MOTORSPORT

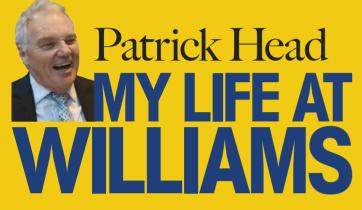
FORMULA 1

GRAND PRIX HISTORY

INDYCARS

HISTORIC RACING

ROAD CARS



THE CAREER

"I'm not as gruff as I'm supposed to be. I don't go round shouting at people..."

LUNCH WITH SIMON TAYLOR

THE EARLY DAYS

"By the end of 1978 we had 18 people. By the beginning of '79 it was up to 32!" BY NIGEL ROEBUCK

THE ICONIC CAR

20 years on: inside story of the innovative racer that made Nigel Mansell a champion BY PATRICK HEAD

WHY FANS WILL LOVE F1 ON SKY

Martin Brundle on quitting the BBC and why we'll want to switch to a dish in 2012

COLIN CHAPMAN'S LAST LOTUS

He never stopped chasing the Next Big Thing. The men who made it happen tell us how

VERDICT ON BMW'S TURBO M5

Andrew Frankel drives new German super-saloon and says better doesn't always mean greater...



THIRD TIME LUCKY?

Ross Brawn on his quest to make Mercedes a winner



Contents



In the spirit of WB **FEATURES** 50 LUNCH WITH... PATRICK HEAD 98 ROSS BRAWN As he leaves the pitlane Patrick Head reflects on the success of Williams Recent additions to Mercedes GP mean a stronger challenge for 2012 **102** KERS AND THE FUTURE **54** FRANK AND PATRICK'S EARLY DAYS It wasn't an easy start for William How KERS will surge ahead in 2014 in F1, but that all changed in 1978 106 NEWMAN/HAAS We look at the US team's glorious past **66** WILLIAMS FW14B Patrick Head gives us the inside line on 112 IAN ASHLEY the most advanced F1 car of all time GP driver, bike racer and Learjet pilot... **80** MANSELL'S LOTUS 92 116 PRIVATE VIEW Forgotten pioneer of a giant F1 leap 1967 Can-Am at Road America 88 STAND 21 RACEWEAR 120 ROAD CARS BMW M5 test, European Car of the French firm has raised safety standards in the sport, and made some famous friends Year shortlist and FIAT's new factory



Call +44 (0) 20 7349 8472 or visit www.motorsportmagazine.com

Contents



FAVOURITES

- **14** THE MOTOR SPORT MONTH New Formula 1 testing calendar and another setback for Robert Kubica
- **21** EVENT OF THE MONTH
- **24** ROEBUCK'S REFLECTIONS Sky's coverage of F1 promises plenty according to Martin Brundle
- **35** DISPATCHES
- **37** ON TWO WHEELS
- **39** THE US SCENE
- 41 DESIRABLES

- 128 SIDETRACKED
- **132 HISTORIC SCENE**
- **135** AUCTIONS
- **137** BOOK REVIEWS Peter Warr on Team Lotus
- **138** YOU WERE THERE
- 140 DOUG NYE
- **144 PARTING SHOT**Porsche 917s in the wet at La Sarthe



APRIL 2012 ISSUE ON SALE FEBRUARY 24

Matters of Moment

wo starkly contrasting views of Nigel Mansell this month. In this issue, which you might have noticed features a few pages on Williams, Patrick

Head tells us that the 1992 World Champion was certainly "high-maintenance", but then goes on to say he was "bloody quick, bloody quick all the time... Nigel was given the Graham Hill mantle of the gritty grafter who

didn't have the skill and artistry of Senna or Prost, and overcame it through sheer determination. I don't think that was fair. I would put him right in the same class as Prost."

As good as Prost, eh? But when Patrick Head speaks, you sit up and take notice. The same was true of the late Peter Warr. whose eagerly anticipated autobiography landed in the office this month. In the book, published posthumously reviewed on page 137, the man who kept the flame burning at Lotus in the wake of Colin Chapman's death makes no mention of 'that' prediction about Mansell's future wins

ratio and the sealing of a certain orifice on his own person... but Warr never backed down, even 31 Grands Prix wins, one world championship, an IndyCar title in his rookie year and a near-miss Indy 500 later.

Consider this section on a driver he considered "seriously flawed": "how Nigel went on to be so successful is a source of bewilderment to all those who knew him when he drove for us. Perhaps he was a late developer - unusual in a Grand Prix driver, but not impossible. Perhaps he happened to be in the right place at the right time... Perhaps the cars he drove later with the addition of the driver aids that Senna was to resent so bitterly served to give him the extra confidence he needed by making the cars easier to drive. The active suspension Williams FW14B that gave him his title was a brilliant and vastly superior car."

That it was, which is why we picked it out for the cover of this Williams-themed issue. But whatever its merits, Mansell still had to make the most of it in 1992 (winning the title by August suggests he did so), and Riccardo Patrese certainly didn't find it "easy". Warr also describes Mansell as "universally disliked in the very close-knit world of F1", and there's the rub. If he'd had the character of his Lotus teammate Elio de Angelis, Mansell would be revered in the manner of Ronnie Peterson or Gilles Villeneuve. But then he wouldn't have been Mansell. The persecution complex, the moans

> and groans, the clumsy syntax, the inconsistency and mistakes on track that was him. Things were never dull with a mixed-up talent like Nigel Mansell around.

> Twenty years after his title season, he still divides opinion like no other.

couple of press releases have pinged in from the Bahrain Grand Prix organisers this month. Don't worry, nothing to worry about for the race on April 22. Apparently.

This is the circuit that dismissed a group of employees last year following the forceful

suppression of protests that shook the Arab state and led directly to the cancellation of the Grand Prix. But it's OK. An independent inquiry has recommended that these 'rogue' employees should get their jobs back and "in a spirit of reconciliation" they're all happily back at work again.

So that's all right, then.

But if that's the case, why are civil rights groups still warning that F1 is heading for trouble by insisting on a return to Bahrain? In the wake of continued reports of police violence against activists, groups such as the Bahrain Centre for Human Rights are calling for a driver and team boycott of the race. It says the government is trying to pretend everything in Bahrain is normal, when clearly it isn't.

The grim determination of the FIA and Bernie Ecclestone to force F1 back into Bahrain is unfathomable. Twelve months on from the global embarrassment of a sport >>>>



Damien Smith Editor



38 Chelsea Wharf, 15 Lots Road, London SW10 0QJ, UK www.motorsportmagazine.com

EDITORIAL

Telephone 020 7349 8497 Fax 020 7349 8494 E-mail editorial@motorsportmagazine.co.uk Editor-in-Chief Nigel Roebuck

Editor Damien Smith

Deputy Editor Gordon Cruickshank Features Editor Rob Widdows **US Editor** Gordon Kirby Art Editor Damon Cogman
Chief Sub-Editor Gillian Rodgers

Associate Editor Ed Foster Digital Designer Zamir Walimohamed

Picture Editor Jeff Bloxham

Senior Contributing Writer Andrew Frankel Editor-at-Large Simon Taylor

Special Contributors Adam Cooper Paul Fearnley, Alan Henry, Richard Heseltine Paul Lawrence

Doug Nye, Mat Oxley, Gary Watkins

Picture Library LAT Photographic: 020 8251 3000

ADVERTISING

Telephone 020 7349 8496 Fax 020 7349 8494 E-mail sales@motorsportmagazine.co.uk Advertising and Events Director Jane Lenny Advertising Manager Faye Matthews Creative Solutions Director Edward Searle Group Head - Dealer & Classified Kavita Brown

PUBLISHING

Managing Director Giovanna Latimer Publishing Controller Jennifer Carruth Subscriptions Manager Steven Barkess Subscriptions Executive Ash Luchmun Accounts Controller Collette Moolman
Administration Sophie Williams

SUBSCRIPTIONS

UK & Overseas subscriptions +44 (0) 20 7349 8472 US subscriptions www.motorsportmagazine.com Motor Sport Magazine Limited, Unit 38 Chelsea Wharf, 15 Lots Road, London, SW10 GQJ, UK.

Motor Sport subscriptions: Unit 38 Chelsea Wharf, 15 Lots Road,
London, SW10 GQJ, UK. Subscription rates (12 issues): UK S&c.

USA 986; rest of world 264. Postage is included.
Motor Sport (S8N No 0027-2019) is published monthly by
Motor Sport (S8N No 0027-2019) is published monthly by
Motor Sport SNN No 0027-2019 is published monthly by
Motor Sport Magazine, GBR, and is distributed in the USA by
SP9. 95 Abbreden Road Emigyalile PA 17318. Periodicals postage
polid at Emigyallie, PA POSIMASTER: send address changes to
Motor Sport, PO BOX 437, Emigyallia PA 17318-0437.

UK and rest of world address changes should be sent to
Unit 38 Chelsea Wharf, 15 Lots Road, London, SW10 DQJ, UK
or by e-mail to subscriptions@motorsportmograpine.co.uk
Subscription enquilifes: subscriptions@motorsportmograpine.co.uk Road, London, SW10 0QJ, UK. Subscription orders: www.motorsportmagazine.com Distribution: Comag, Tavistock Road, West Drayton, UB7 7QE, UK. Colour origination: Rhapsody and All Points Media Printing: Precision Colour Printing, Teltora, a may be me, on.

No part of this publication may be reproduced in any form vithout the written permission of the Publisher. Copyright © 2012 Motor Sport Magazine Limited, all rights reserved. We take very care when compiling the contents of this magazine but can assume no responsibility for any effects arising therefron accepted by us in good faith as correct at the time of going to press. *Motor Sport* magazine is printed in England.







Follow us on

www.motorsportmagazine.com/fb www.twitter.com/Motor_Sport







Matters of Moment

collectively sticking its head in the sand and ignoring a very real problem, history is about to be repeated. No one except 'Bernie and the blazers' wants to go, not least because of the

very real fears that violence is bound to erupt when the eyes of the world are trained on the place.

The race shouldn't happen, it can't happen - and I strongly suspect it won't happen. That teams and manufacturers must take a lead on this to make it so is another depressing indictment of the governance of our sport.

arun Chandhok will make the headlines if he becomes the first Indian driver to race at Le Mans

when the British IRM Racing team heads to the 24 Hours in June with its brand new top-class prototype (see p15). But for one of his teammates the race will have even greater significance and meaning.

