formula. The first one we made, with a 1000cc Honda engine, had so much grip that everywhere was just flat, which wasn't very entertaining. So the second one has a Suzuki Hayabusa, and more grunt. I got my competition licence back and did three races last year, had a win at Brands in the wet and pole at Donington. I'm going to do all 12 races in the series this year. Everybody should take up circuit racing in their 60s!

"I don't have any fixed-wing aircraft any more, but I do have two helicopters, both Robinson 44s. And I was the first person to sign up for Virgin Galactic." This is Richard Branson's scheme to take paying passengers, as soon as the technology allows, on a spacecraft flying at 2500mph, 70 miles above the earth. The trip will cost £125,000, and about 550 people have put down a deposit, including Stephen Hawking, Tom Hanks, Angelina Jolie and Brad Pitt. "I've already done my astronaut training. They whizz you round in a frame until you sustain 9g, but because I've flown aerobatic aircraft they put me up to 16g. That was an incredible sensation."

Clearly, risk still stimulates Adrian Reynard. But risk in the world of motor racing business is behind him now. ARC is thriving, but beneath Adrian's ebullient exterior you sense that there are still scars left by what happened to the firm that carried his name, the firm which consumed his heart and soul for so long, and to the friends, colleagues and employees who lost their jobs. Better now to find thrills in a motorcyclepowered sports-racer, a helicopter or a spaceship than to return as a race-car builder to the battle of the balance sheet.



"In the end I had to accept we were bust. Everything had all gone"

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## No.10 Roger Williamson F3 trophy

It's no surprise that the Donington Collection should be a rich seam of Roger Williamson memorabilia, given founder Tom Wheatcroft's patronage of the young Englishman. On July 2 1972, Williamson was given the trophy below following his victory in the F3 race supporting the French Grand Prix at Clermont-Ferrand. He finished 8.6sec clear of fellow GRD driver Pierre-François Rousselot, with Lucien Guitteny third ahead of future Grand Prix winner Jean-Pierre Jabouille. Rally hero Stig Blomqvist was among the entries, but failed to qualify his Brabham BT38.





ere we go again. We're in a sand bowl in the northern tip of the Sahara desert and the only way out is to reverse up one side until our Land Rover Defender comes to a halt, then put it in first and launch ourselves towards the ridge of one of the huge sand dunes known as razorbacks, upchanging frantically en route.

You have no idea what might be over the other side. An unsuspecting Bedouin, perhaps? They're too wise for that, and in any case the Defender's engine rips through the desert calm like a police siren on a misty morning in London. What we do know is that there will be a massive, 80-degree drop. We have to take it straight and need to be going fast enough to get up the dune, which in the heat of the afternoon offers less traction than usual.

Motor Sport is in the rear of the 4x4, one

foot on the back of each front seat and one hand on the top of each doorframe. Sod the camera that occasionally hits me in the face, and sod the sand ladder, perched on all the equipment in the boot, that keeps clouting the back of my head.

First, second, third, bang. The Defender hits the bottom of the dune and we're momentarily staring at a wall of sand. We're now climbing, engine screaming, and all we can see is deep blue sky above the desert. More sky, sky, sky... and then we're on the top; the front drops and below us is a sandy precipice. Your stomach is still over the other side of the dune, but the driver, British Cross Country Championship competitor Justin Birchall, already has his foot on the power. Any delay and the Defender might not want to come down the slope in a straight line. A quick glance lets us know that we're in another sand bowl. Reposition hands and feet. Here we go again.



# Sand Colon

The Dakar Rally offers the toughest of challenges, but prior to 2013 there had never been an entry quite like Race2Recovery. These are remarkable people, who refuse to allow life-changing injuries deflect their ambition

BY ED FOSTER



Justin is sitting next to Corporal Tom Neathway, his co-driver, and by the time you read this one of the four Wildcats will hopefully have completed the 8500km Dakar Rally as part of the Race2Recovery Team. As we closed for press only one of the fleet remained in the rally, Matt O'Hare and Philip Gillespie still going strong in their Wildcat 'Joy'.

Tackling the Dakar is a mammoth undertaking for any team, with long days and differing terrain that jumps from sand dunes to boulder fields, wadis [shallow river valleys] to gravel tracks. Race2Recovery is no ordinary team, though. It's a group of injured servicemen from the US and the UK, bolstered by ablebodied members to help them with one of the toughest tasks they have faced.

his Sahara trip in early December is their final training session, a chance to learn to drive in sand dunes and an opportunity to get

used to working in difficult environments. For most of us that would involve dealing with the dust, the daytime heat and freezing overnight temperatures. For some of the Race2Recovery team it also means seeing which prosthetics work best on sand, and finding out how they're going to recover a vehicle buried in a dune. No easy task, even with four working limbs.

We're in Defenders because their 4-litre, 283bhp Dakar Wildcats are already en route to South America. Not only do they have many parts in common, but as off-road specialist and tutor Mark Cullum points out, "If you can do razorbacks in Defenders, you'll be all over

them like a cheap suit once you get your Gucci Wildcats." He's referring to the smart spec of the Wildcats rather than any sponsorship deal with the Italian fashion house, but that's not to say that the amazing story of Race2Recovery hasn't attracted some big names - Land Rover, Google, The Royal Foundation, Bosch and many others are partners in the epic adventure.

One of the main protagonists on this trip is Neathway, a member of the Parachute Regiment since 2001, who triggered a booby trap on his last tour of Afghanistan in 2008. "I looked down," he says, "and just saw bones poking from the ends of my legs. My feet had turned to what they called pink mist. They'd just disappeared." The resulting infection meant that both his legs were taken off above the knee and his left arm had to be amputated above the elbow. His outlook on life remains amazingly bright and the only time his smile faded a little was when we were perched precariously on our side, stuck on a dune. Tom couldn't move in case we went all the way over, the whole cabin was covered in sand and the pistons in his

prosthetic legs had long given up the ghost. "Thanks Justin," is all he said, smiling while we awaited help from the following car.

Race2Recovery, which for the Dakar consisted of four Wildcats, a race truck and five support vehicles, was set up by Captain Tony Harris and Neathway to prove just how much injured servicemen could do and to raise money for worthwhile causes. Harris drove one of the Wildcats and is also an injured serviceman he stepped on an IED (improvised explosive device) in Afghanistan in 2009 and has since had his left leg amputated below the knee. "Like a lot of team members I really wanted to compete and challenge myself again," he says in a break from the 10-hour drive from Marrakech, over the Atlas Mountains and down into the northern tip of the Sahara where the training began in earnest. "We've all had long and at times difficult recovery processes. For instance I had my left leg amputated after nine long months of surgery. We wanted to

Race2Recovery Wildcats running as a pair during the Dakar proper

> "For Race2Recovery training also means seeing which prosthetics work best on sand"

challenge ourselves and motor sport was one option that gave us the freedom to compete on the same playing field as everyone else in the hardest race in the world. We didn't want to aim at anything less.

"We're not only very keen to inspire others, but also look to the future in terms of what's going to happen to us injured servicemen. It's vital that we raised money for Help for Heroes as well, because you've got to remember that the mental scars are often worse than the physical ones. Not all injured servicemen are like the team here. Many will need a lot of help for the rest of their lives."

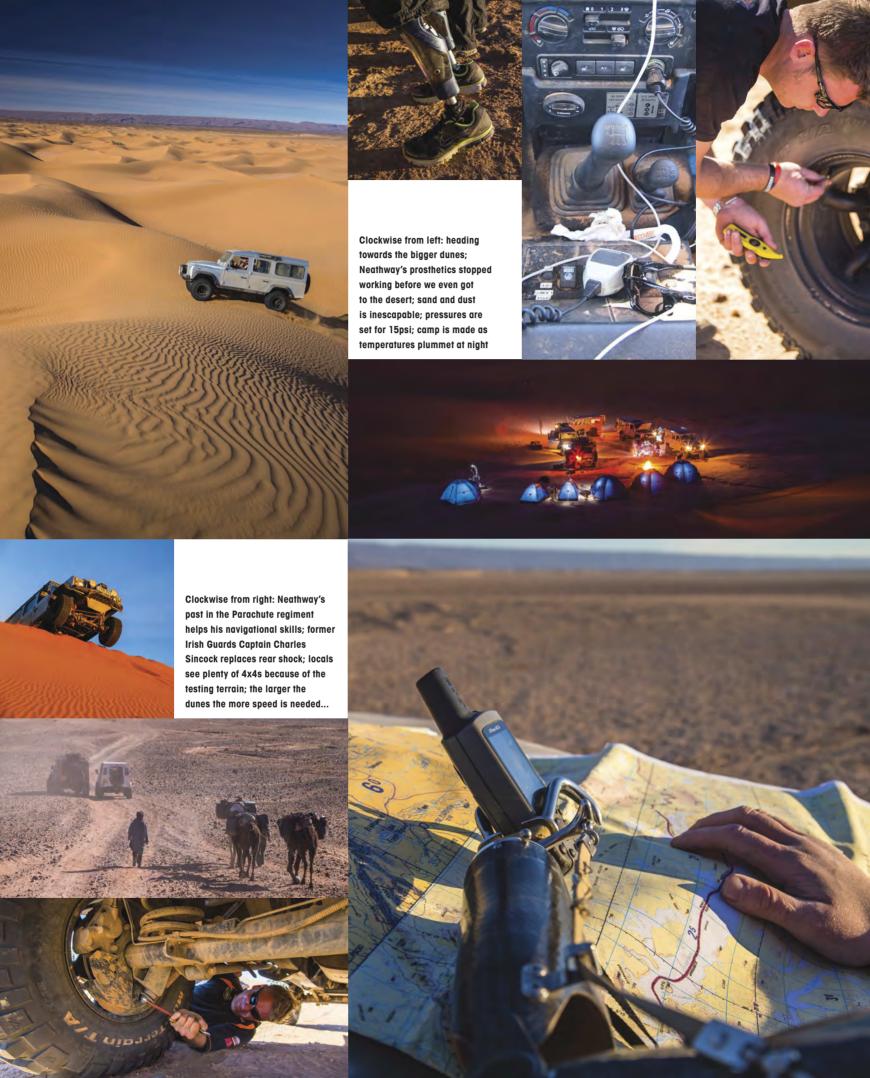
Within two hours of Harris explaining his reasons for starting up Race2Recovery, we're over the snowy Atlas Mountains and have dropped into Utah-like tundra. We're still on a road, of sorts, but come nightfall we have made our last fuel stop in Foum Zguid, near the Algerian frontier, before cutting off-road towards the desert. Cullum gives us a point to go for on the navigation and we're told that we'll be the lead vehicle. The music that has been playing in the background for the last eight and a half hours is turned off and, despite the gradual onset of tiredness, Neathway and Birchall focus on the job in hand. We're going about three times more slowly than they will on the Dakar, but the directions from Neathway are short and delivered with military precision: "Iust over a kilometre and we're turning left. 800 metres. There'll be a track to the left-hand side of a building. 500 metres. Through this

barrier, we coming up to it. There it is."

Which brings us to what can only be described as the worst 'road' in the world. It's the only track through the boulder field, though, and we can't complain because it was used on the Dakar in 2006 - when the raid still took place in Africa. That's why we're training in this part of Morocco - it was notorious Dakar terrain and is similar to what the team will face in South America, the new home for an event synonymous with a country no longer deemed safe enough to host it. An hour and a half and 35km later we're spat out onto the salt flats, which

sit on the edge of the desert. Camp is made and, after a surprisingly comfortable night in a tent, we're woken at 6am in order to get into the dunes as early as possible.

Cullum starts his morning briefing as soon as the camp is packed away. "We had to change a shock on that one," he says pointing at our Defender, "and it should have been changed when we were having scoff this morning. Reason being is that we've wasted 20 minutes of time that could have been spent on the road. It's also a lesson in mechanical sympathy – the track we took last night is a notorious route. It's pretty painful, particularly in these vehicles, because they aren't designed for high speed on this terrain. You've got to protect your vehicle; you've got to protect your asset. On the Dakar if you drive like an idiot during the first five days, you'll trash your Wildcat and you won't complete the route. Stéphane Peterhansel [the most successful competitor in Dakar history, with six motorbike and four car victories at the time of writing] had to nurse his MINI all the way through the 2012 event. He has mechanical sympathy and you need it, too.