Peter Dumbreck (below) is still best known as the man who survived that terrifying flip on the run to Indianapolis in full glare of the TV cameras 13 years ago, in a Mercedes-Benz CLR



so aerodynamically unstable it should never have started the race. But like Mark Webber who survived not one but two pre-race flips that fateful June week in 1999, it's all ancient history for Dumbreck. He's been a professional racing driver for all those years since, plying his talents in

the DTM, Japanese Super GTs and most recently in the FIA GT1 World Championship. He's even returned to Le Mans, albeit in cars as uncompetitive as Spyker's slow GT2.

Now, finally, he's heading back to La Sarthe in a top-class prototype. "I feel like I've finally come full circle," he told me at the Racing Car Show in January. The man who was nicknamed

> 'Slash' in his Formula Vauxhall days because that's what he wrote on a questionnaire when asked what he liked to do in his spare time, is not exactly one to show emotion. But this clearly means a great deal to Dumbreck. Keep an eye on him come June.

eep an ear out too for Ben Edwards, the man who is to replace Martin Brundle as

the BBC's lead F1 commentator. For years, Ben has been a hugely popular figure in the sport and has more than earned his stripes for another shot at the Grand Prix job.

Meanwhile, Brundle is still batting away criticism for his switch to Rupert Murdoch's 'evil empire'. Nigel Roebuck has talked to him for 'Reflections' this month, and as usual, nothing is exactly as it might seem. Brundle has some very good reasons for the move, and while some of them will boost what I suspect is already a pretty healthy credit rating, there's so much more to it than that. Sky's promises for the F1 enthusiast are tantalising. It looks like turning to the 'dark side of the force' is going to prove unavoidable...

nd finally, if you haven't yet entered our competition to win tickets for the Motor Sport Hall of Fame at the Roundhouse on February 16, there are still a couple of days left so log on to the website. We're delighted that Infiniti, whose logos you will recognise from the engine cover of Red Bull F1 cars, will be the official car marque, joining title partner TAG Heuer as a supporter of our big night. It should be quite an evening.











CONTRIBUTORS

Even though SIMON TAYLOR'S Lunch with... features are famously lengthy, he usually strugales to cut them to fit in the magazine. That's because over a good meal his targets relax and let themselves go - it was a mammoth four hours with Patrick Head this month. But excess material can be a blessing. When Lotus team manager Peter Warr died leaving his book unfinished, the family asked Simon to help complete it. Luckily he still had copious notes from our 2008 lunch with Warr and could weave them around Warr's text (Reviews, p137).

On the subject of lunches, ANDREW FRANKEL probably enjoys more business catering than anyone on the staff, thanks to all the car launches he attends. You'll have to wait for next month to read about Toyota's new sports car, so let's hope you can make do with the M5, V8 Bentley - oh, and his drive in the forgotten Lotus that brought active ride to F1. Once he'd squeezed into its tiny cockpit...

Andrew isn't our only BMW M5 fan. As France was a little far for his usual bicycle. **PAUL FEARNLEY** used his M5 to visit a small Parisien firm whose business is racing safety (see p88). He was impressed by what he saw, but he didn't mention whether they gave him a good lunch. His blog about Mark Thatcher on our website is well worth catching, though.

Our photoshoot on the Williams FW14B was a good day for **CHARLIE MAGEE** - this time last year he was knee-deep in Swedish snow snapping Saabs, so a warm studio was a nice change. And given that he spends many shoots hanging out of cars with 'stunt' camera and safety harness, it was a lot safer, too...





The Motor Sport Month

■ FORMULA 1

Drivers told: 'Mind the gap'

A new and formal version of the 'one move' blocking rule, which requires drivers to leave space when they return to the racing line, could lead to some controversy over the course of this season.

Article 20.3 of the 2012 FIA sporting regulations, now updated to include changes announced last year by the World Motor Sport Council, reads as follows: "More than one change of direction to defend a position is not permitted. Any driver moving back towards the racing line, having earlier defended his position off line, should leave at least one car width between his own car and the edge of the track on the approach to the corner."

The fact that this is now enshrined in the regulations means that drivers have a formal guideline, but it seems likely that there will be disagreements over the precise interpretation.

Meanwhile, among the other changes for 2012 is a return to allowing lapped cars to regain their lap under a safety car - thus getting



them out of the way and increasing the chance of a clean fight at the front.

The FIA has also made it clear that it won't always be possible. A 'no overtaking' message will be displayed on the timing monitors "if the clerk of the course considers track conditions are unsuitable". The rule was dropped because of the length of time it took to re-align the cars, especially in the wet.



First test looms for teams

The 2012 Formula 1 season - which will be the longest in history assuming that none of the 20 races is cancelled - will kick into gear when most of the new cars take to the track at Ierez on February 7. It will be the first of just three group tests before the opening race in Australia, with two sessions following on in Barcelona.

Last year there were four tests before the first race, but the teams have agreed to abandon Valencia and move one session into the season. It will take place at Mugello at the start of May, before the first European race in Spain.

The curtailed pre-season running has put a premium on getting it right first time, and it will be particularly tough for Mercedes, the team having opted to save the new W03 until the first Barcelona test. That decision gave Ross Brawn's men an extra 14 days of R&D time, but it means that there is a limited

safety net should the team experience problems when the car runs.

This year all teams have had to deal with a new FIA rule that requires cars to pass all their crash tests before they are allowed to take to the track, whereas previously the deadline was the first race weekend. This led to teams adjusting their schedules so that the first examples of the chassis and other crash structures were ready for crash testing earlier than in the past, in case of any unforeseen problems.

That in turn has made January a little more relaxed, in that it allowed teams to

"THE BLOWN **DIFFUSER IS SUCH** A BIG DRUG THAT IT'S VERY **DIFFICULT TO WEAN YOURSELF**

finish the car build earlier and squeeze in more factory rig testing before their cars take to the track.

In 2011 teams used testing to learn about Pirelli, KERS and the DRS. There are fewer novelties this year, and the focus is all on the aerodynamics. Exhaust blowing of the diffuser has been banned, and teams have sought ways to claw back the extra downforce.

As Brawn notes in this issue (see interview, p98), everyone is waiting to see what the opposition has come up with - and whether there is a repeat of the double diffuser controversy of 2009, when a disputed new piece of technology proved decisive in determining the outcome of the world championship. There remains a large question mark over precisely how teams, and the FIA, will interpret the revised exhaust rules.

"The blown diffuser is such a big drug that it's very difficult to wean yourself off it," one technical director told Motor Sport. "The performance was that big. There are methods of extracting some of that performance back again, and I believe a lot of the teams will do that. We are certainly keeping our eyes open to the possibility. We'll wait and see how it plays out during February and March. I think all the teams who got it to work will be looking to get it to work again."

Another area of focus will be the 'reactive ride height system,' designed to maintain a stable ride height even under braking. It emerged in Ianuary that several teams have been pursuing that direction, which the FIA apparently deems legal as long as it is operated via brake torque, and not directly by the driver. Adam Cooper

■ FORMULA 1

Senna slots in at Williams

Bruno Senna has been confirmed as a Williams driver alongside Pastor Maldonado for the 2012 season. The decision means that ex-Force India driver Adrian Sutil and Grand Prix veteran Rubens Barrichello are both still on the sidelines

"Bruno only started racing when he was 20 years old, said team principal Frank Williams, "but quickly proved his talent in F3 and GP2. The circumstances of Bruno's two seasons in F1 [at HRT and Lotus Renaultl have not given him an ideal opportunity to deliver consistently so it was essential that we spent as much time as possible to understand and evaluate him as a driver."

Senna, whose uncle Avrton raced for Williams in 1994. added, "I feel privileged that Williams has selected me as one of their race drivers. The evaluation process has been intense and methodical, but the time I have spent at the factory has demonstrated that the team has great people and all the resources needed to achieve better things this season."

Now that Daniel Ricciardo and Jean-Eric Vergne have replaced Jaime Alguersuari and Sébastien Buemi at Toro Rosso the only seat still to be filled on the F1 grid is at HRT, alongside Pedro de la Rosa.

Drayson targets Formula E

Lord Drayson is aiming to bring electric racing to London when the new FIA Formula E Championship kicks off in 2012.

Paul Drayson, who has joined forces with Lola to bid to become one of the car suppliers for Formula E, is pushing for a British round for the series that will be made up primarily of street races. He has suggested the London Olympic Park as the ideal venue for the event.

"The idea of London as a venue for a Formula E race makes tremendous sense," he said. "The whole concept of Formula E would absolutely suit London if a suitable venue could be found. Now the Olympic Park is a tremendous facility and is the obvious place for it to happen."

Drayson, a former Labour government minister, said that he had had preliminary discussions about a London race with the relevant authorities, but refused to go into detail.

Drayson unveiled his bid to produce a car for Formula E in January. The LMP1based Lola B12/69 EV has been designed as a test bed for the technology that will be used in its proposed Formula E design.

His company, Drayson Racing Technologies, has gone into partnership with Lola to launch a tender to produce a Formula E racer. A decision on which companies will be licensed to produce cars for the new series is expected to be announced after the FIA World Council at the beginning of March.

■ SPORTS CARS

Chandhok set for Le Mans

Grand Prix racer Karun Chandhok will become the first Indian driver to contest the Le Mans 24 Hours this season.

The 27-year-old, who has 11 Formula 1 starts to his name with HRT and Team Lotus, will race the British JRM Racing team's Honda Performance Development ARX-03a in the full FIA World Endurance Championship, which includes Le Mans. His team-mates in the LMP1 car will be David Brabham and Peter Dumbreck.

"I explored the options to race in F1 and, when it didn't look like a possibility, I decided to look outside, and the WEC presents the next-best option," said Chandhok.

Narain Karthikeyan was on course to be the first Indian to race at Le Mans in 2009. He qualified a Kolles Audi R10 but dislocated his shoulder in the run-up to the race.

JRM is switching to LMP1 and the WEC after winning last year's FIA GT1 World Championship with a Nissan GT-R driven by Dumbreck and Michael Krumm. It has cited the great sponsorship opportunities presented by the WEC for the move.



■ FORMULA 1

Newey's New Year honour

Both Red Bull designer Adrian Newey and 1992 Formula 1 world champion Nigel Mansell were named in the UK's New Year Honours list.

Newey, who has designed F1 world championshipwinning cars for Williams, McLaren and Red Bull, received an OBE for his services to motor sport.

Meanwhile ex-F1 and Indycar champion Mansell received a CBE for services to children and young people.

Mansell - who was already an OBE - is president of the UK Youth charity and in 2010 undertook a 1200-mile cycle around the UK with his two sons Leo and Greg, and ex-Tour de France racer Magnus Backstedt.



■ SPORTS CARS

Blundell back for full season in a McLaren

Former grand prix driver Mark Blundell will contest his first full season of racing in 12 years during 2012.

The 45-year-old Briton has signed to drive a United Autosports McLaren MP4-12C GT3 in the six-round Blancpain Endurance Series. It

will be the ex-McLaren F1 driver's first full year of competition since leaving Champ Cars at the end of 2000.

Blundell, who will share the McLaren with team boss Zak Brown and Mark Patterson, explained that he had been motivated to race more regularly after undertaking a handful of starts in 2010-11, including last year's Daytona 24 Hours.

"Doing those races last year, especially Daytona, made me start to think about a full season," he said. "Daytona proved the speed was still there, but also that the enjoyment was still there."

GP3 race winner Alexander Sims will also race a McLaren in 2012. The 23-year-old has joined McLaren's squad of development drivers and will be placed with one of the customer teams running MP4-12Cs.

The Motor Sport Month



WRC deal hits the skids

News of an investigation into alleged asset stripping at a bank in Lithuania should not have so much as raised an eyebrow for the World Rally Championship's powerbrokers when the emerged last story November. Instead, to the current detriment of the sport, the two subjects have become intrinsically linked.

Rather than celebrating the turn of the new year full of optimism for the future, those at the sharp end of the WRC were facing up to a new crisis and one that will send shockwaves through the service parks of the world for several months to come.

Central to the investigation by Lithuanian prosecutors was Vladimir Antonov, the boss of Convers Sports Initiatives, which included Portsmouth Football Club and WRC promoter and rights holder North One Sport in its portfolio, but has since been placed into administration.

Antonov had promised to underwrite a 10-year promotional plan for the WRC, but without CSI's promised millions there was no money to back the championship's long-term recovery, not to mention the running costs for 2012, such filming and postproduction of each event.

NOS thought it had found a saviour at the 11th hour in the form of a Qatari investment bank, but despite promises of a support package which exceeded £100 million, it was not enough to spur the FIA into a favourable response.

Instead motor sport's world governing body cancelled the NOS contract, stating that it hadn't received "unequivocal assurances from NOS that it could fulfil its contractual obligations". This led to NOS's rapid meltdown and left sister company North One Television seemingly on the brink.

NOTV sold NOS to Antonov's CSI in 2011 on the proviso it was retained to continue televising the championship. However, the failure of NOS means that NOTV not only loses the WRC filming deal but also has virtually no chance of recouping the reported £2m which it is owed by asset-weak NOS.

To make matters worse, NOTV must now pay out hundreds of thousands of pounds in redundancy money to its beleaguered staff of more than 40.

In a statement confirming its decision to terminate its

contract with NOS, the FIA vowed to work "tirelessly" to ensure the 2012 WRC went ahead. But barely days before the famous Monte Carlo Rally - back on the WRC roster for the first time since 2008 - got underway, no promotion agreement had been signed.

Eurosport Events, the satellite channel's marketing arm and the driving force behind the World Touring Car Championship and Intercontinental Rally Challenge, has stepped in and was close to inking a threeyear deal with the FIA when Motor Sport went to press.

However, this agreement may amount to Eurosport merely filming and distributing footage of the series - paid for by the FIA with the FIA absorbing some of NOS's promotional responsibilities.

But fears that the new alliance might not be able to deliver the promotion spend that NOS had planned came with the news that there was no guarantee of live television coverage of the Power Stage, a hit NOS product introduced in 2011 to award bonus points for the final stage of every event.

Elsewhere, a legal dispute between administrators and Stage One Technology, the company responsible for the WRC's sophisticated timing and tracking systems, meant Monte Carlo Rally organisers had to source lower-spec replacement equipment.

At least the action on the stages this year should provide some solace. Citroën and Ford have committed ever-present factory teams and semi-works efforts, MINI will contest as many rounds as its finances allow, while Volkswagen will field two Super 2000-specification Skoda Fabias on all events as it prepares for its WRC return in 2013. Richard Rodgers

Meeke left on the sidelines by budget shortfall

Kris Meeke is unsure when he will make his next appearance in the World Rally Championship amid the financial woes currently engulfing the factory MINI team.

The Northern Irish driver had been expected to line up alongside Spaniard Dani Sordo on all 13 rounds of this year's WRC, but a lack of funding means that he's lost his seat at the Prodrive-run squad until more sponsorship is found.

meanwhile. has MINI. yet to confirm Sordo's schedule beyond the first two events of 2012 and could even undertake a partial campaign as it uses its restricted resources to test and homologate a new air intake and engine tweaks instead.

Although Meeke is under contract to MINI until the end of 2013, he is only expected to undertake limited testing and promotional appearances until the budgetary situation is resolved.

Young Corsican Pierre Campana took his place on the Monte Carlo Rally in

January, while former Junior World Rally Champion Patrik Sandell has been nominated as Sordo's team-mate for Rally Sweden in February.

With MINI owner BMW's initial commitment limited funding homologation and preliminary engine and chassis development, the

running budget is Prodrive's responsibility and is dependent on the British firm selling customer versions of its John Cooper Works WRC and attracting commercial backers.

A title sponsor slipped from Prodrive's grasp last summer and while company chairman David Richards has spoken of alternative investors, none have come to the table offering the required millions.

RALLYING

Peterhansel's perfect 10

the South American-based

2009 that a manufacturer other than Volkswagen has won. German X-raid-built MINIs dominated, with seeing off the Hummers of Robby Gordon and 2010 winner Nasser Al-Attiyah.

wins and four victories in cars, hailed the event as one of his "best triumphs

"When you think of how hard it is to win a Dakar, it's incredible that I've been able to win 10," he said "To take victory in was five years ago when the event was held in Africa] is

"I was starting to doubt wasn't made for South America... and in the end everything turned out fine!"



■ SPORTS CARS

Morgan badges OAK racers

The Morgan name will return to the Le Mans 24 Hours 50 years after its famous class victory in the French enduro.

The British sportscar manufacturer has joined forces with the French OAK Racing team in an agreement that will result in its LMP2 OAK-Pescarolo chassis competing in 2012 as Morgans. The badging deal will encompass the solo works entry OAK will field in the new FIA World Endurance Championship and customer versions of the car racing around the world, including a car run by IndyCar squad Conquest in the American Le Mans Series.

Morgan boss Charles Morgan, grandson of marque founder HFS Morgan, said: "This deal gets us back to Le Mans 50 years after our twolitre class win with the Plus 4 Supersport. We've been looking to do something in motor sport again after the Aero 8 GT3 project [which ended in 2010] and this is the perfect partnership for us.

"Racing is important for the brand, but it also puts us in touch with technologies that we are not involved with already. For example, OAK has its own carbon facility. This deal could, perhaps, lead to a limited edition."

Morgan said that he hoped that a British driver would be part of the Le Mans line-up.

Morgan last competed at Le Mans in 2004 with the factory-run Aero 8R GT2 car.



Kubica in new setback

Robert Kubica's slow road to recovery suffered a further setback when he injured his right leg after he slipped on an icy road near his home in Italy.

The Pole suffered a fractured tibia, and was treated by surgeons who dealt with him after his rally accident last February. The original injury to his right hand remains the key to his return to full fitness.

Kubica is now a free agent, as his contract with Lotus-Renault ran out at the end of 2011. He continues to be associated with a possible future at Ferrari, where Felipe Massa is under huge pressure to raise his game if he is to retain his seat for 2013. However, there is competition from other drivers, including Ferrari Academy member Sergio Pérez.

Although opportunities for testing are limited, Kubica would be allowed to drive a two-year-old 2010 car, on 'demo' Bridgestone tyres, should any team wish to try him out.

OUR NEW WEBSITE

WWW.MOTORSPORTMAGAZINE.COM

By the time you read this the podcast team of Nigel Roebuck, Damien Rob Widdows and Ed Foster will have sat down with former Renault technical chief Pat Symonds. When he last came in to record a podcast

during November 2010 one listener commented that he wished we had Pat for three hours instead of one. Well, with the recording on January 19 we now have another hour of insight from him.

We've also set up a podcast for late February, but we won't be saying just yet who is ioining us for that one. Suffice to sav he was auite useful around La Sarthe in the 1970s and '80s Look out for it on the website from February 29.

It's rare that everyone agrees on something, but this did happen recently when Rob Widdows wrote about the lack of 'Sir' in John Surtees' name.

"What is perhaps more interesting," said Rob after writing about the New Year Honours for Nigel Mansell and Adrian Newey, "is why certain other motor racing people have not been recognised. The most obviously glaring omission is the only man ever to win world titles on motorcycles and in cars. I refer, of course to John Surtees

who should long ago have received a knighthood.'

Everyone was in agreement. "John Surtees' contribution motor sport

should not remain unrecognised," e-mailed Tomlinson, if the man himself might be more than a little embarrassed by such an honour!"

Alonaside explainina why Formula 1 should get rid of DRS, how good Tony Brise was and the future of European races. Nigel Roebuck also answered a question this month from Richard McConnell on which drivers who never won a Grand Prix would he most like to have seen do so

He named both Jean Behra and Chris Amon. "In 1968. had his Ferraris been more reliable. Amon should have been world champion." he wrote. "Like Behra, Chris won non-championship F1 races, but the cards never fell his way when it mattered, and he stands as emphatically the greatest driver never to win a Grand Prix. As Mario Andretti said, "If Chris went into the undertaking business, people would stop dying...

By the time you log on Nigel will have also written his monthly newsletter and will be selecting questions to answer for his next batch of Q&As. See you online soon.

■ FORMULA 1

Senna film nominated for three BAFTAs

Senna has been recognised by the British film making establishment with three BAFTA award nominations.

It will be in contention in the Outstanding British Film, Best Documentary and Best Editing categories at the February 12 ceremony.

It's highly unusual for a documentary to be nominated alongside traditional dramas in the first category, where its rivals include My Week with Marilyn and Tinker, Tailor, Soldier, Spy.

"It has been a joy to bring Ayrton to the big screen and I think that these nominations recognise the beauty, the drama and the spectacle of his life," writer Manesh Pandey told Motor Sport. "Our film stands up to the very best work out there. I'm so pleased, delighted and thrilled."