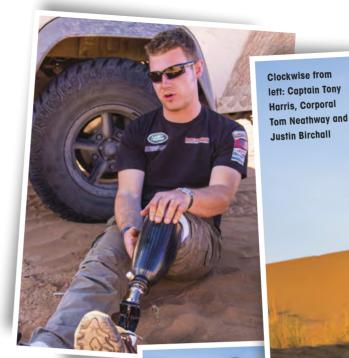
"We're about to head into the sand dunes but, looking at the map, if you were doing this for real, you'd notice the big sand sea and you'd box around it if you didn't have to go in there for a check point. The direct route is not always the fastest way. However, sand dunes are the hardest terrain vou can drive in - if vou can handle these you'll be fine in everything else."

Soft sand and a heavy vehicle mean you need to follow strict rules and always bear in mind your traction, ground clearance and stability. With the Race2Recovery team working in pairs, so that one vehicle can help out another, it also means that they need to stay out of each other's dust. Air filters and breathers will be filled with sand and if you suddenly have to start climbing to where the air is thinner, you'll come to a grinding halt. A header tank with blocked breathers won't be happy at 4975m above sea level, a record altitude the 2013 Dakar was due to reach.

There's plenty more. You need to realise very quickly if you break a half-shaft, because the torque-biting diffs on the Defenders and Wildcats will start working overtime and weld themselves together in no time. Temperature sensors on some of the cars will help, but they're not infallible. All coolants need to be kept at maximum levels, because of surge when cars are negotiating steep ascents or descents, and then there are the tyres: 15psi is perfect for driving on sand dunes thanks to the bigger footprint, but leave them at that pressure when you hit a boulder field and you'll be mending punctures in a matter of minutes. Any tight turns will also risk popping the tyres off the rims. And, of course, your ground clearance is lower.

he tips keep coming: the sand's early-morning and late-evening moisture content will help give you traction, but don't follow in the tracks of another car because disturbed sand will lack grip. And look out for which way the wind is blowing. The windward side of the dunes is always grippier, fine dust having been blown over to the leeward side. If you have to drive into the wind, don't be surprised if you're doing one kilometre forward and five sideways in order to find an easier route.

"You always need to make sure you have equal pressure on each wheel, or each side, so that you've got equal grip," says Cullum. To do that you need to head straight at a dune, straight up and straight down. The idea of approaching at an angle will mean more weight on the lower tyre, unequal pressure and a higher chance of getting stuck. More importantly if you drop off a razorback at an angle you'll be tumbling down to the bottom before you can straighten the vehicle. "If you're square on you can also decelerate quicker, which is pretty important if you're heading for

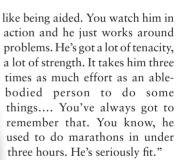


a great big wadi."

"Carlos Sainz [who won the Dakar in 2010] is a bit of a hero of mine and I used to watch him when he was doing British rallies. I went out to Mauritania and saw him get stuck on a really low intensity dune because, back then, he didn't have an understanding about ground pressure. It's absolutely key."

Ramp clearance (that between each axle) is obviously affected by taking things straight on, but thankfully sand is quite forgiving and as long as you have enough momentum you can break the top of the dunes. It all sounds relatively straightforward thanks to Cullum's expert coaching, but five minutes into the sand sea we're stuck because we ignored his advice and tried to drive across the face of a reasonably small dune. An hour of digging in the midday sun and we're off again. The next dune stops us in our tracks - too little momentum and we're beached on the top. It's painful progress, even with five cars full of people to help recover us.

"We've established that Tom's quite capable of digging us out if we do get stuck," says Birchall. "We've talked about the fact that we're going to get frustrated, we're going to get tired because we'll potentially be working on less than four hours of sleep. We'll be open and frank, not take it personally and move on. His attitude is amazing, though. He doesn't want his situation to put him behind and he doesn't



Even though each Wildcat has one able-bodied person and one

injured ex-serviceman, the task that the team set itself by competing in the Dakar is surely one of the greatest motor sport undertakings of the past decade. Whatever happened in the actual event, it will no doubt do much to underline their capabilities. But what next?

Birchall will return to the British Cross Country Championship, but for many of the team their futures also lie in motor sport. Neathway already does PR for his girlfriend's rally team and has done plenty of co-driving. "It started off as a charity thing," he says about motor sport. "Then it overtook everything else. I haven't been able to do anything on the side for the last two years!" That he didn't even mention its contribution to his rehabilitation is testament to the man he is, to how the Race2Recovery team views itself and why its Dakar mission will have succeeded before the crews even reached the startline in Lima.

If you would like to help Race2Recovery raise money for Tedworth House and injured soldiers please visit www.race2recovery.com.

# THE FILES

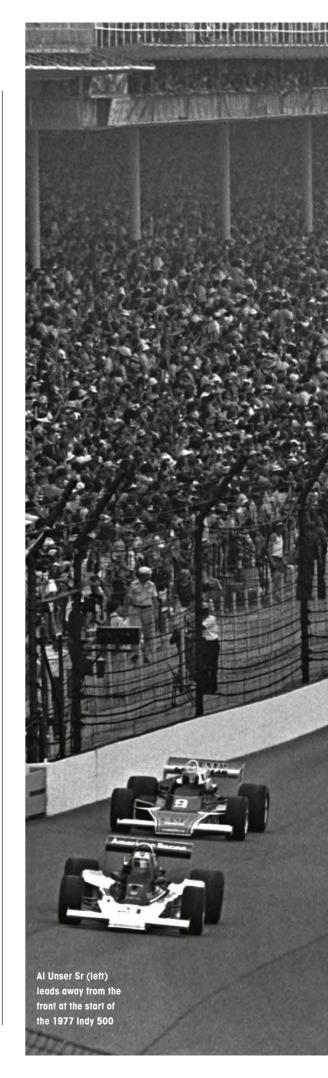
One team's initiative provided the trigger for a spectacular Indycar success story and a ground-breaking British designer was close to the project's heart

BY GORDON KIRBY



e would become a Formula 1 'visionary', the most coveted racing car designer of his generation much like Adrian Newey today. In the 1980s John Barnard's MP4 series of carbon-fibre McLarens broke new ground in composite chassis design and set a new benchmark in preparation and performance. Today, Red Bull's design genius leans on Christian Horner for support and triple World Champion Sebastian Vettel is his muse. Back then, John Barnard had Ron Dennis and the mercurial Alain Prost.

But like Newey, the young Barnard built his reputation far away from the Grand Prix circuits, instead making his name on the ovals of American Indycar racing. This is where the foundations of those three consecutive F1 drivers' championships (one for Niki Lauda, two for Prost) and two constructors' titles were laid.





Barnard was a junior engineer at McLaren in 1975, drawing suspension and wing updates for the M16C Indycar. He'd started his career a few years earlier at Lola Cars, before moving to McLaren where he worked beside F1 and Indycar designer Gordon Coppuck. One day Barnard got a phone call from former Lola man Iim Chapman, who was then team manager for the Vel's Parnelli Jones F1, F5000 and Indycar teams. After a few years producing mildly successful Indy and F1 cars for VPJ, ex-Lotus designer Maurice Philippe was leaving and Chapman proposed to Vel Miletich and Parnelli Jones that Barnard should replace him.

"The VPJ thing was my big chance," Barnard says. "I came to join Parnelli because I knew Jim Chapman and Hughie Absalom, who had been at McLaren and was now here as chief mechanic. When Jim phoned and asked if I wanted a go at chief designer, I said, 'Yes please. When's the next plane?"

arnard's primary job at VPJ was to design and develop the groundbreaking Parnelli VPJ6B and 6C that introduced the turbo Cosworth DFX to Indycar racing. Over the next dozen years the DFX dominated, winning 151 races, including 10 consecutive Indy 500s between 1978-87. After three years in California with VPI, Barnard moved on to design Jim Hall's equally revolutionary Chaparral 2K Indycar before rejoining McLaren in 1981, now under Ron Dennis's leadership, where he designed the first carbonfibre McLaren MP4/1 F1 car.

When Barnard arrived at VPJ in Southern California in 1975 he was thrown in at the deep end, fettling the team's F1 car and designing the drivetrain for Parnelli's off-road Ford truck.

"I'd just got married a couple of weeks before. We arrived on the Saturday and on Monday I was working on the F1 car," Barnard says. "It had inboard brakes and nobody really understood them at the time. But they kept breaking driveshafts so I beavered away redesigning the front suspension and a whole new front upright to fit outboard brakes. I had been there about three days and was already working to three or four o'clock in the morning and I thought, 'Hmm. What have I stepped into?

"Immediately as I finished this work on the F1 car Parnelli came along and asked if I could finish his Bronco. There was a tube frame and that's about all. I had to draw a 4WD axle assembly and all the suspension. Eventually I started on the Indycar programme. At that time I didn't even have a helper. After six months or so Gordon Kimball was hired, but there were only ever two of us in the drawing office."

Through the early and mid-1970s Indycars were allowed to run unlimited boost, and the ageing four-cylinder Offenhauser found itself



pushed beyond its limits. "I was on USAC's rules committee and we kept blowing up engines," says Parnelli Jones. "You could not buy an engine from Drake Engineering [manufacturers of the Offy] and run 500 miles. You couldn't even run it 100 miles because of porosity in the engines. We had a machine to impregnate the engines so we could keep ours together, but you had to pull it all apart and blueprint it after you bought it.

"We sent two engines back and wanted to order a couple more, but Drake said he wasn't building any more until he sold those other two. At that point I felt this was a losing deal for us.

"The more engines Drake broke, the more money he made. I said that to the USAC rules committee and he threatened to sue me. Then USAC cut the fuel mileage back to 1.8 mpg and I said to Vel, 'We've got those little Formula 1 Cosworths. I think they could work'."

The engine situation was so bad that in 1975 VPJ put more effort into F1 with Mario Andretti, and the American F5000 series with

Andretti and Al Unser, than it did into the USAC championship, where Unser ran six races and Andretti just four. But the team was busy working on converting the F1 car into an Indycar and turbocharging Cosworth's DFV.

"We had Larry Slutter and Chickie Hirashima working on it and we got it working good," Parnelli says. "We had to make a lot of our own parts for the engine. We had Barnard redesign the F1 car for it."

Barnard adds: "It was actually a completely new chassis. We put coil springs on the rear, but I kept the torsion bars on the front."

He strengthened the car by double-skinning the monocoque and designing a much stouter front bulkhead. "That proved very useful," Barnard says. "In '77 we were practising at Indy and Al ran over Janet Guthrie's turbine wheel, which came out on the track, and had quite a big accident. But he walked away. I was glad I had double-skinned that front bulkhead."

The resulting VPJ6B was a much smaller overall package than the existing Offy- and



Foyt/Ford-powered chassis. "The car had basically the same outside configuration as the F1," Jones says. "It made a great combination. It was cool, a great car, the fastest flat-bottom car around until ground effects came in."

Says Barnard: "It was very different. We had the Eagle-Offies sitting in the workshop and it was like looking at a truck against a Formula Ford. The McLaren M16s were also big buggers compared to the Parnelli. It was a real step."

Barnard found himself equally involved in VPJ's DFX development programme. "There was a lot to do on the engine - inlet manifolds and all sorts of things. I was drawing con rods and pistons, an oil pump system, fuel injection and God knows what else. It was fantastic for me because I had never really got into engines much, but we had our engine shop so we could do this stuff to every part of the car and engine. It was fantastic, just like having a toy shop."

However, there was little support from Keith Duckworth for turbocharging the DFV. "I remember Vel reporting that Cosworth told him he was a bit of a twit trying to get all this horsepower out of an engine that was designed to generate 500bhp, and there we were getting more than 800," Barnard says. "Vel told me, 'Those bloody guys at Cosworth don't mind selling me pistons and heads all the time. I've spent \$100,000 with them just on pistons,' But they told him we were idiots for making a turbocharged version of their engine."

Duckworth famously didn't believe in turbos. "I remember him giving me a lecture about turbos," Barnard adds, "and another one about why 4WD wouldn't work."

Unser and Andretti ran a few practice laps at Indianapolis that year in an early version of the VPJ6, and the first complete 6B made its debut in Unser's hands in 1975's season-closing race at Phoenix, finishing fifth. "Once we got in the

right ballpark with wheel and spring rates we had pretty good balance, and it got better and better," Barnard remembers. "We continued to muck about with the engine. It was an ongoing programme. I was making wastegates and all sorts of things."

Unser scored the Parnelli-Cosworth's first win in the Pocono 500 in June 1976, then won

again at Milwaukee in August and Phoenix at the end of the season. "We proved that the engine worked and we brought Duckworth over to Pocono because we wanted to get a distributorship for the Cosworth Indy programme," Parnelli recalls. "So Duckworth came over and damned if he didn't turn around and steal Larry Slutter and Chickie from us."