Unfortunately Senna was ignored by the committee responsible for compiling the 'long list' for the Academy Awards, so the complete membership have not been given a chance to vote for it.

The Motor Sport Month



Retro revival of the real RoC

Brands Hatch is set to host Formula 1 races under the illustrious 'Race of Champions' title for the first time in 29 years.

The Historic Race of Champions has been added to the bill for the Masters Festival to be held at the Kent circuit on May 26/27. It will cater for Grand Prix cars from the early years of the 3-litre era, between 1966 and '71.

The idea celebrates the non-championship F1 races held in April between 1965 and '83 and has been initiated by racers Ioe Twyman. Andrew Smith and Roger Wills. It will allow the Masters organisers to gauge support ahead of a possibly expanded series of races in 2013.

"We are hoping to provide a platform for the earlier cars," said Twyman, who wants to entice owners entering the Monaco Historique meeting held two weeks earlier to stay on in Europe for a second race weekend, "Apart from Monaco every two years, there is no other race for this era of car and we want to change that."

Two March 701s are early confirmed entries: Smith's ex-Jackie Stewart car, which won the 1970 Race of Champions (above) and Wills' ex-Chris Amon works sister version.

A pair of 20-minute races is the chosen format, while plans are underway to organise a traditional prize of 100 bottles of champagne to the driver who claims pole position. It is hoped that the races, which will be sponsored by preparation company Hall & Hall, will attract an entry of at least 20 cars.

The contemporary Race of Champions survives today as a sports stadia-based shootout event held each winter for star drivers from F1, sports cars, rallying and US racing.

■HISTORICS

Porsche 956 heads the cast in Stoneleigh

Centre stage for the displays at Race Retro will be taken by Porsche 956 chassis 001, the Rothmans car piloted by Jacky Ickx and Derek Bell on the model's debut race at Silverstone in May 1982. The car will showcase the event's celebration of 30 years of the 956 Group C car and its 962 derivative.

Porsches will also feature prominently on the live rally stage in the grounds of Stoneleigh Park, Warwickshire during Saturday and Sunday of the February 24-26 event.

Graham Hill's BRM P57 will be on display to commemorate the 50th anniversary of BRM's first world championship title in 1962, while two ex-works racing MGBs will help mark that model's 50th year. The 1963 Sebring 12-hour car of Christabel Carlisle and the MGB GT later raced at Sebring by Paddy Hopkirk and Andrew Hedges will be on show.

Motor Sport readers can take advantage of a special offer for advanced ticket bookings. Save £2 per ticket for any show day by going to www.raceretro.com, quoting discount code MS12.



More than 45 years after it last raced, the Lotus 18 that Stirling Moss took to victory at Monaco in 1961 is coming back to racing. It is hoped that this year's Monaco Historic Grand Prix will mark the car's return, although it has been regularly demonstrated over the years. "We're just crack-testing everything," said Ian Nuthall, who is preparing the Lotus. "It's an amazing car."



HISTORICS

F5000 set for 2012 Classic

Formula 5000, Formula 2 and touring cars from 1975 to 1999 are among the changes to

the race line-up for the 2012 Silverstone Classic.

For the first time, F5000 and F2 cars will race together at the huge July festival, sharing a grid for two races on the full Grand Prix circuit. The mighty 5-litre Chevrolet-powered F5000s are expected to set the pace, but the best of the 2-litre F2 cars from the late 1970s will be close behind. "It's great to be able to take F5000 cars onto the Grand Prix circuit," said Lola T400 racer Michael Lyons. "We have the horsepower, but the F2 cars are very quick."

Touring cars are back on the bill with an expected 50-car grid, including Super Touring machinery and earlier Group 2 and Group A cars ranging from BMW CSLs to Ford Sierra Cosworths and Rover SD1s. The 1990s era will be represented by Nissan Primeras and Ford Mondeos. The event will also commemorate the 25th anniversary of the Sierra Cosworth and 50 years of the MGB.



Martini tonic for 2-litre cars

International Supersports Cup has come an end with the announcement that the 2-litre cars from the pan-European series will be merged with the HSCC's Martini Trophy.

The two series for 2-litre sports-racing cars of the 1970s will join forces in 2012 under HSCC management and will be titled the Martini Trophy with Supersports.

The new series will have a five-event, 10-race schedule at high-profile historic race meetings, and former Supersports promoter Silvio Kalb plans to race his March 75S.

"This is the best news for a long time for 2-litre sports car racing," said Grahame White from the HSCC.

■ OBITUARY

Gianpiero Moretti

The founder of steering wheel manufacturer Momo, who has died aged 71 after a long battle with cancer, was a successful sports car racer, but perhaps his greatest achievement was persuading Ferrari to build its first prototype in 20 years.

The result of Moretti's efforts was the Ferrari 333SP, the car that was perhaps the saviour of American sports car racing in the 1990s. Fittingly, Moretti and his Momo-backed team gave the car its biggest win at the 1998 Daytona 24 Hours when he triumphed together with Mauro Baldi, Didier Theys and Arie Luyendyk.

Moretti began his racing career in the 1960s and from the start of the following decade was a regular on the international sportscar scene, predominantly in the US. He entered a variety of machinery, from Porsches through Marches and a Nissan, before the arrival of the 333SP in 1994.

Event of the Month



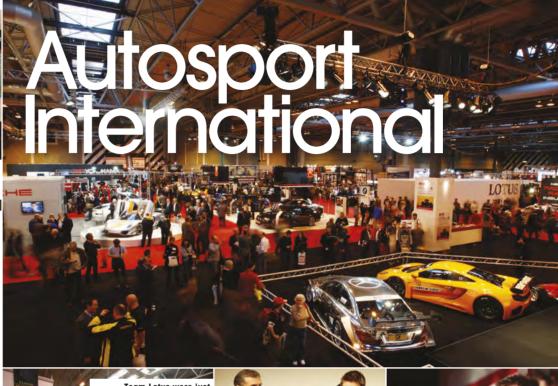
The NEC, Birmingham

THE AUTOSPORT INTERNATIONAL SHOW always feels like a reset button for the year ahead. The past season was firmly put behind us all on January 12-15 while new wares were plugged, star guests talked about their plans for 2012 and evervone looked ahead to another 12 months of excitement.

Motor Sport was there on all four days and welcomed many readers onto its stand to show off the new iPad edition and the latest issue. Editor-in-chief Nigel Roebuck was busy signing copies of the magazine on the Friday while editor Damien Smith fielded questions and interviews on the Thursday. It's a great time to get feedback on what we're doing, so many thanks to everyone who came to say hello and let us know that we're on the right track.

A 20-second walk from the stand in Hall 6 was the main stage, which was graced by guests such as David Coulthard, Jake Humphrey, Paul di Resta, Christian Horner and Pat Symonds from the Formula 1 paddock. The F1 broadcast coverage for this vear was a hot topic as new BBC lead commentator Ben Edwards and Steve Rider, recently recruited by Sky, also talked to the assembled crowds.

While Rider pointed out that the BBC should show more motor sport other than F1, Humphrey stressed that the BBC's coverage this year will still bring in the numbers. "The teams realise that they have to speak to the media," he said, "and Sky will do hours of coverage and they will do a stunning job because they produce good sports content. But the important thing for us is that we are going to have the big audience, we are going to have the millions of eyeballs and that's what the teams love."









The world of sports cars was also well represented with Audi drivers Allan McNish and Tom Kristensen talking about the new World Endurance Championship, and Aston Martin works driver Darren Turner describing the company's focus on GT racing after the 'blip' that was the AMR-One. Look out for the Oxfordshire-based driver on the Le Mans grid once again this year.

A stone's throw from the main stage was the usual contemporary F1 display, but it was to the far end of Hall 20 that many F1 fans headed for a special Ayrton Senna tribute. On display were the Toleman TG183B in which the Brazilian made his Grand Prix debut. two McLarens and the DAP kart that he used to finish second in the 1980 World Kartina Championship

Elsewhere, British rally drivers were celebrated with a selection of cars including the Ford Focus X7 FMC that Colin McRae used to win the 2001 WRC Rally of Cyprus and the 2002 Rally of Greece, and the Mini Cooper S that carried Paddy Hopkirk to his 1964 Monte Carlo Rally victory.

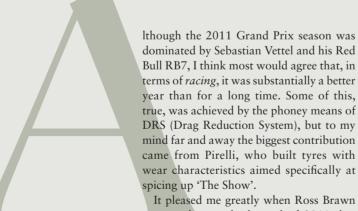
If you couldn't make Autosport International, we'll be at Race Retro at Stoneleigh Park in Warwickshire on February 24-26, and we hope to see you there. Ed Foster





REFLECTIONS

- Brundle says Sky coverage will be for the purists
- Senna's Williams ride removes Barrichello from F1
- Toro Rosso recruits know to whom they must aspire



suggested towards the end of 2011 that DRS might well be quietly dispensed with, that the new generation of tyres was on its own quite enough to provide the variety and unpredictability that are the lifeblood of F1 - and which had long been missing during those endless years of Schumacher, Ferrari and (bespoke) Bridgestone tyres.

In point of fact, though, it was tyres that

brought an end to Michael's spree of world championships. Having taken the title in 2000/01/02/03/04, he won only a single Grand Prix in 2005 - and that in a race, at Indianapolis, in which only six cars started.

All the Michelin runners, it will be remembered, were obliged to withdraw because of safety concerns for the French tyres through the long 'oval' turn at the end of the lap. Only those on Bridgestones two Ferraris, two Jordans, two Minardis went to the grid, and thus it was that names such as Monteiro, Karthikeyan, Albers and Friesacher figured in the top six of a Grand Prix, all of them lapped by Schumacher and Barrichello.

One way and another, it was a pretty still afternoon: Michael - to keep his hand in ushered his team-mate off the road while taking the lead, but otherwise there was little to sustain the disillusioned spectators'



interest, and understandably many of them never came back to Indy for an F1 race.

In the paddock we had known for quite a while that the Michelin runners wouldn't be starting, but this information was not shared with the fans, and it was the height of cynicism - presumably to honour some financial commitment that 20 cars came out for the parade lap, only for 14 of them to peel off into the pit lane at the end of it. Only then did 120,000 folk in the grandstands begin to understand that they had been had. It was one of the more shameful episodes in the sport's history, and the FIA's intransigence, in refusing to consider any solution to the problem (including the insertion of a temporary chicane), made a joke of the phrase 'governing body'.

If tyres played a considerable role in the outcome of races last year, so also - for a

very different reason - they did in 2005, for during the preceding winter the FIA had, out of the blue, decreed that in-race tyre changes were henceforth banned. The companies therefore went to work on

"Brawn suggested that DRS might well be quietly dispensed with"

building tyres good for 200 miles, and - the Indy debacle apart - Michelin did a very much better job than Bridgestone. Schumacher contrived still to finish third in the world championship – but his 62 points fell rather short of Alonso and Raikkonen, on 133 and 112 respectively. Bridgestone, in sum, was humbled, and no one was greatly surprised when the FIA announced that after a single year - the 'no tyre changes' rule was to be rescinded...

On occasion, though, Schumacher did manage to be genuinely competitive in 2005, as at Imola, where he goofed in qualifying and started only 14th, but came through to second in the race, with only Alonso's Renault ahead. Fernando, whose engine had already taken him to victory in Bahrain, was obliged to run all afternoon with a reduced rev limit, and faced a busy time with Michael through the last dozen laps.

It was indeed a mesmeric scrap, and everyone was transfixed. Friends at home later told me that they, too, had been glued to the screen - hence their keen >>>>

Nigel Roebuck

disappointment when suddenly, with four laps to go, the race was interrupted by a commercial break! By the time coverage was resumed the San Marino Grand Prix was all but done.

That day stood as a low watermark in ITV's coverage of Grand Prix racing indeed, all these years on fans still remember it, as do I the scene at the airport in Bologna that Sunday night, when everyone was commiserating with Jim Rosenthal, then ITV's F1 anchorman. In the press room we had learned – almost as it happened - of the fateful decision to 'go to commercial' in the UK, and of the almost simultaneous meltdown of ITV's websites and phone lines.

Rosenthal was only too aware of the furore back home, and clearly relieved to get a sympathetic response from F1's insiders. He personally had had nothing to do with the decision, and readily understood why British fans were as livid as they were. Problem was, contracts were contracts, and there had to be a certain number of ad breaks in the course of a Grand Prix...

Why, though, leave it until four laps from the flag? One charitable theory was that the man making the decisions perhaps assumed that Schumacher would swiftly dispense with Alonso (as he had Jenson Button), at which point the ads could spew forth without causing too much offence. If such were the case he was unlucky, for Fernando resolutely stayed in front, and with every passing lap the decision to 'go to commercial' necessarily became more agonised. By the time it was finally taken, furious condemnation from viewers was guaranteed.

As many pointed out, it was not, after all, as though a sainted football match were ever interrupted by commercial breaks. Can you imagine a situation, with Manchester United and Chelski 2-2 with five minutes left, and a commentator obliged to say, 'We'll be back in three minutes...'? Nor I, and that was always the great failing in ITV's coverage of F1: never

from the beginning of discussions should it have been countenanced to have the race - the race - interrupted for any reason, let alone something as irritating as

adverts. A friend of mine kept a list of those companies pumping their products at him during the Grands Prix, and resolved never to buy any of them. Illogical it may have been, since it was this that was paying for the coverage in the first place, but I could understand his point of view.

"Yes, the ad breaks infuriated everyone," said Martin Brundle, who began his broadcasting career with ITV in 1997. "If ever there was a sport not cut out for them, it's F1 – but ITV's business model was such that they couldn't afford not to put the ads on when they did, because they were paying so much money to cover it. And, of course, over time the ad breaks got longer - going from one minute 45 seconds to two minutes 45...

"Naturally the viewers hated that, and I completely understood it, but to make any financial sense out of covering F1 that was what ITV had to do. Having said that, though, it annoys me to read that ITV

> weren't very good. I don't subscribe to that. They did the broadcasting of F1 for 12 years, and - other than the ad breaks - I think they moved the coverage on massively, given what they inherited from the BBC..."

Brundle has a point. Although the Beeb's coverage of F1 had always been highly professional, it was very much of the 'no frills' variety, the corporation relying heavily on the popularity of Murray Walker and, for many years, the astuteness and irreverence of James Hunt.

A poignant memory is of arriving home on the Tuesday morning after the 1993 Canadian Grand

Prix, and playing back the messages on my answering machine. One was this: "Nigel, J. Hunt, Monday evening. Just ringing for a catch-up – give me a shout. Bye..." On my way in from Heathrow I'd been given the news of James's death late the previous night. He, like Murray, had not been in Montreal, because it was a long-haul race, and cheaper for the BBC to have the two of them watching a monitor in London.

So well were these broadcasts put together, however, that few viewers were aware that Murray and James were not always where they appeared to be. Relatively, the coverage was done on a





shoestring, and if, when ITV won the contract, some fans found the music and glitz took a little getting used to, still there was no doubt that many more background stories and interviews were aired than had previously been the case. Brundle is right: in the era of ITV the coverage of Grand Prix racing undoubtedly became more comprehensive. If only it hadn't been for those wretched ads...

When the BBC got the British TV rights back for 2009, coverage of F1 reached a new level of popularity. "No doubt about that," said Brundle. "It was more of a *Top Gear* style programme, and the audience figures reflected that - four million for qualifying, and six million for the race...'

"I think the British – the BBC – do a perfect job," commented Niki Lauda, who has himself worked in television for many years. "Martin and David [Coulthard] - I think they're the best of the lot, and they also have so many others working with them. They see

so many different things, which a lot of the commentators don't even recognise."

True enough. It was an inspired idea, for 2011, to put Coulthard in the commentary box with Brundle, and for many the biggest loss in the new BBC/Sky arrangement is that the partnership has been broken up. While David remains with the Beeb, Martin – after long deliberation – is away to Sky.

"I'm slightly crestfallen not to be working with DC any more," he said. "I feel a bit as though I've moved from McLaren to Ferrari, or from Man U to Man City. I don't like change - I'm the Norfolk boy who lives five miles from where he was born, 52 years ago. It wasn't an easy decision to take. Rest assured, I've lost a lot of sleep over it..."

It was in Hungary, early on the Friday morning, that news broke of the BBC's decision to cut back on its commitment to F1, to cover only half the Grands Prix live, while Sky would transmit the lot. In these austere financial times

cutbacks have become a way of life and the BBC concluded that its spending on F1 close to £50m a year - had become untenable. Many believe that, had Bernie Ecclestone been approached for a discount, it might well have been granted, but in the event apparently that never arose, and so the deal with Sky was done.

Done very quickly, too, so that it took everyone - Brundle included - completely by surprise. On Twitter, Martin at once made his feelings clear: "Not impressed..."

"I'll admit," he said, "that for a ""

Nigel Roebuck

time I actually got a bit demotivated. After Hungary I don't think I went into the track on a Thursday at any of the other races. The last thing I want to do is beat up on the BBC, but I do want people to understand why I would at least engage with Sky. Frankly, I felt the BBC let us down because they changed the ground rules - they told me all the way through that they'd never ever not completed a contract, but then they bailed out a couple of years early and that's what caused this situation.

"I thought it was very badly handled. We got the news in the TV compound in Hungary that morning, and after very little briefing we then had to walk into the paddock and face the world's F1 media. It

really didn't need to be announced instantly.

"I went to see Bernie that weekend, once we'd got the glad tidings, and I said, 'What d'you want me to do?' He hesitated for a second, and then he said, 'I want you to go to Sky'. It wasn't that that made my decision, but it was worth paying attention to..."

Brundle knows that many have assumed he is going to Sky simply for the money, but while he admits that was hardly a deterrent, he is emphatic that there was much more to his decision than that. "As I said, I agonised a long time over it, but I'll admit to some

frustrations with the BBC - I wanted to do more technical stuff, but increasingly it seemed to me that the content was coming under the control of one person, and I didn't always agree with some of it."

What struck me, I said, was that there appeared to be an increase in gimmicky stuff in the pre-race content, sometimes at the expense of more interesting and relevant stories. When I got home from Silverstone, for example, and watched a recording of the afternoon's events, I was astonished that Alonso's exuberant laps in Bernie Ecclestone's ex-Gonzalez Ferrari 375 – for many spectators a true highlight of the day - were nowhere to be seen.

"Yes," said Brundle. "We missed the whole thing with Fernando - and then he goes and wins the Grand Prix! The other thing about Silverstone was that the story of the weekend was the blown exhaust controversy - something that at that one race made the cars a second a lap slower and we gave it maybe two minutes...

"It wasn't until race weekend in New Delhi that I finally made up my mind to go to Sky. There was one moment when I thought, 'I don't care how many people are watching – this is not the sort of F1 television I want to be making...' I know not everyone would agree with that - the BBC have been getting the sort of audiences for qualifying that ITV used to get for the race, and that's

> extraordinary, something's right! If they'd played a different hand, I wouldn't have left. Sky will be more for the F1 purist than the casual viewer..."

> When first I heard that, I'll confess to being surprised, but Brundle said it was indeed the case, and had played a big part in his decision. "Ever since the deal was announced, Sky's had people at the races, just filming promo stuff: in Abu Dhabi they had 17 people there, with five cameras. They're going to show the new car launches, the pre-season tests, and at the Grands Prix they're going to

show both practice sessions on Friday, and the one on Saturday morning, as well as qualifying and the race - which they are not going to interrupt with ad breaks...

"I took for ever to make up my mind, but I'm convinced I've done the right thing - even if I'm probably going to be doing three times more work than with the BBC. Everyone I've met at Sky talks my language, and I've been astonished by the commitment

they're making to F1. When I was there recently, a McLaren F1 show car was being delivered – it's in the lobby, just to motivate everyone!"

If Brundle's enthusiasm for his new job with Sky is unbounded, he well knows that not everyone shares it. On websites and blogs some fans have called him a traitor for leaving the BBC, and of course some of this animosity stems from a widespread distaste for Rupert Murdoch and all his works.

There is also the question of cost: not surprisingly folk instinctively baulk at the idea of paying for something previously free, and a Sky Sports subscription is not cheap - particularly at a time when everyone, at least to some degree, is suffering from the financial holocaust spawned by those darling bankers, with a little local help from G Brown. For some the cost of a subscription will simply be too high, while others will perhaps find a way to finance it by making economies elsewhere. It seems beyond doubt that Sky's coverage will be more comprehensive than anything previously seen, so perhaps in the coming years we are going to find out how many people are casually interested in F1 and how many are devoted to it.