Barnard took a dim view of Duckworth's manoeuvre. "As soon as we won Pocono, Cosworth saw the light," Barnard comments. "It wasn't long afterwards that they nicked Larry Slutter and set their own engine shop up right there in Torrance, which to be honest I thought was pretty mean.

"I was told by somebody at Cosworth many years later that the turbo Indy engine programme - the DFX as they called it - was their most profitable programme of all. So I wasn't impressed with the way they did that. Vel and Parnelli were the ones putting their hands in their pockets to develop this car and engine, and I don't think they ever got the proper credit."

After all the money and effort VPJ had put into developing the engine, not being able to turn it into a commercial enterprise was a big blow, playing a role in the team's demise a few years later. "Of course," Jones says, "we were in a catch-22 because you had to satisfy your sponsors and we needed to order parts from

Duckworth. We could have sued him, but we decided to try to work with him."

In developing the Parnelli-Cosworth Barnard started experimenting with plastic skirts fitted beneath the car. Without really knowing it he was dabbling in ground effects. "They were obviously very powerful. The effect the drivers could feel was instant. The thing I hadn't got my head around at the time was how to keep them alive. The skirts weren't doing what they could have been doing. But that was the beginning of the learning curve."

For the '77 season both McLaren and Penske built new F1-based cars with DFX engines and Tom Sneva won the USAC Championship aboard Penske's Cosworth-powered McLaren M24 and Penske PC5. Johnny Rutherford also won four USAC races in the works McLaren-

> DFX while Unser and new team-mate Danny Ongais each won a single race, with Big Al taking the California 500.

Ongais's car was sponsored by Ted Field under his Interscope banner, and in 1977 and 1978, after Firestone announced they were pulling out of racing, Field and Interscope became VPI's primary

sponsor. The tyre company had been Parnelli's major sponsor since his driving days and its withdrawal resulted in Unser leaving VPJ at the end of 1977. During that season Unser went through a lot of heartache, believing Ongais was enjoying better engines.

"Al used to get really wound up," Barnard says. "He was convinced Danny was getting a more powerful engine because he was a bit faster on the straights. I could never convince Al that it was because Danny would run oversteer on big ovals like Indy, which the experienced guys like Al would never do because they knew that at some stage it was going to bite them bad.

"We could never convince Al that Danny's engines weren't any more powerful, that it was due to car set-up more than anything. And in the end it did bite Danny.

"I used to get on pretty well with both Al and Mario," Barnard adds. "I even got Mario machining some bits on the lathe. I got on with Al the best. He was great to work with and I followed him to Chaparral. I never got quite the same closeness with Danny, although he was obviously quick and extremely brave."

A revised car, the VPI6C with improved aerodynamics and transverse gearbox, was introduced in 1977. "For the 6C I did new bodywork which was much more aerodynamic, much prettier, and we did a transverse >>>> gearbox for it. It used Weismann gears and I did the casing. A little pattern-making guy around the corner crafted it in his garage.

"Aerodynamics became one of the main areas we worked on, trying different rear and front wings. Although I didn't actually measure it, I think the bodywork on the 6C was a reasonably good step in terms of drag. It had a full aerodynamic-profile cockpit and the rear end was properly finished, whereas on the 6B it was still a leftover from the F1 arrangement."

Barnard intended to place the turbocharger behind the gearbox, improving aero, but this required long exhaust pipes that reduced power and throttle response, so he had to relocate the turbo on top of the transaxle. "When I did the Chaparral, my next car," he says, "I made a new bell-housing to integrate the turbo behind the engine properly and get it down lower with shorter exhaust pipes. That became the way to mount the turbo for many years thereafter."

This was in the days before wind tunnels were designed with a moving plane specifically for ground-effect racing cars. Barnard did his wind tunnel work in the giant Lockheed aircraft tunnel in Atlanta. "We went there two or three times with a variety of bits and pieces to try. I wouldn't say I came away from there with an enormous amount of answers that allowed me

to go forward. It was more a case of collecting information. I was looking at radiator flows and all sorts of things like that.

"I had been using tunnels before at McLaren and even back to Lola days, but what we did then was too basic to be of great value. Being

"It was bloody hard work, but I was young and ready to do whatever it took"

able to put a full-size car in the Lockheed tunnel was certainly a great improvement in terms of information. But we didn't have rotating wheels or anything like that. It was all approximate without a moving ground plane."

nser left VPJ to join Jim Hall's new Indy team in 1978 and won all three USAC 500-mile races that year, in Hall's Lola-Cosworth. Ongais continued in a lone Interscope Parnelli, won a season-high five races and took eight poles, but that was the end of the road for VPJ. The F1 team closed early in 1976 and the Indycar team now followed.

"When Firestone got out of racing it certainly left us hurting financially," Parnelli says. "We

had to let Barnard go, and of course Al too, because we had no heavy-duty sponsor. We had a good operation. I think if Firestone hadn't decided to get out of racing we would have continued. We had Ted Field coughing up some money for Danny Ongais, and that was about

it. We took the car out to Ontario after Al had left and Foyt jumped in and set a quick time. He fell in love with it, so we furnished him with a couple of cars."

Foyt drove his own 6C in 1979, winning four USAC races with it, and continued to race the car into 1981, scoring the last of his 67 wins in this chassis. Ongais also continued to race his Interscope Parnellis in 1979 and '80

as the car continued to be competitive against the early ground-effect Indycars from Penske and Chaparral.

Meanwhile Barnard designed the Chaparral 2K, which Unser raced for Jim Hall in 1979 and Johnny Rutherford drove in 1980, winning the Indy 500 and CART championship. "The Chaparral thing followed everything we did at Parnellis," Barnard says. "Hughie [Absalom] and Al went to Chaparral. By that time I had got to know Al quite well and really it was those two who dragged me along to speak to Jim Hall and get me into Chaparral.

"I didn't start the Cosworth programme," he adds, "but I had most of the input making a car work around that engine. Looking back, I learned massive amounts and enjoyed it, too. It was bloody hard work, but I was a young man and ready to do whatever it took."





On Saturday May 18, 2013, 1979 Formula 1 World Champion Jody Scheckter will host a sumptuous banquet, while offering a rare opportunity to hear him speak about his incredible racing career and view his own collection of the cars he drove – as seen in the February issue of *Motor Sport*.

### A taster of the menu:

#### A SELECTION OF LAVERSTOKE PARK FARM CANAPÉS

"We'll be offering a selection of biltong," says Jody. "We make the biltong I always dreamed about - and it does not contain preservatives or colourings. It is cured overnight and then slowly dried, giving its unique flavour. Early South African settlers used these methods to preserve their meats naturally."



BUFFALO MOZZARELLA WITH FRESH TOMATO & BASIL Served with a selection of our home-grown baby salad leaves and vegetable crudités

"The equipment that makes our mozzarella comes from Modena near the Ferrari factory. Michelin star chef Angela Hartnett rated our mozzarella "10 out of 10" saying it was "fresher and creamier than the finest Italian". It's so good I took some to Ferrari a couple of years ago and they loved it. My dream is to export my mozzarella to Italy..."



#### AWARD WINNING PAN-FRIED BUFFALO FILLET

"Buffalo meat is lower in fat and cholesterol than beef. It beats normal fillet for taste and our dry-aged buffalo fillet was awarded 'The Best Speciality' food in England, on top of the highest award of three gold stars at the Great Taste Awards. We have our own herd of more than 2000 water buffalo."

More to be revealed next month...

The evening, held in association with *Motor Sport*, will take place in the new state-of-the-art Saracens Rugby Stadium. The multi-course feast will be sourced from Jody's award-winning Laverstoke Park organic farm. Tickets are offered at a discounted rate for *Motor Sport* subscribers.

To book your tickets call +44 (0)207 349 8472 For group bookings please contact us.

Tickets are priced at: £250 for subscribers £295 for non-subscribers

For more information go to:

www.motorsportmagazine.com/gourmet or email:

readers events @motors portmagazine.com

WHEN: Saturday May 18, 2013

TIME: 6pm

WHERE: Saracens Rugby Stadium, London



very year has its commemorations, but I fear that amid the deluge heading this way in 2013 - 50th anniversaries for Lamborghini and the Porsche 911, 100 years of Aston Martin, 90 of Le Mans and so on – one small but significant birthday is going to be overlooked. Forty years ago this year Colin Chapman was a man with big plans for Lotus, plans that would turn Lotus Cars from a manufacturer of low volume, low profit, lightweight sports cars into a constructor of epic coupés and supercars to rival Porsche and Ferrari. Needless to say those plans did not include the car that pretty much

started it all. The Lotus 7 was already 15 years old and Chapman saw no part for it in his ambitious vision for the future.

But one of his dealers did. Graham Nearn had the Lotus concession in Caterham, Surrey, bought the rights to the Seven from Chapman and founded a new marque in the process.

Although I got to know Nearn quite well over the years, I never plucked up the nerve to ask him if he knew just how brave he'd been to take on an apparently obsolete sports car just as the world economy was tipping into OPECinduced freefall. I liked and admired hugely his courage and achievements, but he had an irascible quality where the press were concerned, even those of us who needed no

convincing as to his products' merits. Like many small British sports car manufacturers, if he read a test you'd written he'd ignore the 99 per cent praise you'd lavish and ring up to complain about the one per cent criticism.

Every motoring journalist has a Caterham tale to tell. I bought my first before I got into the business and crashed it heavily at Goodwood, exiting a wet chicane trying to show my mates in the pits just how sideways it would go. Very, as it turned out. Unable to foot the bill, I sold the wreck back to the factory. Then James May, myself and sundry other Autocar chums worked around the clock for an entire weekend to build another powered by a fiery 2-litre, 175bhp Vauxhall twin cam engine



fed by a pair of snorting Webers. In six months I drove it something like 15,000 miles, including a holiday to France with a girlfriend so unfussed by this highly unorthodox means of transport I thought she might make a good wife and mother. She did and still does.

I did my first race in a Caterham and was heading for the podium until ambition overtook talent and threw me off the circuit, mercifully damaging only my pride. And then, when I was made editor of this magazine, I realised a life's ambition to spec my own Seven, a Superlight R and the first to be painted black with a yellow stripe but, happily, by no means the last.

Today Caterham is the same, but different. Nearn sadly died in 2009 and his company



### SUBARU WRX STI

F YOU'VE ALWAYS HAD A passing fancy for a new WRX (the Impreza name has now been dropped), have had its day. you'd better be quick. This might be the 20th year in which it's been on sale in many and various guises, but it is also the last. Subaru is withdrawing it from sale, stocks are dwindling and soon an important chapter in motoring history will conclude.

I well remember testing the original. At the time we thought it would take over the world. With a 208bhp turbocharged boxer motor powering all four wheels in a practical family car that would never go wrong, it seemed to provide an answer to almost every question posed by those who needed commonsense wheels but wanted something worth driving. It was quicker than a Porsche 968, a damn sight more usable and less than

#### **FACTFILE**

**ENGINE:** 2.5 litres, four cylinders, turbocharged

TOP SPEED: 158mph PRICE: £27,995

POWER: 300bhp at 6000rpm FUEL/CO2: 26.9mpg, 243g/km

www.subaru.co.uk

half the price. After 20 years with the market to itself, the hot hatchback appeared to drive thanks to ever-excellent

Drive a WRX today and you'll soon understand why its presumed world domination never came to pass. A car that had once seemed so far ahead of the game has now fallen badly adrift.

The engine has swollen from 2.0 to 2.5 litres, now produces 300bhp in stock form (though 320 and 340bhp versions are even worse. Official figures affordable upgrades from the suggest it returns just 0.2mpg factory) and remains its best more than a 500bhp Bentley feature, but where once its Continental GT V8. Subaru performance was startling it is now merely average.

Likewise the car's handling: the alory days of World Rally Championship success are

long gone and the WRX has been sanitised. It's still fun to steering and natural poise, but it no longer feels light and agile and has to be coaxed into extrovert behaviour: it is no longer natural.

The less said about the rest of the car the better, but you should perhaps know the ride quality is poor, the interior design dreadful and the fuel consumption has dropped the price of the WRX from £32,995 to £27,995, presumably to clear out the stock. Even at that level, sadly, it's hard to see the value.



#### ROAD TESTS

was sold first to the likeable and effective Ansar Ali and, in 2011, to Tony Fernandes. It still makes about 500 Sevens a year in its Dartford factory, 150 of which are racing cars built to take part in myriad series around the world, including the Caterham Academy (in which nearly 900 compulsorily novice drivers have now cut their racing teeth).