"When I was a kid," said Brundle, "I used to struggle to stay awake until 11 o'clock,



"I wanted to do more technical stuff with the BBC"



listening to Murray and James doing a onehour highlights programme of that day's race, and then I'd struggle to get to school on time the next morning. Now you're going to have a dedicated channel covering F1 and you're going to get the might of Sky versus the might of the BBC - I mean, which bit of that do the fans not get?"

Time will tell. Whatever else, though, it's reassuring to know we will not have a repetition of Imola 2005...

t is mid-January as I write, and as of now we know the identities of all but one of the drivers who will be competing in this season's World Championship. Pedro de la Rosa still awaits a team mate at HRT, and while this is unlikely to keep anyone - save candidates for the drive - awake, rather more surprising is that only now have we learned that Bruno Senna will partner Pastor Maldonado at Williams, this putting an end to Rubens Barrichello's hopes of a 20th season in Formula 1.

Williams had an atrocious time of it in 2011, Barrichello and Maldonado contriving to score but five points in a season in which Toro Rosso, immediately above them in the table, ended up with 44. Frank's team finished ninth in the constructors' championship, ahead only of the 'new' - or not so 'new' - outfits, which again failed between them to put a point on the board. In 2010 Williams had been sixth, with 69 points, and both Barrichello and Nico Hulkenberg had their moments; this time around a more radical car simply didn't work, and even Rubens struggled to maintain his perennially sunny demeanour.

As Frank has always maintained, F1 is a meritocracy and should remain so. Reward according to results, in other words, not only in terms of what a team receives from Bernie Ecclestone's bottomless vault, but also from the point of view of sponsor interest and outlay. Williams have not won a Grand Prix since Juan Pablo Montoya's BMW-powered car beat Kimi Raikkonen's McLaren at Interlagos in 2004.

Lately times have been hard, therefore, as clearly evidenced a year ago by the replacement of the immensely promising Hulkenberg by Maldonado. When this was announced the press uniformly concluded that Pastor's Venezuelan petro-dollars had swung the drive in his direction, and it was an absurdity when Williams CEO Adam Parr denied this was the case, somewhat curiously describing the journalists' reasoning as 'repulsive'.

It wasn't repulsive any more than it was incorrect. In the press room down the years I would say there has been more natural sympathy, in every sense of the word, for Williams than for any other team in the paddock. Occasionally that was perhaps over the top, but such has been the essential affection for Frank and Patrick Head that there was always pleasure in their successes, resolute support for their team in less felicitous times.

After several disappointing seasons, to say nothing of the worldwide economic meltdown, it was no surprise that Williams needed to take a 'paying driver', and no disgrace, either, so quite why Parr reacted as he did remains unclear: the press room wasn't born yesterday, and history shows that few have been the teams unfailingly able to pick their drivers simply on merit. As last season came to an end at Interlagos, Maldonado was the driver confirmed for Williams in 2012, Barrichello the one left dangling.

Several friends of Rubens tried gently to point out to him that probably this was the end of the road. His had been a distinguished F1 career, ranging over an unequalled 326 Grands Prix, but maybe now it would be better to quit, have a big celebration at his home Grand Prix, than face being shown the door, as has happened to so many others over the years.

Barrichello, typically, declined to go along. He may have earned a great deal of money from his marathon spell in F1, but essentially Rubens is one of those rare souls who loves driving for its own sake, and his enthusiasm for the life of a Grand Prix driver is just as it was back in 1993. Three years ago, when Honda's late-in-the-day withdrawal from F1 left him without a drive, he had weeks of anxiety while Ross Brawn decided who should partner Jenson Button in the reconstituted and renamed team, so this was not a new situation for him: he would not do the 'emotional farewell' thing at Interlagos, he declared, because he wasn't ready to say farewell.

Many suggested it was time for Barrichello to go because, well, because he was getting on a bit, wasn't he? True, he will be 40 in May (four months after Michael Schumacher's 43rd birthday), but that in itself was no reason to stop - the car, after all, doesn't know how old the driver is.

When he got the Brawn drive for 2009 finally, plenty of observers thought that a younger man should have been signed, but Rubens won twice that year, at Valencia and Monza, and through the second half of the season undeniably had the edge on Jenson, who went on to become world champion. After years in the wilderness with Honda, both men showed that in the right car they could get the job done.

"That's the most frustrating thing about F1," said Barrichello. "If you haven't got the car, you can do nothing about it - it's not like tennis, where you just have a racquet, and, OK, sometimes you have a bad phase, and then you come out of it. I had success at Ferrari, none at Honda, then success again with Brawn, and it was nothing to do with talent - my mind has changed over the years, but I don't think my actual talent has ever changed..."

After a single season as Brawn the team was bought out by Mercedes, Button going over to McLaren, Barrichello to

Nigel Roebuck

Williams. After the successes of 2009 this was widely seen as a step down for Rubens, but he refused to see it that way. "If you look back to interviews I did when I was karting in Brazil, you'll see that when I was asked which team I wanted to drive for in F1, I always said Williams. I think this is the right moment for the team to get me - they're getting all my experience and enthusiasm and love and passion for driving."

It should not be forgotten, either, that his signing of a Williams contract obliged Barrichello later to turn down another offer from... McLaren, no less. "It didn't bother me," he said. "I'd made the agreement with Frank, and I was a happy man."

Quite apart from anything else, Rubens for the first time in his F1 career - was unequivocally number one driver for a team, and he had a staunch ally in technical director Sam Michael, who had worked with him at Jordan in the early days. In 2010 I asked Sam how the renewed partnership was working out, and his response was instant: "Rubens is the best driver I've ever worked with, full stop." Really?

"Absolutely. How he hasn't been world champion three or four times I can't imagine. He's not far off 40 - and he still has the enthusiasm of a rookie. When I talked to Ross about him, he said, 'You know, the cars that took Michael to all those victories would never have been the cars they were without Rubens...' I can only say that I've never met a driver who understood racing cars, and how they work, like him."

Now, though, Sam Michael has left Williams for McLaren, and there's no doubt that the last year has been one of seismic change for Frank's team. As Mike Coughlan moves in as technical director, so Patrick Head, while remaining a Williams man, ends his time with the F1 team, and although for some years he had been less directly involved than formerly, symbolically his departure truly does mark the end of an era. Doubtless Head will continue to pop up at a Grand Prix here and there, for racing is in his DNA, but in future Williams will not - cannot - be Williams as she is spoke.

There appears in some circles to be a

belief that racing drivers have a sell-by date, that once a certain age has been reached they should gracefully step aside to allow guys perhaps half their age to move in. I have a certain sympathy for this view, in the sense that it appears - in this era of testing bans - ever more difficult for a young driver to register his talent and lay claim to a race drive. That said, there is no logic in dropping a driver simply on grounds of age: experience, after all, will always have a hand to play, and as Sam Michael said of Barrichello, "there's almost nothing that can happen over a Grand Prix weekend that he hasn't seen a hundred times before..."

When Rubens was awaiting word from Brawn three years ago, one of his rivals for the drive was Senna, and the same applied now with Williams. In an ideal world no team would choose to go racing with two virtual rookies - Senna and Maldonado but Bruno had considerably more financial backing behind him than Rubens and that was not to be discounted in this financial climate. Even before the credit crunch 'drivers with a budget' always found themselves welcomed by the smaller teams, but time was when Williams could pick and choose. Let's remember that Nigel Mansell, in his world championship season, left the team rather than go up against Alain Prost in 1993, and a year later Prost did the same, because Ayrton Senna was coming on board for '94. Fifteen and 20 years ago everyone wanted to drive for Williams.



lsewhere on the grid, there was some surprise when Toro Rosso announced that neither Sébastien Buemi not Jaime Alguersuari would be retained for the coming season, but I must say it seemed to me no more than logical, if perhaps a touch harsh. Toro Rosso, after all, exists very much as a proving ground for young drivers, with a view to their possible elevation to the Red Bull team, and while Buemi and Alguersuari both did a competent job, there was little evidence that either could one day reach the

Nigel Roebuck

top level. The feeling was that they had had their chance, and now it was time for others from the 'Red Bull Academy' to try their luck. Hence Daniel Ricciardo and Jean-Eric Vergne drive for Toro Rosso in 2012, and there seems good reason to believe that one of them may eventually

move up to partner Sebastian Vettel.

This, after all, is how Vettel himself progressed. As BMW's test driver, he made his F1 debut at Indianapolis in 2007, standing in for Robert Kubica, who had suffered an enormous accident in Montreal the previous weekend. Sebastian finished eighth at the Brickyard, but Robert

was back at the next race, Silverstone, so that looked like the end of his racing for the moment.

Not necessarily so. Over at Toro Rosso they had tired of Scott Speed's unwelcome blend of modest pace and curious behaviour, and Vettel, just celebrating his 20th birthday, seemed the obvious candidate to replace him. For all that, it amazes me still that the approach to BMW proved successful, that Mario Theissen who must surely have been at least thinking in terms of replacing Nick Heidfeld with Vettel for 2008 - allowed him to go elsewhere. When I asked Mario about it at the time, he said BMW had not wished to stand in Vettel's way, and while that was all very laudable, still it seemed extraordinary that this German company would let this German prodigy slip through its fingers.

It should be remembered that back then the regulations were somewhat looser, in the sense that a Toro Rosso was effectively a Red Bull, if always an update or three behind. Having said that, Adrian Newey's Renault-engined RB4 was a good car, rather than a great one, and as the 2008 season progressed the Ferrari-powered Toro Rosso was able to close the performance gap. At Monza, where the

weather was unspeakably foul in qualifying, Vettel shook the establishment by taking pole position, threatened - remarkably only by Heikki Kovalainen's McLaren.

These two were comfortably quicker than the rest and I can remember the exhilaration in the McLaren camp afterwards, for the forecast for Sunday was similarly dire, and Kovalainen looked a strong bet. "You've got it made..." an engineer said to Heikki.

As it was Kovalainen indeed drove a fine race to second place the next day, but he could do nothing whatever about Vettel, who led confidently from the start, and in the atrocious conditions never looked like making the mistake under pressure many - the McLaren man included - had predicted. Not least because he was never under any pressure.

It was one of those days you never forget, a race destined to sit in motor racing legend because it went so much against the state of play and featured a driver you knew instinctively was going to be one of the great ones. "This kid's the real deal, isn't he?" said Martin Brundle afterwards.