But plans are afoot. Fernandes already has a Caterham-branded Formula 1 team and a new engineering business, called Caterham Technology and Innovation, that's based just around the corner from Lotus in Norfolk. This is the same facility that built Bentley's 2003 Le Mans winner and Caterham intends to use it to compete with Lotus for consultancy work. At the same time CTI is working on the new Caterham/Renault joint venture that will lead to a new breed of Caterham-branded sports cars being built in Renault's old Alpine factory in Dieppe. With a business plan for it to produce 25,000 of these new Caterhams from 2015 onwards, and a design brief that puts it on a collision course with the new Porsche Cayman, this is going to be a Caterham like none before.

But I wanted to see how things stood today, which is how I found myself in the Caterham showroom the company will soon have to vacate, because Nearn's children have served notice. The company hopes to stay in Surrey, but the chances of finding other premises in Caterham itself seem remote.

I was there for a run in the new Supersports R, a kind of halfway house between the entry level Roadsports cars with modest engine power, open differentials and road-based tyres, and the delightfully loopy but utterly uncivilised R400 and R500 track-day weapons.

Like all Caterhams you can select almost any detail specification you want, but all Supersport Rs come with a 180bhp 2-litre engine, racederived suspension, a limited slip diff, close ratio five-speed gearbox (an even more tightly





stacked six-speeder is an option) and Avon CR500 rubber designed to work equally well on road or track.

This one also came with a windscreen and heater, options I can remember Caterham's then-engineering director almost refusing to put on my Superlight R because it so went against his principles; to me it just made it possible to enjoy the car more of the time.

So without the need for a helmet and with lightly toasted feet I headed out onto slippery, salt-strewn roads in a temperature of precisely zero degrees to find out more.

My first discovery is that those Avons have no grip at all in such conditions, which is precisely what I'd hoped. It reminded me of my



first, the one I smeared down the tyres at Goodwood, with its live rear axle and concrete tyres. It just gently oversteered everywhere feeling more like a Formula Ford on spacesavers than a conventional road car.

I had to go faster, not slower, to calm it down a touch. The five-speed box is still related to that found in the Ford Sierra, albeit with superclose ratios. It changes swiftly enough, though I've always found Caterham's homegrown sixspeeder far preferable. Either way, on a day like this you need third before there's reliable traction. Thereafter it's a question of just how far into its arms you want to fall. Its charms are such you can feel almost helpless against its urgings. It wants you to go forever faster - not a good idea in this weather - but not only does it provide the tools for the job, it also climbs into your head and starts rewiring your brain to give you the imperative to pick them up.

Happily 25 years of driving Caterhams had provided a degree of immunity and I was able to return slowly, licence, liberty and livelihood intact. What impression did it leave? It might have been the wrong day but, 40 years on and for those to whom driving pleasure matters most, it remains the right car.



### RANGE ROVER TDV8 AUTOBIOGRAPHY

REDICTABLY IT TURNS out that the V8 diesel Range Rover is the most conspicuously talented of the range. An engine has to suit the car in which it's fitted. While the petrol-driven, supercharged 5-litre V8 in the flagship car reviewed last month provides hilarious ultimate performance, it's nothing like as well suited as a diesel to the needs of this car.

Forget that petrol provides 510bhp and diesel a 'mere' 339bhp, and focus on the fact that at just 1750rpm the diesel motor is already chugging out far more torque than its petrol equivalent can muster at any point in its rev range.

Also, in a Range Rover diesel is quieter than petrol. I know this is a curious assertion. but it's true: the blower on the petrol engine is quite raucous while the diesel's twin turbos reduce engine noise to the furthest rumble of thunder on the horizon.

Not that this will bother too many prospective buyers. but you're better off-road with the diesel too. It provides superior engine braking and enough steam to pull you up the steepest, craggiest slopes at rarely more than idling revs. This is not about the

four-wheel drive, electronic diffs, terrain control, hill descent or any other tractionenhancing tricks common to all such cars, but a machine's ability to let you drive it with millimetric accuracy at glacial speeds with utterly precise applications of power. Here, this diesel is kina.

Nor will it be lost even on those who can afford to drop £150 into its gargantuan 105-litre tank that the diesel

#### **FACTFILE**

ENGINE: 4.4 litres, eight cylinders, turbocharged

TOP SPEED: 135mph PRICE: £94,695

POWER: 339bhp at 3500rpm

FUEL/CO2: 32.5mpg, 229g/km

Range Rover will travel well over half as far again on a single fill-up, which is the difference between reaching Nice from Calais in one hit and having to stop somewhere short of Lyon.

Yes, this Range Rover is still heavy, profligate and, in blinged up Autobiography guise, remains eye-wateringly expensive. But I understand exactly why it's causing Land Rover the loveliest of headaches as waiting lists of eager buvers start to stretch into the middle distance.

For a certain sort of wellheeled person who embraces a go-anywhere, do-anything lifestyle, there's nothing on the market to touch it.





### ASTON MARTIN DR9

AN IT REALLY BE 10 years since the DB9 was launched? I remember my first drive like it was 10 days ago, sharing the car with the inestimable and down the Col de Vence just because we could and marvelling at how much better it was than the Ferrari 612 Scaglietti I'd driven earlier that week.

This new one doesn't look much different, does it? While Ferrari has gone all post-modern and replaced the Scaglietti with the FF shooting brake, through choice or circumstance Aston has chosen a resolutely conservative approach. Its looks are little changed inside or out: there remains a 5935cc V12 under the bonnet (still built in a Ford factory in Cologne) while the essential architecture Aston Martin likes to call V/H (vertical/horizontal, to reflect its high adaptability) remains, albeit in updated form. Its power finds its way to the rear wheels through the same six-speed slushmatic ZF gearbox it used all those years ago.

knowledge and sit in the car. Once you've noted just how space-inefficient the interior still is, how little room is provided for the legs some of the changes Gavin Green, charging up of tall drivers and how awful that cannot be seen. the ergonomics remain, you The engine, for instance, might well conclude its time is up. The DB9 had a good run, but after a decade

Arm yourself with this what is needed is not a mild and now has the same have always steered well update but a new car. This the DB9 is emphatically not.

> But tarry a while longer and ponder for a moment displaces the same number of cubic centimetres, but is fully 40bhp more powerful

steam as the DBS, Aston's flagship until the new Vanquish came along. It has new suspension settings and carbon ceramic brakes, which previously weren't even an option. Its structure has been stiffened to the tune of 20 per cent, its spring and damper rates carefully rethought with the latter now driver programmable into Normal, Sport or Track modes.

What hasn't changed much is the price: it's almost £4000 more expensive than the old DB9 (which the brakes alone would explain) too, thanks to its firmer and fully £18,000 cheaper than the now defunct and exclusivity created by its still less powerful Virage, which used to plug the gap between DB9 and Vanquish.

This is an unexpectedly impressive car. It's faster than I was expecting or than its figures suggest: blame that sluggish gearbox and the lack of launch control for modest on-paper pace. The enaine has never sounded better and spreads its power evenly across the rev range.

But the surprise is that really handles. DB9s

and been at home in the corners, but this one feels alive to your every whim. It turns in sharply, grips hard and, if you so choose, drifts beautifully. Yet when you reactivate the traction control, it cruises as well as any DB9 ever did.

The biggest question it throws up is what possible reason can there be to spend another £58,000 on the Vanquish? It is quicker (although the figures are launch control-assisted) but little more fun to drive and a less convincina tourer. ride. In the end it's only the £189,995 price tag that puts clear air between it and the DB9. If you don't care about that, get a DB9, a Porsche Cayman R and put the rest in the bank.  $\mathbf{M}$ 



#### **FACTFILE**

ENGINE: 5.9 litres, 12 cylinders, normally aspirated

TOP SPEED: 183mph PRICE: £131 995

POWER: 510bhp at 7200rpm FUEL/CO<sub>2</sub>: 19.8mpg, 333g/km

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# Sidetracked with ed foster





### MEXICAN NEW WAVE

First challenge for McLaren's latest signing Sergio Pérez – balancing jet lag and press grillings

his is unusual for a McLaren driver: Sergio Pérez is running late. He flew in from Mexico this morning, spent time at the McLaren Technology Centre meeting 'the world's press' and is now en route to the Hilton hotel by London Bridge, ready for more interviews.

It's not the first time he's done a day's work for his new team, as he's already spent a day in the McLaren simulator, which was "positive" according to the ex-Sauber driver. It's been a punishing schedule today, though, and by the time I sit down in front of him he's stifling a yawn. McLaren, a team famous for making its drivers work hard away from the track as well as on it, has been packing in as much PR time as possible. No doubt his two-year stint at Sauber already feels like a long time ago. The jet lag and constant questions about this new chapter in his life will surely be starting to grate, but he's now a driver for what he calls "the best team in the world".

It's clear that he's genuinely thrilled about lining up alongside Jenson Button in a car that will give him a chance to win races on a regular basis, as anyone would be, especially if you believe the hardly-contained excitement oozing from Woking about the MP4-28's potential. "It really feels great," Pérez says after I ask what it's like being in McLaren-branded clothing for the first time. "To be wearing the kit... it's a special day for me. When you first walk into the McLaren Technology Centre it's the history that strikes you. There's so much history in those corridors, so many famous names, so many trophies. It gives you a boost to deliver what they're expecting from you."

The team will be expecting a lot, and when we're talking about the trophies McLaren has amassed since 1966 Pérez is quick to insert, "I'll have to add to them."

Rewind eight years and a young Pérez was preparing for his first season of Formula BMW. If someone had told him he'd be a McLaren driver in 2013 would he have believed them? "No, not really!" he replies with a smile. "When I came to Europe my goal was to become a Formula 1 driver, but it seemed very far away. There are never any guarantees that you're going to make it, but my career went quite well. I made it to Formula 1, I made it into a good team in the shape of Sauber and now I'm with the best team in the world."

The 'best' team for the 23-year-old was rumoured to be Ferrari earlier in the 2012 season, despite Luca di Montezemolo's remarks that Pérez was too inexperienced to drive for the Scuderia. "I was surprised when McLaren approached me," he admits, "but I did have options from some other top teams as well." Which other teams? "I think it's easy to tell. there's no point in me saying... I first met Martin [Whitmarsh] in Hungary, the last race before the summer break. The opportunity to race developed a bit more over the summer break and then we did it [the deal]." As many of you will remember, at September's Singapore Grand Prix McLaren was still relaxed about Lewis Hamilton staying with the team, yet only days later Pérez had been announced as the 2008 World Champion's replacement.

The Pérez sitting in front of me now is unfazed about stepping into the shoes of one of the fastest drivers the sport has ever seeen. "He was the last champion for the team so it won't be easy replacing him. I'm confident that I can do a good job, though. When you get into a McLaren seat you have to be on the pace immediately. Your goal has to be to win. If I don't I'll be disappointed."

Pérez splits opinion and while the last comment is what every driver on the grid would

say in his situation, some will take it as arrogant from someone who has only been on the podium three times. Is this founded? Despite the jetlag and the numerous interviews he's already done he is far from aloof, and not a bit arrogant. "From the outside it's difficult to get to know me," he says. "Sure, some people will think I'm arrogant just because I drive for the best team. I don't think that's the case... I'm a human with normal problems, same as everybody else. Driving for McLaren is a great honour, but I'm just a normal guy.

"I've got a lot to learn from Jenson. He's the most experienced driver in F1 at the moment and he's a great team-mate to have, no? He's a good guy, a driver that will guarantee good results, that will always be up there. The target is to learn from him, but the main target is to beat him as well."

If the Pérez from the 2012 Malaysian or Italian Grands Prix is in the McLaren then he might well beat Button – but the Pérez from the last quarter of 2012? "I made some mistakes during the latter part of 2012," he admits when asked what went wrong. "Most of that, though, came from the lack of pace - we lost quite a lot towards the end of the year."

It's doubtful that his McLaren will ever 'lose' that much pace during a season, and he will be

expected to perform as soon as he takes to first Constructors' Championship since 1998? And will Pérez be able to match Button with his wise head and deft touch on the wheel? We'll only be able to answer those when the lights go out in Melbourne.





### OLD HEADS,

RAM may be a new team in GT. but it boasts years of experience in everything up to Formula 1

HERE'S A NEW KID ON THE block in international GT racing. We say new, but really it's an experienced kid in a new guise. RAM Racing is the

new moniker (the team has no links to the similarly-named F1 sauad from the late 1970s and early '80s), but making up the team is years of experience in the shape of Schumacher's number one Mercedes mechanic, Dan Shufflebottom, long-time sports car racer Johnny Mowlem, and 2003 Le Mans 24 Hours winner Guy Smith.

Shufflebottom - who has also worked with Subaru in the WRC, Vic Lee Racing in the British Touring Car Championship and then BAR Honda and Brawn before it morphed into Mercedes in 2010 - is the team principal who was tasked with assembling the team by an unnamed backer. "His vision was to own a Ferrari team." he says as we overlook their 458 GTE car below us in their new workshop next to Silverstone. "He realised he didn't really know how to go about it, so that's where I came in."

It's been a very quick turnaround as the backer first approached Shufflebottom in January 2012. By the end of the year the team was ready to announce plans to race in the 2013 European Le Mans Series and the Dubai 24 Hours. It's also waiting to hear about its Le Mans 24 Hours entry. "It's unlikely we'll get one, to be honest, because we're a new team," admits Mowlem, who was an early addition to **RAM Racina** 

"Dan told me what his plan was early last year, and it sounded genuine. Quite often these things don't! Now that I'm on board properly it's really exciting. I've driven for lots of teams and I can safely say that the group of people Dan has put



together is second to none. They're not just ambitious, but experienced in all forms of motor sport, even F1."

Alongside the team sits principal technical director Mark Schomann, who has spent a career in sports cars, IndyCar, Grand-Am and the ALMS, head of operations Kevin Poole, who has the BTCC, British Rally Championship and F1 on his CV. and chief mechanic Garv Holland who helped set up

Carlin's GP2 team in between F1 stints for BAR, Honda, Brawn GP and Force India. "Finding the right people was one of the biggest challenges for us," admits Shufflebottom. "We could have stuck an advert in a magazine, received 100 CVs and then picked from those, but we wanted to ask people 'who would you recommend?' Most of the time they didn't want to do that, which means that the few who did knew their suggestions would be good. They were putting their necks on the line. That's how the team has come together and it's worked well." It's a method that explains why it felt like an old team to Mowlem when they shook the car down at Fiorano

Mowlem, who is still contracted as a Lotus factory driver until April 1, admits that the RAM opportunity came at a good time in his career. "I'll still be doing some testing for Lotus, but there's no real motor sport programme there for me," he says, "Well, certainly nothing of which I'd want to be a part. It's all imploded a little bit, which is unfortunate, but that's the reality of it. Rightly or wrongly I already feel like I'm more than just a driver here."

Talking about Mowlem, Shufflebottom adds: "He's become a sounding block about more than just the drivers. He's got so many years of experience that I've turned to him whenever I've

needed advice. The learning curve in sports cars is so steep and it never seems to stop. I'm slightly wondering when it's going to plateau!"

Things have not been made any easier by a change in the ELMS rules concerning professional and amateur drivers. "When Dan started last year," says Mowlem, "he was looking for four professional drivers in order to do GTE Pro, but now they've merged that with GTE

Am and it's just GTE. You now have to have an amateur driver in each car."

"I'd just got to the point where I thought I had a plan in place," Shufflebottom continues. "We were just about to put pen to paper with a couple of professional drivers when Johnny put a call into the ACO and found out by chance that things were going to change. Another couple of weeks and we would have been tied in for the year."

Depending on how the season in the ELMS goes, RAM Racing might compete in a couple of World Endurance Championship rounds near the end of the season. A full WEC campaign was a possibility from a financial point of view, but Shufflebottom was keen that the team didn't stretch itself too soon. A wise decision, despite the experience within the team.

On January 11 RAM Racing competed in its first race, the Dubai 24 Hours, qualifying 11th out of 82 starters, just under two hundredths of a second behind the factory-supported AF Corse Ferrari team. It raced strongly in the early stages, but had to retire because of accident damage iust after half distance.

It was an unfortunate end to a strong first race. The team will pick itself up and no doubt be ready to prove its competitiveness come the first ELMS race on April 12-13.

### **LEVELLING** RACING'S PLAYING FIFLE

As the FIA and ACO draft new GT rules, the debate over penalising success continues



OULD BENTLEY'S NEW racing Continental be able to compete with Ferrari's 458 or Molaren's MP4-12C

without the balance of performance rules in GT racing? Of course not. Would the British GT Championship have grids including cars from Aston Martin, Ginetta, Chevron, BMW, Lotus, Chevrolet, Mercedes, Porsche and Audi? Again, almost certainly not. One car would be faster than the rest and every team would be knocking on that maker's door. Emotional ties would matter not a jot.

"Without the balance of performance in GTE the Ferrari 458 would be the best GT car out there, bar none," Johnny Mowlem says after we finish talking about RAM Racing. "I like F1 in the sense that you get given a set of regulations and then you push them to breaking point. If you're clever you gain an advantage. Not for long, though.

"They should go that way with GTE - if someone can eke out another two laps on a tank then they should be able to keep that performance. They've spent the time and effort so it's only fair." Ferrari worked hard last year on its direct injection system, which helped the car run for a lap or two longer, but that advantage was soon pegged back and the Italian firm has had to release an update for the car to get it back up to speed.

"Because Ferrari has so many customer cars it can't exercise the same leverage that other manufacturers can," continues Mowlem. "Ferrari can't say 'we're off' because the brand will still be represented."

"For me it's simple," adds Dan Shufflebottom. "It's the job of the other manufacturers to do a better job. The guys doing the best job shouldn't be penalised; if they are, what's the incentive to produce a really fast car? The 458 probably wouldn't have needed updating if they had got the balance of performance right, as it would have been on the pace this year anyway."

As we wait for the 'new GT plan' from the FIA and ACO one can only hope that innovation will be rewarded, but various cars will still have the ability to compete together. It's a tough one to get right.

### listoric Scen WITH GORDON CRUICKSHANK



**ON A WING** 

Welcome to a time ripe with risk, when stunts were tackled with vim rather than parachutes

ome 30 years ago, having taken a design degree but been hijacked onto this venerable organ, I used to hang around with a bunch of newly hatched car designers at the Royal College of Art in London. One of the people I met then was Peter Stevens, the man who made the McLaren F1 look so gorgeous among many other design highlights, who was teaching auto design to my mates. He's always involved in something interesting, and recently he sent over a photo that made my eyes pop.

While in an American junk shop, Peter found a 1920s photo album that showed a young woman leaping from a car onto an aeroplane. Intrigued, he followed it up and discovered a

tale of daring that would be inconceivable today.

During the 1920s an enterprising young lady called Mabel (sometimes Mable) Cody formed a

flying circus performing dramatic stunts up and down the western States. Mabel's outfit specialised in parachute jumps, a "leap for life" from plane to plane, and wing-walking - and we're not talking being firmly strapped to a nice solid frame. She and her co-lunatics clambered all over the aircraft completely unattached, hanging off wings and wheels at roof-dodging altitudes. The boss, 'Curly' Burns, whom Mabel later married, billed the 20-year-old as the niece of Buffalo Bill Cody - as Peter puts it,

"Things were looser then. Impresarios made things up to suit the show!"

Burns devised the idea of leaping from a car onto a plane and, in November 1921, persuaded Norwegian Indianapolis driver Sig Haughdahl to drive an eight-cylinder Miller on Villano beach south of Jacksonville, Florida. Circus member 'Bugs' McGowan would do the first jump, with Mabel going next. On the fourth pass 'Bugs' managed to grab the rope ladder trailing from the Curtis 'Jennie', staple of all such flying outfits, and climbed aboard to huge applause from the crowd. Rain sadly snookered Mabel's jump, but she tried again in 1924,

> using a big touring car along the spacious sands of Daytona Beach.

This time a crowd of several thousands watched her reach up into the 70mph slipstream (the warsurplus 'Jennie' was a stable slow flier), grab hold of a wing strut and clamber aboard. Impressive enough, but the

really memorable stunt involved a flailing rope ladder hanging from the wing. This one was filmed by someone in the crowd - you should be able to YouTube it - and it's scary. The intrepid Mabel leaps for the ladder, the wing dips with her sudden weight and she's dragged along the sand at motorway speeds before being hoiked

into the air. And all of this only yards from gawping onlookers. One dropped wingtip and the Curtis would cartwheel into the spectators...

On a later demonstration a rung of the ladder broke and Mabel somersaulted along the sands, breaking several bones and knocking herself out. It didn't put her off; by 1927 she and Curly were running six 'planes and a gang of fearless flyers. As she told the Florida Times-Union, "It's my neck, and I guess I'll risk it any time I feel like taking a chance!"

### **BENTLEY** BOYS, THE UNTOLD TALE

How three future pillars of the automotive industry led a budding young writer astray

HINKING BACK TO THOSE RCA days reminds me of a personal record, one of which I should be ashamed. And I am. Maybe exposing it in print will assuage my quilt

I had on test one of the first Bentley Mulsanne Turbos. With a huge Garrett turbocharger bolted to the V8, the engine room looked more suited to a destroyer than a limousine, but its 450lb ft of bulldozer torque demanded to be shown off. So I swished silently up to the RCA and collected some car-mad pals.

Risky move. While demonstrating the car's huge capabilities I let myself be whipped up by their encouragement. Well, there's something addictive about the spiralling g-force of a big turbo and on one stretch I left my foot on the throttle for far too long as a couple of tons of British steel fired itself at the horizon. I say horizon; did I mention this was central London? I'm not prepared to confirm peak velocity, but today I'd have been making friends with Norman Stanley Fletcher. (Feeble defence: it was a straight, empty road, M'lud...)

I'd be happy to share blame with those egging me on, but it might not be politic: all three are now highly respected design mavens who've made their automotive mark in Paris, Stuttgart and Coventry...



### **'HEROIN?** THAT'S HOW MI5 PAYS ME

They don't make racers like lan Burgess nowadays - but even in period he was a case apart

OOKING THROUGH SOME of our readers' contributions for forthcoming You Were There pages (a feature, incidentally, that on its introduction I predicted would run out of steam after four months - 10 years ago), I came across a picture of a Cooper entered by 'Tommy' Atkins. Tommy, who raced at Brooklands pre-war, owned and entered a number of cars through the 1950s and '60s for a variety of drivers, under the High Efficiency Motors banner. The name took me back some 15 years to a highly entertaining lunch with the late Grand Prix driver and drua smuaaler Ian Burgess. While researching the Scirocco

Formula 1 car I managed to contact the elusive Burgess, the team's lead driver. "No phone numbers, my dear chap - just drop a note to my pied à terre and I'll see it next time I'm in the country." These visits were short and furtive due to lan's awkward relations with authority.

Now look, I was talking about Atkins and you've distracted me with Burgess. Anyway, having taken me to the Pitt Rivers Club in Mayfair ('taken' in the sense that he invited me there and at the end said with wide-eyed innocence. "Your people picking up the bill, are they?"), lan enlivened the lunch-time chop with scurrilous tales about racing, drinking and spying, entertainingly interrupted by the arrival of one-time fellow Cooper driver Jackie Epstein.

Round, florid face beaming over a glass of red. Burgess repeated with immense sincerity his defence that the reason he had such a huge stash of heroin on him when stopped by customs was that this was how MI5 paid him for his intelligence work in the Middle East. This may have been true

Among his tales of racing for Cooper, Camoradi and Centro-Sud, he recalled driving for Tommy Atkins in 1958 and '59.

"Very short fuse, Tommy, and very, very jealous of his young wife," he told me gleefully. One day Atkins went back to his home mid-afternoon to find that his wife was out. When she returned he arilled her about where she'd been. "Just at the swimming baths, Tommy."

"And the very next morning," continued Burgess, leaning back and waving his glass, "the poor woman was woken by digger engines in the garden. Tommy had her own pool built for her by the weekend!"

Burgess's visits home had to be brief and unannounced. While doing his 10-stretch he made many useful friends - well, he was a jovial soul. Then he moved to an open prison - from where, so I've been told, he was liberated early, without Her Majesty's permission, by some of the boys. Always handy to have friends in low places.

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### Stars turn out at Stoneleigh

Murray Walker and Sir Stirling Moss confirmed as special quests for Race Retro's 10th birthday celebrations

otor sport legends Sir Stirling Moss and Murray Walker, the Lotus 25 with which Jim Clark carried off the 1963 F1 World Championship and some high-octane rally driving will be highlights of Race Retro's 10th anniversary at Stoneleigh Park, Warwickshire, during the weekend of February 22-24, 2013.