He was. At the end of the 2008 season David Coulthard announced his retirement and, as had long been planned, Vettel duly

slid into Red Bull. The rest - three seasons, two world championships, 20 Grands Prix victories - we know. Messrs Ricciardo and Vergne will dream of such things.

Monza in 2008 made for

an unforgettable day

"Seb's a brilliant racing driver," said Brundle, "but he's also smart. Something I've learned since I stopped driving - and something the current drivers, by and large, have failed to learn - is that journalists, whom they hate bothering them, are the opinion formers. And in the time since I turned from gamekeeper to poacher Sebastian's one of the very few I've met who's worked that out. They're all obsessed with saying the right thing at press conferences, but they haven't worked out how much more it means if you've got a journalist or TV guy wandering round the paddock, saying, 'Tell you what, that Vettel is a lovely kid..."

So he was, and - perhaps more remarkably - so he still is. Without question there is a tungsten side to Vettel, as members of his team can attest, but in normal circumstances he remains as unaffected, as witty, as the day I first met him. Perhaps he learned lessons from Gerhard Berger, co-owner of Toro Rosso during his season and a half with the team. "All through my career," Gerhard said, "I always tried to be myself. It's much easier that way, and I told Sebastian he should do the same - when you put on an act, people can always tell..."

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

Rob Widdows

DISPATCHES



VW'S PLAN OF ATTACK

LOT OF MY LIFE GOES BY WHILE ON THE HIGHWAYS OF Britain. Sometimes I pass the time by betting myself a fiver that in the next 30 seconds I will see a Volkswagen. I am still in profit. So, to curry favour with all you VW drivers, this month's column is about the maker of these ubiquitous cars. I'm not daft; I know how to drum up a few more readers.

If Volkswagen made alarm clocks I would buy one. This is because people keep telling me the cars are so reliable. Maybe they are, but aside from the venerable Golf GTi they are not exactly sexy. But this may be about to change with what VW calls 'the hottest Polo ever'.

Volkswagen has beaun to test its Polo R WRC in preparation for the 2013 World Rally Championship, the company finally deciding to expose its cars at the highest level. There is, quite rightly, much excitement at the prospect of another make joining the WRC.

The manufacturer has signed up Sébastien Ogier, who won five rounds of the WRC in 2011. The highly rated Frenchman has clearly decided that the potential of the Polo is a better bet than another season alongside his nemesis, Sébastien Loeb at Citroën. No sooner had Ogier zipped up his new VW overalls than he went out and won the Race of Champions in Düsseldorf, beating Tom Kristensen in the final and showcasing the new Polo (above).

"Sébastien really impressed me," said Tom afterwards, "and he certainly has a big future ahead of him in rallying with Volkswagen." High praise indeed from the eight-time winner of Le Mans.

Double world champion Carlos Sainz, who won the Dakar Rally for VW in 2010, is also on board in an advisory capacity. He has done some initial shakedowns with a prototype car and will continue to act as a management consultant for the WRC team.

"It's an interesting challenge; we start from zero," Sainz tells me. "The prototype is only 60 per cent of what will come later in the development, but it is promising and has a good balance.

The first indications are good, but we are too far away from the final car to make a proper judgement. On a modern rally car the most important factors are weight distribution and suspension setup - that's where the speed and driveability comes from in the beginning. You don't slide cars like in the old days; it's important now to drive the modern cars as straight as possible.

The Polo will need to be good. Loeb says he will continue to compete until the end of 2013 and Sainz is acutely aware of the strength in depth at Citroën. "They have so much managerial experience, but it's not only Citroën, there is also Ford and Mini. But Loeb is an outstanding driver, an extraordinary talent - to win eight titles, this is only for a mega driver. But we intend to make it more difficult for Citroën in 2013.

Former German F3 champion Kris Nissen, now VW's director of motor sport, is also upbeat about its high-profile move to the WRC.

"After our success on the Dakar we needed to find other highlevel things to do and the WRC gives us global exposure," he says. "But it needs more TV coverage and we are working on that with the FIA. More manufacturers are coming in now and the WRC gives us bigger opportunities for our dealers and sponsors. Also the sporting image of our cars will be improved by success in the WRC and we will be working with the same passion with which we won the Dakar Rally for the past three years." No surprises there

Nissen is clearly enthused by the signing of Ogier from Citroën ahead of a demanding test and development programme on all surfaces mixed with a WRC campaign in a Škoda Fabia S2000.

"I'm really proud that Sébastien chose to come to us now. He can test the car all through 2012 and that will put him in a good position for 2013. I don't believe he was in the shadow of Loeb, no way, and remember that they both won five rallies last year."

I'd have another fiver on there being plenty of hot Polos on the roads before too long. M

Mat Oxley

ON TWO WHEELS



DORNA'S MASTER PLAN

FEW MONTHS AGO THIS COLUMN SPECULATED THAT MotoGP rights-holder Dorna was quietly working to undermine the power of the factories to achieve its aim of closer, cheaper racing. Now the peace has been broken, with Dorna CEO Carmelo Ezpeleta turning into something of a Bernie Ecclestone, abandoning diplomacy and uttering diktats.

Ezpeleta (a bit taller but balder and poorer than Bernie) used to be friends with the manufacturers. He thought they were vital to MotoGP's existence. Now he believes the opposite - that it is their costly R&D programmes that are actually threatening the sport.

This confrontation has been coming for a while and will be familiar to F1 fans - on the one side are those flahting for entertaining racing, on the other are those arguing for a technology race.

For several years MotoGP has struggled to fill even half the grid. Last season there were usually just 16 or 17 starters. The problem, of course, is a lack of sponsorship that had already claimed several teams before the global economic meltdown

Ezpeleta's henchmen are now concocting a radical new set of MotoGP rules to slash costs and massively restrict technology. No surprise that the factories - the few still left - aren't happy with this plan to 'dumb down' the sport. Honda has threatened to quit.

Dorna's assault on racing purity has been well planned. A couple of years ago Ezpeleta outlined his plans for a new kind of low-cost MotoGP bike designed merely to fill the back end of the grid. These machines - grudgingly accepted by the factories - would run tuned streetbike engines that make around 230bhp (like Colin Edward's Suter BMW, above) and would never trouble the exotic factory prototypes that make 250bhp or more.

But as soon as these so-called CRT bikes (this stands for Claiming Rule Teams) began shakedown tests they were no longer grid fillers, instead they became the thin edge of the wedge. During a press conference to launch the first 2012 CRT team Ezpeleta announced - almost by the way - that within a few years all MotoGP bikes will be like this.

No one knows whether he planned it this way all along or whether his decision to con the factories came more recently. Either way, it's a genius move: once the CRT bikes were up and running the factories effectively lost most of their power because Dorna no longer relies entirely upon them to put bikes on the grid.

Dorna won't ban factory prototypes, instead it will reduce them to the level of CRT bikes, most probably with an rpm limit and control ECU. These new rules could be introduced as soon as 2013.

The factories argue there is no point in them being in MotoGP if there is no technical challenge and they may well be correct. But Ezpeleta is adamant: his interests are a full grid and close racing, even if that means one or more of the factories departing.

The new technical rules have vet to be finalised, so we don't vet know whether MotoGP's control ECU will feature traction control. No doubt Ezpeleta will be watching this year's British Superbike Championship with special interest because it is the first major bike racing series to ban traction control, BSB has also introduced a milder engine spec, which (in some people's minds) does away with the need for traction control. If the British series gets through 2012 without major incident then Ezpeleta will surely be emboldened to ban - or severely limit - traction control in MotoGP.

The factories aren't the only people displeased with MotoGP's new direction. World Champion Casey Stoner has also threatened to walk. "If MotoGP isn't prototypes then I'll be out of here," he told me recently. "It's like Formula 1 switching to touring cars."

Stoner exaggerates somewhat but you get his drift. But even if the Aussie does retire early Ezpeleta knows that most riders will stick around. Their only real alternative to MotoGP is World Superbikes, where the machinery is even less exotic and salaries are massively reduced. Dorna, it would seem, is going to win this war.

Gordon Kirby

THE US SCENE



NEW YEAR, NEW HOPE

ITH NEW CARS AND ENGINES FOR THE FIRST TIME IN SIX years, the IndyCar Series is hoping for a fresh start in 2012. This follows the dispiriting era of the old Dallara-Honda de facto spec car, which came to an abrupt and tragic end when Dan Wheldon was killed in an explosive 15-car accident at last season's finale in Las Vegas.

Wheldon's death focused everyone's minds on the problems of pack racing on high-banked ovals with underpowered cars that have too much downforce. Many big names in the sport, past and present, have pleaded for a substantial increase in power and a reduction in downforce, but IndyCar's new package makes only a tiny change to that equation. Nor was the issue addressed by the accident report into Dan's death.

The aftermath to the accident highlighted the web of problems in which IndyCar is enmeshed, with a poor officiating team, a weak schedule of races and the smallest media footprint of all professional and many amateur sports in America. Brian Barnhart has been removed as chief steward but continues as vicepresident of operations, while IndyCar's boss Randy Bernard has struggled to find someone to replace Barnhart in race control.

With the drivers opposed to racing on high-banked 1.5-mile ovals such as Las Vegas, Bernard also had trouble planning a new calendar. IndyCar will race on only four ovals this season - the fewest ever - and no fewer than eight street or temporary circuits. Over the past 15 years 20 oval tracks have abandoned Indycar, which has become primarily a street-racing series in danger of ending up with only one oval race - the Indianapolis 500. It's ironic that Tony George's IRL revolution, intended strictly as an oval series, has resulted in the near-death of Indycar racing on ovals.

It's also clear that many people find the new Dallara DW12 (above) aesthetically unattractive, while early testing of the car did not go well. Quicker than the old car on road courses,

it lacked for speed on the ovals - at Indy in particular - because of weight distribution and aero balance problems. After four months of initial testing the first batch of DW12s were delivered to the teams in December, with Dallara offering optional new front and rear suspension at no charge to alter the wheelbase. Dallara hoped to resolve the aero problems in the wind tunnel in January. I'm sure Ganassi and Penske will figure out the new car, but it will be an expensive and demanding test for most other teams.

Many fans keep reminding me that while the car's appeal is important, the most important thing for IndyCar is to develop a new generation of American stars. Until the drivers such as Graham Rahal, Ryan Hunter-Reay or Marco Andretti can become regular race winners and champions, transforming themselves in IndyCar's impoverished media environment into sporting superstars, Indycar racing will continue to languish in the margins.