The international historic motor sport show is planning a celebration of the magnificent racing history of Team Lotus, with stunning displays of the legendary cars that scored some of the marque's most notable victories. It will also pay tribute to the rallying career of Alpine Renault on the 40th anniversary of its first World Rally Championship title, with cars competing on the Live Rally Stage as well as appearing as static exhibits.

Group B rally cars will be out in force on Saturday and Sunday, putting on a breathtaking demonstration on a purpose-built course. The layout has been altered for 2013 and drivers will have to adjust to a challenging sequence of revised twists and turns.

Visitors can even get behind the wheel of a



professionally prepared rally car from HERO, the Historic Endurance Rallying Organisation, via its 'arrive and drive' fleet. For just £25 you can put a classic rally car through its paces and get a feel for rally driving on a testing course.

Sir Stirling Moss makes his Race Retro debut

on Saturday February 23, appearing on the live interview stage for Q&A sessions as well as signing autographs and memorabilia for his many fans. He will share the stage with another iconic name in motor sport, former F1 commentator Murray Walker, who appears on Saturday and Sunday.

Those looking to invest in a piece of motor sport nostalgia should visit the Silverstone Auction, which specialises in the sale of the finest classic cars, modern supercars, all types of competition machinery, modern and historic motorcycles and automobilia. Viewing is open all day on Friday and Saturday morning.

The sale begins on Saturday lunchtime, starting with automobilia.



children's tickets at £5 for Friday and Saturday and free on Sunday. Car parking is free and has been moved to a hard surface area nearer to the halls. The show is open from 9.30am each day and closes at 5.30pm on Friday and Saturday and 4.30pm on Sunday. To book tickets and for the latest updates, visit www.raceretro.com

### Desirables





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### round the houses

#### - ARTCURIAL -

Rétromobile is once again upon us and Artcurial will be holding its annual sale on Friday February 8. The 'Star of the Show' label will no doubt go to the 1936 Talbot T150C (above), which raced at Le Mans on four occasions and in the Mille Miglia once. Artcurial seems to think it will attract plenty of interest and has placed a £1-1.3 million estimate on it.

This particular car was one of two sold by the factory in order to pay for the new Grand Prix team and drivers René Dreyfus and André Morel. Its list of owners - which includes the likes of Pierre Levegh – is as long as the run of T150Cs was short, but highlights include second-place finishes in the 1946 Belgian Grand Prix, Nantes Grand Prix and the Grand Prix des Trois Villes du Nord. Even in 1947, when the six-cylinder car was nearly 10 years old and fighting even to be remotely competitive, it managed third-place finishes in the Grand Prix des Frontières and the Pescara Grand Prix.

Lining up alongside the Talbot is a 1962 Ferrari 250GT cabriolet Pininfarina (£490-660,000), which has been found in a basement in Marseille with only 15,000km on the clock. There is also the last Bugatti EB110 to be built. This particular 1995 SS is expected to sell for £310-400,000 - we just hope any potential buyer is aware that its running costs are on a par with those of a Vulcan bomber.

#### - COYS -

At Coys' Autosport International sale on January 12, a 1974 Rolls-Royce Silver Shadow,

down in the catalogue as a £9-11,000 car, eventually sold for £74,000 to a Russian telephone bidder. Why? Well, this particular model belonged to Queen singer Freddie Mercury from 1979 until his death in 1991.

Going for even more than that was a 1953 BMW Willis Special, which sold for £154,000.

#### - BONHAMS -

More lots have been confirmed for Bonhams' February 6/7 sale in Paris. As well as the ex-Varzi 1931 Bugatti T54 and the 1929 De Havilland DH60 Gipsy Moth biplane which starred in the film Out of Africa, Bonhams has now added a 1969 Lancia Fulvia Rallye coupé (£26-39,000), a 1956 Aston Martin DB2/4 MkII coupé (£130-150,000) and a great little 1973 Fiat 238 Fourgon that was used by Garage Francorchamps in period (below). It's in unrestored condition (the seized engine has hazelnuts sitting on its manifold...), but if you



great support vehicle for your historic Ferrari single-seater or sports car.

If you're in the market for a racing car for the 2013 season, there's also a 1976 Tiga FF (£12-20,000), the ex-Jo Schlesser 1966 Matra MS5 Formula 2/3 single-seater (£77-120,000), a 1966 Porsche 907 Carrera Coupé (£410-570,000) and a 1962 Lotus Type 23B (£73-90,000).

#### - SILVERSTONE AUCTIONS -

On February 22-24 Race Retro will fill the halls at Stoneleigh Park, Warwickshire, and on the Saturday Silverstone Auctions will host its annual sale. The line up so far is understandably competition-focused with both rally cars and circuit racers well represented.

Crossing the block will be a 1985 Group N Ford Sierra Cosworth that had many British rally wins between 1986 and 1988 (£27-30,000), a 1965 Alfa Romeo Giulia Sprint GT FIA racer (£18-22,000), a Lotus Elan 26R with period and recent race history (£125-140,000), a 1969 Lola T70 MkIIIB (£570-650,000), a 1973 Renault-Alpine A110 (£35-40,000), a 1976 Triumph TR7 V8 rally car (£40-48,000) and two Grand Prix cars: a 1953 Cooper Bristol and a 1953 Connaught AL10 (£140-160,000 and £200-250,000 respectively).  $\square$ 

A full round up of the Scottsdale sales will be included in the April issue.

EB 4 **SHANNONS** Sydney Summer Classic Auction, Sydney, NSW, Australia Tel: 0061 2 8019 4116 6-7 BONHAMS Les Grandes Marques du Monde au Grand Palais, The Grand Palais, Paris, France Tel: 020 7468 5801

FEB 8 ARTCURIAL Motorcars à Rétromobile, Salon Rétromobile, Paris, France Tel: 0033 1 42 99 20 51

B 15/16 RM AUCTIONS The Bruce Weiner Microcar Museum, Madison, Georgia, USA Tel: 001 800 211 4371

FEB 18 **SHANNONS** *Melbourne Late Summer Classic Auction*, Melbourne, Australia Tel: 0061 2 8019 4116

23 MECUM Fran and Ron Green's Verde Classics Museum Collection, Commerce Drive, Boynton Beach, Florida, USA Tel: 001 (262) 275 5050

28 BONHAMS Collectors' Motor Cars & Automobilia, Boca Raton, Florida, USA Tel: 020 7468 5801

23 SILVERSTONE AUCTIONS Race Retro & Classic Car Sale, Stoneleigh Park, Coventry Tel: 01926 691 141

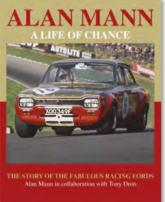
24 BARONS Classic, Collectors and Sports Cars, Esher Hall, Sandown Park Exhibition Complex, Surrey Tel: 08454 30 60 60

**H&H** Classic and Collectors' Cars The Pavilion Gardens, Buxton Tel: 08458 334 455

www.motorsportmagazine.com

### Reviews |





### ALAN MANN

A LIFE OF CHANCE

by Alan Mann in collaboration with Tony Dron

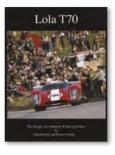
The tragedy of Alan Mann's engrossing autobiography is that he never had a chance to see it in published form. The great Ford entrant of the 1960s died last March, but it's a small mercy that he had at least approved the text written in collaboration with Tony Dron.

Mann was still in his twenties when he quit driving to establish his own team, adopting those fabulous colours of bright

red and gold - better even than Gulf, we reckon! They adorned a series of Fords, from Falcons, Cortinas, Mustangs and Escorts to the stunning but unsuccessful P68 F3L. His roles in the Cobra and GT40 stories are also part of racing folklore.

Mann was still young when his involvement came to an abrupt halt at the end of the 1960s. But like Sir John Whitmore, the driver he rated so highly, he squeezed a lifetime of experiences into a handful of short years. His story is full of colour, as are the characters that crop up. It's a volume packed with tales and forthright opinion, an invaluable source from the era. DS

Published by Motor Racing Publications, ISBN 978 1 899870 85 1, £45



#### OLA T70 THE DESIGN, DEVELOPMENT & RACING HISTORY

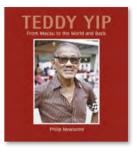
by John Starkey and Franco Varani

Starkey himself admits that he has "written a lot on Lola T70s", but after a chance meeting with sports car fan Franco Varani he has more to offer. Three and a half thousand pages of research has been condensed into this 550-page tome on Eric Broadley's masterpiece - it's safe to say that his claim in the introduction that this is "the Lola T70 book" won't be disputed.

It charts the history of the T70, from the Mk VI GT to T70s racing today, but the real detail comes in Part 2: Chassis Histories, SL70/1-SL76/153. As one might imagine, this is a book for T70 owners or else very serious fans. The histories of each chassis are broken up with photos from past and present, but there's still no escapina the fact that this is a seriously detailed data book.

The work has been two years in the making, but it could have done with another few months just to iron out a low-res image or two and the occasional copy error. EF

**Published by Gryfon Publishers** ISBN 978 0 9818272 2 3, \$150



#### TEDDY YIP

FROM MACAU TO THE WORLD AND BACK by Philip Newsome

For more than four decades, Yip Tak Lee (or 'Teddy' as he became), was a larger-than-life character who simply immersed himself in the sport he loved. Not a natural driving talent, he spent a few years racina his own cars at the earliest Macau GPs, but it was through the creation of Theodore Racing that he caught the public's imagination.

A hugely popular man, he entered his cars in F5000, F2, Formula Atlantic, Can-Am. Indvaars and, of course, F1. Although not the most successful F1 entrant, he never gave up and gave future F1 world champions such as Keke Rosbera and Alan Jones a seat in his cars. He was also associated with many a Macau GP winner over the vears - including Avrton Senna, who won in 1983 when the race was first run to F3 regulations.

With its fine collection of excellently sourced photos, this is an entertaining look at the life of the man who didn't set out to 'win at all costs', but was quite content just to be there. DC

**Published by Blue Flag Press** ISBN 978 988 17053 1 0, \$55



#### DBR 9 THE DEFINITIVE HISTORY

by Thomas A Gruber and Christoph Mäder

Just to pick this up tells you that it won't be seen in WHSmith - inside its sturdy slip case the book itself is clad in sensuous embossed leather. That may be a clue to the intended buyers - people who already own Aston Martins, and possibly the very people who raced one of the DBR9s it concerns.

It is beautifully produced, the story of the DB9 and its racing offshoot being illustrated not only by fine photography but with elaborate transparent overlays demonstrating everything from suspension parts to chassis mods and airflow. Each of the chassis is described along with the teams who ran them, plus all results and even lap times. With its fold-out timelines and those intriguing overlays it's practically interactive, and not exactly lacking in information - it's hard to think of any more data they could have included. Expensive, but the last word on DBR9s. GC

Published by T.A.G. Verlag GmbH, ISBN 978 3 200 02797 8, €450

### Reviews |



- AUTOCOURSE 2012-2013
- THE OFFICIAL FORMULA 1 SEASON REVIEW 2012
- LE MANS 24 HOURS 2012 OFFICIAL YEARBOOK
- MOTOGP SEASON REVIEW 2012

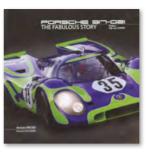
The Autocourse annual has always been the benchmark for season reviews and that doesn't look likely to change. As well as their extensive Formula 1 coverage they still manage to find room to feature nearly every major series on four wheels and Tarmac. The reports are highly detailed without alienating the casual fan while the stats pages are clear and well presented. And of course, the whole thing is illustrated with some of the finest images of the racing year. At £49.95 it's not the cheapest annual out there but, in its 62nd year, Autocourse is still the one to have.

There isn't much about the official Formula 1 review to set it apart, with an uninspired design and a reserved tone. There are plenty of quotes from the drivers (albeit nothing you can't hear in a press conference) and some interesting photos, but you won't find anything here that isn't done better elsewhere.

Instead of over-analysing 24 hours of racing, the ACO's official Le Mans yearbook tells the story of the race largely through pictures. The Audi-Toyota fight gets top billing, but the DeltaWing and Matra celebration add colour to an already attractive presentation.

The official MotoGP review gets it right. After a season of such discontent, it celebrates what's great about the series and looks to the future without making the whole thing seem like a political pamphlet. Casey Stoner's early retirement for example - given his strong opinions on Grand Prix motorcycle racing - is handled with taste and respect. ACH

Autocourse 2012-2013, Published by Icon Publishing Limited, ISBN 978 1905334 77 3, £49.95. The Official Formula 1 season review 2012, Published by Haynes Publishing, ISBN 978 0 85733 253 0, £35. Le Mans 24 Hours 2012 official yearbook, Published by E-T-A-I, ISBN 978 2 7268 9680 8, €49. **MotoGP season review 2012,** Published by Haynes Publishing, ISBN 978 0 85733 252 3, £30.



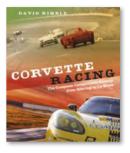
PORSCHE 91*7-*021 THE FABULOUS STORY

by Jacques Breuer and Raymond Collianon

Books on single cars can be too much of a good thing - how much information can you absorb on one chassis? This one goes even further than most, yet somehow breaks through the info barrier; both the history and the restoration of this shorttail Porsche 917 make for a good read.

The major difference is the production quality: in place of the murky workshop photos of most restoration tales, the lucky man who owns 917-021 has commissioned very fine studio shots of the components, even to views of the bare frame with engine and driver aboard and ghosted body overlaid. An outline of the whole 917 story precedes the car's own history, but it helps that the car has a good tale to tell - driven by Pedro Rodriguez, painted in mad liveries and turned into a road car among other things. Generous action photos plus drawings and other paperwork make the pages good to look at, too. GC

Available from www.917-021.com ISBN 978 2 9601156 1 1, €95



FROM SEBRING TO LE MANS

#### DRVETTE RACING THE COMPLETE COMPETITION HISTORY

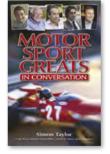
by David Kimble

No one could have known back in 1953, when the name of a small, fast naval vessel was suggested to Chevrolet's chief engineer Ed Cole as a possible title for the manufacturer's new car, that the word 'Corvette' would become one of the most famous names in motoring history. Or that 60 years later the car would still be competing for class wins in the most important sports car races.

Motor Sport contributor Oliver Gavin obviously makes an appearance in the latter stages of Kimble's work, but this book covers so much more than the recent history of the 'Vette. All major variations of the American muscle car are included, as well as the GTP effort in the 1980s, drag racing versions and, of course, the engines that powered them through the ages.

This is a beautiful book with some areat images, interesting cutaways and informative text. Not to be missed by Corvette aficionados. EF

**Published by Motorbooks** ISBN 978 0 7603 4343 2, £40



### MOTOR SPORT GREATS IN CONVERSATION

by Simon Taylor

The content will be familiar to Motor Sport readers - a series of delightful essays, compiled by Simon Taylor and laced with culinary relish. Since its introduction to the magazine as a regular monthly feature in 2006, the 'Lunch With...' series has become a popular staple, author Taylor chatting to assorted sporting luminaries. Without fail, they have been engaging company. This book collates

highlights from the past six years and 24 interviews are reproduced within. Subjects include Chris Amon, Emerson Fittipaldi, Dan Gurney, Jacky Ickx, Roger Penske, Dario Franchitti, Mario Andretti and, poignantly, three eminent personalities who have passed away since, Roy Salvadori, Sid Watkins and Tom Wheatcroft.

They were a fine read first time around and time hasn't dulled their appeal. One accepts that we might be thought biased, but that doesn't alter the facts. SA Published by Haynes Publishing, ISBN 978 0 85733 250 9, £19.99



# Undercover operations

Renowned transport specialist opens new car and bike storage facility close to Silverstone

ircuit2Circuit provides a comprehensive range of covered car transport delivered with exceptional service. Transporting any vehicle,

anywhere, Circuit2Circuit works with a number of Blue Chip companies and prominent individuals, delivering vehicles all over the globe. With a proven background in motor sport within Formula 1, BTCC and beyond they can provide the best cost-effective solution and the highest calibre drivers in the industry.

The resources on offer by Circuit2Circuit are pretty comprehensive, from individual race and motor shuttles to race trailers that can move multiple vehicles at once - perfect for your whole team! The latest addition to the fleet is a five-car transporter, offering the ultimate service in multi-car logistics. Each and every method of transport is completely covered, ensuring your car is delivered discreetly and securely, and is not at risk by any elements such as the weather or stone chips during the journey.

To complement the transportation service offered by Circuit2Circuit, and to respond to many customer requests, the company has introduced a bespoke storage facility in 2013 for classic, prestige and race vehicles: it's called Silverstone Classic and Race Car Storage.

The storage facility is based in rural Northamptonshire in a secure and discreet location close to Silverstone circuit and junction 15a of the M1. It has been specially tailored to

suit customer's individual requirements and as such, Silverstone Classic and Race Car Storage can offer a number of different storage options.

Your car will be kept in a dry, clean and fully alarmed secure environment. While your car is being stored in this purpose-built facility you can choose from a number of maintenance programmes. And of course, vehicles can be collected and delivered back to your premises via the expertise of Circuit2Circuit if desired.

Motorcycles are also welcomed and a couple of notable bikes currently in storage include a 1983 Yamaha RD125LC with only 1057 miles on the clock and a 1984 Honda CBX 750FE that's logged up a mere 19,000 miles. Both bikes are in excellent condition having been stored in a dehumidified environment, ensuring they are kept free of moisture. Both still have their original fittings including exhausts thanks to being kept in this environment.

Company boss Leigh Pettifer explains how Silverstone Classic and Race Car Storage started: "With the car transportation service

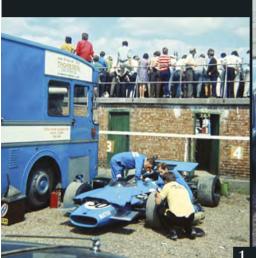
we have been offering for the past 12 years, we are often asked to store vehicles in a secure facility. We ensure every car is treated with the same professionalism at all times by all our experienced staff and it is this ethos that has given us such an enviable reputation."

It is this reputation that has race teams, sponsors and marketing companies ensuring that Circuit2Circuit remains at the forefront of the industry. Sir Jackie Stewart OBE recently said how the company "carries out its business in a very professional fashion". High praise indeed!



### YOU WERE THERE

Thanks to the easy access, one enthusiast came back with a colourful record of his low-cost trip to the 1969 British GP









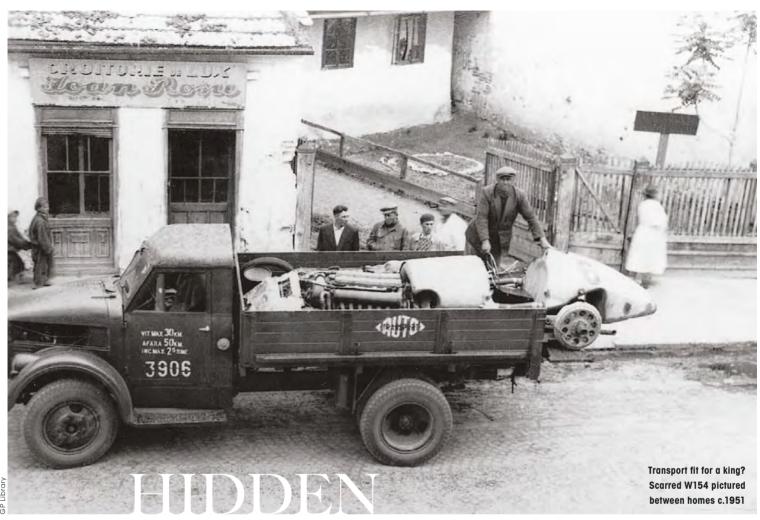


### IAIN FRASER

Having just got his first car, an Austin 1100 Vanden Plas, Iain set off from Winchester to Silverstone for the 1969 British Grand Prix. "I took a backpack and tent and camped in the next field. You could wander into the paddock whenever you liked," he recalls. "I got all the drivers' autographs!"  $\{1\}$  Though Stewart would win in an MS80, Matra also struggled with the 4WD MS84  $\{2\}$  Rob Walker brought a Lotus 49B for Jo Siffert  $\{3\}$  Another privateer: Colin Crabbe entered a McLaren M7A for Vic Elford  $\{4\}$  Pedro Rodríguez (light blue overalls) was let down by his Ferrari's V12  $\{5\}$  and  $\{6\}$  Gold Leaf livery carried over well to team transport like hardtop Moke and Europa  $\{7\}$  McLaren's orange livery highlights Denny Hulme's M7A



### Doug Nye



### TREASURES

Some added detail to demvstify the wartime whereabouts of motor racing's most charismatic fleet

n our story about the Collier Collection's Mercedes-Benz W154 last month, I mentioned its wartime refuge somewhere within the Esterhazy Castle estate at Eisenstadt, between Graz and Vienna in eastern Austria. The advancing Soviet Army occupied the area in 1945 and remained there until as late as 1955, when Austria regained its full freedom. Today the Esterhazy Castle is a favourite tourist attraction, though I doubt many would view it with nostalgic awe just because of its connection with fugitive Grand Prix cars... As we described, Daimler-Benz had stored its racing cars in and around the factory at Unterturkheim, Stuttgart, until 1942-43 when Allied bombing really intensified and they dispersed valuable cars for safety. D-B tended to consign them in pairs, variously to trusted Mercedes agencies, rural cultural sites or to mining and industrial facilities, Postwar, on March 15, 1946, among the chilly rubble stacks of shattered Stuttgart, a D-B employee listed 21 cars' last-known whereabouts and (where possible) their contemporary locations. I won't include all the recorded detail and serial numbers here - "you'll never guess what we have found" - but for posterity here's an abstract of that remarkably historic listing of which pre-war works team cars went where:

#### 5.66-litre straight-8 cars

W125/5: to Kulmbach, Bavaria. 1946: Unterturkheim works, in Halle Grotz (the great factory halls being known variously by the name of either their current, or particularly respected past, foremen)

W125/6: Unterturkheim works. 1946: at M-B Hamburg. W125/9: to E Laise at Briesnitz, near Dresden. 1946: Unterturkheim works, in Halle Grotz.

W125/10: to A Siegert, Brieg bei Breslau (now Brzeg, Poland). 1946: whereabouts unknown - either destroyed or enaulfed by the Soviet advance and confiscated for inspection and research.

#### Record cars

W125/11: streamlined record car without engine: to Niederlassung (branch) Dresden, then to Kulmbach. 1946: Unterturkheim works, in Halle Grotz.

W125/'166 366': enclosed-wheel record car with V12 engine: had been hidden at J F Kuhnel, Leipa, Bohemia (now Ceska Lipa, Czech Republic). 1946: unknown, again engulfed by the Soviet advance.

T80 Super-Rennwagen '439 805': Land Speed Record car, without engine: Pluderhausen, east of Stuttgart. 1946: Unterturkheim works, in Halle Grotz.

### 3-litre V12 Grand Prix cars

W154/3: without engine: to Krutina & Mohle cement works, Saarbrücken, in western Germany. 1946: recovered from Allies and returned to Unterturkheim, in Halle Grotz

W154/6: to M Rossler, Sprottau (now Szprotawa, Poland). 1946: unknown, plainly lost within Sovietoccupied territory.

W154/7: to Vienna Mercedes-Benz dealership then into hiding on the Ducal estate of Schloss Esterhazy, Eisenstadt, Austria. 1946: unknown (actually taken by Soviet forces but abandoned at Braila, Rumania; later to Jozska Roman; subsequently sold to Dieter Holterbosch in the USA, then to Joel Finn; now in Arturo Keller's private collection at Sonoma, California).

W154/8: to M Rossler, Sprottau (now Szprotawa, Poland) with W154/6, above. 1946: unknown.

W154/9: probably from Poland to Neupaka (now Nová Paka, Czech Republic), or into an old textile factory at nearby Stara Paka. With car 10 below, walled up in workshops of pre-war Czech motorcyclist and racing driver Antonin Vitvar. 1946: unknown, but in fact one sold via UK to Don Lee, USA, for Indy 500; other to Prague National Technical Museum.

W154/10: see above.

W154/11: to Kulmbach, Upper Frankonia. 1946: Unterturkheim, in Halle Grotz,

W154/12: Unterturkheim works. 1946: surviving at Mercedes-Benz branch in Hambura.

W154/15: to Vienna Mercedes-Benz dealership then into hiding on the Ducal estate of Schloss Esterhazy, Eisenstadt, Austria. 1946: unknown (actually taken by Soviet forces but abandoned at Braila, Rumania; later to Jozska and Tibor Roman; then as described in last month's issue to Dr Andre Bilciurescu, later Yoshiyuki Hayashi; eventually to The Collier Collection, Florida, USA. Entrusted to Rob Hall for the Goodwood Revival 'Silver Arrows' demo).

W154/16: hidden at J F Kuhnel, Leipa, Bohemia (now Ceska Lipa, Northern, Czech Republic). 1946: unknown, taken by the Soviets.

#### 11/2-litre V8 W165 V8 'Voiturette' racing cars

W165/1: at Moritzburg, Lower Saxony. 1946: at M-B Zurich, Switzerland (pp Rudi Caracciola)

W165/2: at Moritzburg, as above. 1946: at M-B Zurich, Switzerland (pp Rudi Caracciola)

W165/3: at Kaltwasser bei Luben (now Zimna Woda), Poland). 1946: unknown

W165/4\*: hidden at JF Kuhnel, Leipa, Bohemia (now Ceska Lipa, Czech Republic). 1946: unknown. \*Conventional wisdom has been that only three W165s were built, two completed and finishing 1-2 in the 1939 Tripoli GP. A third car set of parts was made, yet here's a fourth car being listed in 1946 as 'missing'.

So there, just for the published record, is a little light upon a hitherto most obscure period in the history of the most charismatic Grand Prix cars that the world has yet seen.



### Cooper that was shakin', not stirred

From the sublime to the - ahem - not quite so stupendous, I have just fallen heir to a fascinating little cache of early Cooper photographs. Among them are some shots of one of John and Charlie Cooper's most obscure little prototypes, the 1949-50 Cooper-Sunbeam.

One day late in 1949 a Major Barker had contacted Cooper in Surbiton. He was PA to Sir Bernard Docker, then chairman of BSA, Daimler, Hooper Car Bodies and more, whose lavish spending (largely to

please his extravagantly publicity-conscious wife. Norah) filled contemporary gossip columns.

Sir Bernard was Norah's third husband. After makina a mark on London's social scene in the 1930s as a dance hostess at the Café de Paris, she had married Clement Callingham, head of the Henekey's wines and spirits company. He died in 1946 whereupon she married

Sir William Collins, president of Fortnum & Mason, Within two years he also died and in 1949 Norah married Sir Bernard. She had a 12-year-old son, Lance, by Clement Callingham, and Major Barker now commissioned the Cooper Car Co to build a little car for the boy to drive around the family estate at Poole in Dorset. It was to use an engine made by one of Docker's companies.

In 1943, BSA had bought Sunbeam motorcycles from AJS/Matchless. For 1947, they introduced an unusual 488cc, low-compression, in-line twin-cylinder model, with single overhead camshaft, all designed by Erling Poppe around the bottom half of a pre-war prototype BSA in-line twin.

The result was Sunbeam's S7 motorcycle, which

with its balloon tyres and bulbous mudguards was aimed (rather like Austin's A90 Atlantic) at the US market without first seeking opinion from gen-yoo-wine American buyers. Initially its two-cylinder soho engine seemed quite lively but, because BSA wouldn't fork out for a proper crown wheel and pinion final drive, the S7's shaft instead powered a worm and wheel system. This proved so frail the engine had to be detuned to 25bhp... which turned-off most American customers when a cooking British ohv single from Ariel,

> BSA, Matchless, Norton etc offered 26-30bhp in chaindrive frames some 30-40lb lighter. A stock, cammy Manx Norton gave about 45bhp and Joe Craia's 'works' engines a reputed 50-ish.

Sunbeam's \$7/\$8 engines were revamped in 1949, but the reputational damage had been done. Sales never really recovered so, for Lance Docker's special, Cooper plopped an S7

gearbox and shaft drive into a sports car version of their 500cc E3 frame. As John later told me: "It vibrated so much it was completely useless, and so we never completed it. I sold them the redundant old Cooper-Vauxhall (their first postwar sports car) instead and it was modified by Hooper's to carry a mock Daimler grille and flashy interior".

The photos show John Cooper warming up the unbodied little Sunbeam S7-powered prototype in the Goodwood paddock, and Stirling Moss joining in for a giggle. In these health and safety-conscious days it's enlightening to see a gravity-feed petrol tank rigged on stays above the engine. Here was one little all-British special - commissioned by big industry from little industry - that went nowhere fast.



### Doug Nye



### Roger Penske's hunt for the Michelin man

One of the most capable and influential racing 'mechanics' (an inadequate term) that I recall from my reporting days around the teams was Don Beresford of McLaren. He worked at Frazer Nash, Aston Martin, the Yeoman Credit/Bowmaker team with Cooper and Lola chassis, then at Lola Cars and Ford Advanced Vehicles before Bruce Mcl aren and Teddy Mayer invited him to join them at Colnbrook, as works manager. He remained a major player for McLaren well into the 1980s, and when he left in 1983 - missing the small-group culture of decades past - he became head of composites for Teddy Mayer and Tyler Alexander's Indycar team, re-engineering and racing March cars. This morphed into Formula One Race Car Engineering, producing their 1985-86 Haas-Lola F1 cars. He then became Penske Cars Head of Composites in 1987 before retiring at the end of 1998.

Don died in 2008, but meantime his son Nigel had followed in his footsteps, becoming a Tyrrell race engineer through 1989-91. He moved to Penske Racing in 1992 in Reading, Pennsylvania "...as race engineer to my hero, Rick Mears. When Rick retired I worked with his replacement Paul Tracy. We had a very successful working relationship, and Paul narrowly lost out to Nigel Mansell in the 1993 CART Championship. At the end of 1994 Tracy left the team and I went back to Tyrrell (but)... having been with a successful, well-resourced team like Penske it was difficult to cope with the constantly hand-to-mouth life. When Tracy returned to Penske in 1996, Roger made me an 'offer I couldn't refuse' and I went back, on the proviso I could live in the UK. I worked at Penske Cars as head of engineering under Nigel Bennett, and then John Travis. When John left L became technical director of Penske Cars.

In the mid-noughties Nigel was very closely involved in Penske's collaboration with Porsche, building, developing and racing their DHL-liveried LMP2-category RS Spyders (pictured above) in the American Le Mans series

Nigel recalls: "A vital part of this very successful

project was the relationship with Michelin. We had one of their top guys, Vincent Barthe, assigned to look after all our tyre management affairs, both at the track and back in Clermont-Ferrand.

"Sports car racing is very important to Roger Penske. I always felt that for him NASCAR was 'business', Inducar (with the exception of the Indu 500) was 'pleasure' but sports cars were 'passion'. RP started out racing sports cars, and he is still very much in touch with those roots. He takes the Indv 500 more seriously than anything, but would approach those relatively minor ALMS races with just as much focus.

"The biggest ALMS race is the Sebring 12 Hours. Our main competition was the Audi R10 turbodiesel. Although our LMP2 RS Spyder was nominally in a lower class than the Audis, we were typically able to give them a real run for their money on the tight, bumpy American tracks. On the arid at Sebrina in 2007, Roger was wound up super-tight, sensing that we had a real chance against Audi.

"Everyone at Penske Racing is there because they want to work for Roger. He sets the standards - he's deep into his 70s, but nobody works harder, or longer hours. He wants to know everything and you'd better have the answers. Don't ever try to fudge him because he'll know vou're fibbina..

"So, the cars were on the grid, ready for the big race. There were thousands of people crushing around the cars and crews. For some reason Roger decided to ensure our cars' tyre pressures had been set correctly. Tension began to rise and the mechanics sensed that maybe now was a good time to go back and check the spares at the truck, Roger decided he needed Vincent from Michelin. He fixed one of the most junior mechanics with his full focus and called: 'You! Where's the Michelin man?'

"The young man swung around, spotted his target and bawled, 'There! There's the Michelin man!' You can imagine the withering stare that followed as RP swung around to see the man, parading past, waving at the crowd in his Bibendum costume...





### Turner's cards reach seasonal milestone

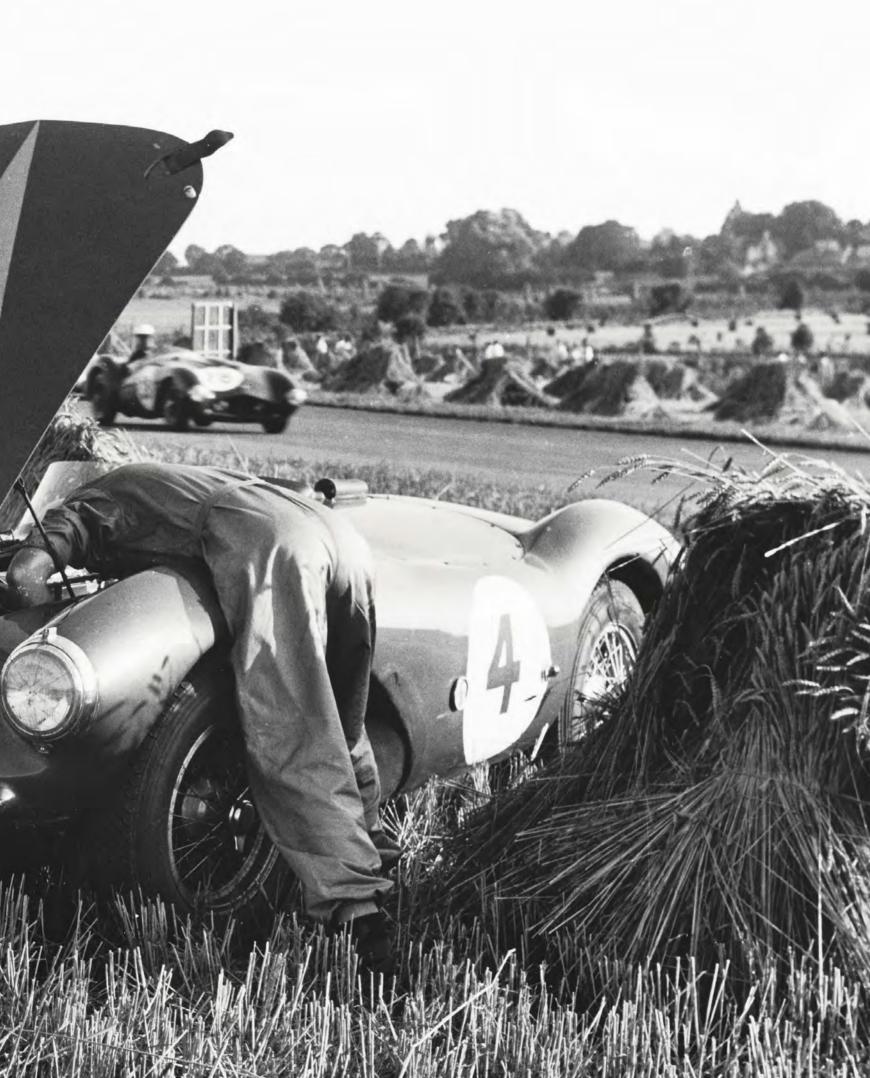
At Christmas a landmark was passed and I feel it should not pass unrecorded. For 'the hostilities'. artist Michael Turner published his 50th annual set of Christmas cards

His first set in 1963 covered six subjects; Graham Hill in the BRM at Monaco, Bruce McLaren's Cooper broadside in the rainstorm at Spa, which Michael recalls vividly for the savage lightning flashes as he stood there, getting soaked, Jimmy Clark's Lotus 25 dominant at Zandvoort, Graham again in the Rover-BRM gas turbine car at Le Mans, Dan Gurney's Brabham at Silverstone and John Surtees's Ferrari over the hill and gone away at the Nürburgring.

For this past year Spa and Silverstone again featured in Mike's latest set of five cards, but I can't help thinking that the front-runners in 1963 could never have imagined F1 World Championship rounds also being run in Melbourne, Valencia... and Shanghai. Congratulations Michael - 50-up, and hopefully many more to come. Long may your brush flourish.









This year *Motor Sport* is teaming up with Speed Chills, the UK's largest provider of private camping at Le Mans on June 22-23, to create a self-drive package exclusively for *Motor Sport* readers

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- Clean toilets regularly serviced by our team of attendants
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- Live entertainment on Friday and Saturday night

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- A dedicated Motor Sport club house with all fresco and indoor areas to relax in with race coverage on a large screen
- Motor Sport staff on site to help with any questions and queries
- Film screenings from the *Motor Sport* Le Mans archive collection
- The *Motor Sport* editorial team will be on hand during the pre-race build-up to give you the inside track on teams and drivers

Prices start at £229 per person based on four people in a car via Dover/Calais on a 7m by 5m pitch. Prices include general admission race tickets and ferry crossing. Grandstand seats can be added for as little as £70 per person.

To book for 2013:

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or email: motorsportoffer@speedchills.com Tel: **0845 652 8824** (24 hours) or **01252 717871** (office hours)

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