Almost 30 years ago Emerson Fittipaldi, Teo Fabi, Derek Daly and Roberto Guerrero formed the leading edge of a wave of ex-Formula 1 drivers who swept over Indycar racing. For a while the influx of foreign drivers was a good thing, helping to broaden global interest in what was once a strictly American sport. But eventually the overseas drivers dominated, leaving us with only a handful of American drivers, none of whom had anythina like the star power once enjoyed by such as AJFoyt, Mario Andretti, Parnelli Jones, Bobby and Al Unser, Rick Mears, et al.

It will be interesting to watch the engine battle unfold in 2012 between Honda, Chevrolet/Ilmor and Lotus/Judd, and if anyone can challenge Ganassi and Penske's dominance. Almost lost among the grief surrounding Wheldon's death was Dario Franchitti's third straight IndyCar title and his fourth in five years. Franchitti and Ganassi have become the combination to beat in IndyCar, and it will be intriguing to see if the new formula has any effect on their chances of defending their crown.

Desirables



Desirables



Dial C for memories

Thanks for the Alan Mann Racing article in February's issue, which rekindled some good memories. He mentioned racing a Jaguar C-type and running a garage in Sussex with Roy Pierpoint. That sounds like the Wayside Garage, Rusper (north of Horsham) from which my late father, Keith Jeans, bought a bright red C-type registered 333 GMT in about 1959 to do some club racing, sprints and hillclimbs. It was chassis 050, rebuilt following a serious accident at Oulton Park some time previously. As one did in those days, he drove to and from meetings and enjoyed it to the full on the roads. I even got taken to and from school in it occasionally.

He had several class wins at Wiscombe, Brighton and Weston-Super-Mare against the likes of John Buncombe, (Jonathan's dad), Wally Cuff and Dizzy Addicot, but was hopelessly outclassed at circuits by more nimble machinery like the Lotus XI. So he decided to acquire one for the following year. Having paid £1000 for the Jaguar he struggled to get £750 for it a year later. It was subsequently owned by Brian Corser at Shrewsbury, who fitted a 3.8 engine, and in the 1990s I heard it belonged to Steve Earle in California.

The Lotus XI my father bought came from a dealer well known at the time, and his first meeting was at Goodwood. Following practice he was approached by a man on crutches called Ken Loasby who took a lot of interest in the car as it had previously been his. He claimed that he had driven the circuit at least a second quicker than father's time. Looking at the crutches, Dad realised how this was achieved. He went on to ask how long father had owned the car. When told, he said that was interesting because the dealer hadn't bothered to inform him that there was any interest in the car, let alone that it was sold. Thanks for the memories. Simon Jeans, Sherborne, Dorset

Gethin's great impression

Sir.

It was with great regret that I learned of the death of Peter Gethin, a very under-rated driver in my opinion, who seemed in his Formula 1 spells at McLaren and BRM to have arrived just at the wrong time.

Although I attended my first 'live' race (the BOAC 1000Kms at Brands Hatch) in April of 1968 at the tender age of four years, it was not until Gethin's famous victory at Monza in September 1971 and that of his team mate Jo Siffert at the Osterreichring two weeks before that I seriously took notice of motor racing, and can recall scanning the pages of my father's copies of Autosport, Motoring News and, of course, Motor Sport to read the details of these two thrilling races. Not long after that win at Monza I was present at Brands Hatch for the World Championship Victory Race which, with the fatal crash of Siffert, taught me the brutal truth of the sport at that time. Many readers may understand a seven-year-old's bewilderment as one hero 'won' the race whilst another died.

The following year I was at the British Grand Prix. At the souvenir shop selling BRM merchandise I bought a poster of Gethin in his

P160. At the time I thought this the finest looking single-seater car; I still do. As I walked with my father on the pavement behind the main grandstand we came upon the man himself, sitting on the grass, in his racing overalls flanked by two tightly clothed

Marlboro beauties. I asked him if he would sign the poster which he agreed to do, but we then realised that none of us had a pen to hand. Gethin got up from the grass, saying he would go to find one and invited me to sit with the girls whilst I waited, telling them to 'look after me'. I still have that autographed poster.

Living close to Brands Hatch in the late '60s and early '70s I was lucky enough to go to many races, especially F5000 where, of course, Gethin was a master, first in a McLaren, then a Chevron and finally a Lola. The last time I saw him race was as a late replacement at the British Grand Prix of 1974 in a one-off Embassy Hill Lola drive.

The 2011 season has seen more overtaking in Formula 1 for many a long year and even if it is somewhat contrived, it has added to the spectacle. However, take a quick detour to YouTube to see Gethin's victory at Monza on

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)

that far off day in 1971 and you will see all anyone needs to about real overtaking and courageous driving.

Phil Johnson, Belgrade, Serbia

Epstein's adventure

I took this photo on the startline for the 1963 Targa Florio. The car is a 2-litre Cooper-Climax driven by the recently deceased Jackie Epstein and co-driver Bill Wilkes. The car was classified 23rd, but if I remember correctly it crashed on its last lap at very high speed, putting Jackie in hospital. Again, I seem to remember visiting him in hospital. However, he made a full recovery to drive again in the Targa with Paul Hawkins in a Ferrari 275LM. Jackie was of

> course the son of the great sculptor and painter Sir Jakob Epstein.

Perhaps Bill Wilkes is still around and can fill us in on their Targa adventure. In those days, any

visit to the depths of Sicily was indeed an adventure. I think the car must have been written off, but who knows - it may still be around and happily racing in historic events? Paul Watson, Halstock, Dorset

Big hand for Hans

Sir,

I thoroughly enjoyed reading Lunch with... Hans Stuck (December issue) and would like to share a couple of incidents with your readers.

The first occurred at Silverstone in the late '80s or early '90s. Hans was driving a BMW touring car in a support race and in those days the paddock for such events was out on the old Club Circuit straight. I was passing the area where Hans' car was being prepared and heard a couple of young lads ask one of the mechanics if Hans was there as they wanted his autograph. The mechanic explained that he had had to go to another part of the circuit and suggested that they came back later.

A while later I happened to be walking in the same area when Hans arrived on a very old push bike. I heard the mechanic mention that two boys had been looking for him and that they had been asked to return later. Hans

|| Letters ||

was clearly unhappy about this and quizzed the mechanic for descriptions of the boys. He then set off on the bike at high speed and eventually found the boys and signed their autograph book. While doing so he chatted away to them and apologised for not being available earlier! I bet those boys have not forgotten his kindness. So typical of the man.

The second incident occurred at Le Mans in the late '90s. I was in the grandstand above the pits during one of the evening practice sessions when Hans was interviewed live on Radio Le Mans. At the end of the interview he shared a joke with the listeners and then started laughing. (Anyone who has heard him laugh will be able to imagine the volume.) Still laughing, he walked away down the paddock but via the radio we could still hear him! Gradually his laugh faded away - but I can still hear it in my memory. Wonderful!

David Keen, Sevilla, Spain

Snakes alive

I read with interest in your February 2012 issue that this year's Goodwood Revival will feature an all-Cobra race, announced as being the first of its kind in Britain.

Well, not quite... On July 22, 1990 the HSCC put on an 'AC Cobra Trophy' at its International Chevron Association Weekend at Donington Park. The race drew a respectable entry of 23 cars (of which eight were of the road-going variety) but no special-bodied cars were present.

No doubt the promised event at Goodwood will be a different kettle of fish altogether, but the first all-Cobra race on British soil it will definitely not be.

Norbert Vogel, Waterloo, Belgium

Thumbs up for digital

I like the digital edition very much! The navigation seems very intuitive. I'm looking forward to the next posted e-dition.

I hope you have plans to allow subscribers of the print edition to convert to the digital edition as soon as possible.

Richard Docken, by e-mail

[All subscribers now have free access to the iPad edition. Non-subscribers can buy single digital issues through iTunes or from www.motorsportmagazine.com]

Scots at the top

It was good to see that Allan McNish was back in Scotland at Knockhill (January 2012 issue), but I think he might have been a little disingenuous (or forgetful) with his comments about the lack of Scottish performers at elite level in other sports. I am particularly thinking of Sir Chris Hoy who has won four Olympic gold medals and 10 world championships and is still competing at the top level. To go fast, he does not rely on having the best car, either! Simon Coleman, Linlithgow, Scotland

Cosworth conversations

I look forward to Motor Sport coming through the letterbox each month and always turn first to Simon Taylor's Lunch with... interview. I've never been disappointed – thanks, Simon.

I especially enjoyed the one with Mike Costin. In the '90s I lived at East Haddon, just north of Northampton, and many a Sunday afternoon I would hear the bikes scrambling up on the hill so would wander up to have a look. Often there would be another spectator who had crossed the road from his house - he didn't know me but I knew he was Keith Duckworth. We always exchanged pleasantries - nice man.

Later on I owned a Westfield which in the summer I would sometimes drive to a farm outside Northampton to buy fresh asparagus.

One day I came out of the farm shop to find a man all over my car - underneath as well. He said he just wanted to see how these types were constructed these days as he used to work for Lotus. He said his name was Costin so I said "Mike Costin?" "Yes". We had a long chat about cars and racing. Heaven on earth - lovely man.

Keep up the good work – you're still the best. Andrew Forsyth, Capel, Surrey

KEEP IN TOUCH

The new-look 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 p44).

Putting the K in Surtees

I strongly agree with Rob Widdows' comments on your website that John Surtees should receive a knighthood. His achievement as world champion on two wheels and four remains unique after nearly 50 years. Well done Rob for highlighting the matter.

Many of us will be aware of the relentless hoo-ha which accompanied each honours list until Bruce Forsyth was finally given a knighthood last year. I will not offer an opinion on the merits of that particular K, other than to say that if Brucie deserved it then Big John definitely does.

I don't think, by the way, that John has been overlooked because he put any noses out of joint. It should be pointed out that he has in fact been honoured twice - an MBE as long ago as 1959 and then raised to OBE in 2008. That the latter appointment was quite recent may go some way to explaining the lack of a further elevation to K in the short time afterwards, disappointing though that is to all of us. By next year five years will have passed, so hopefully the K will be more feasible again. If not next year, then certainly one might dare to hope in time for John's 80th birthday the year after.

Final point, Rob - OBE doesn't stand for Order of the British Empire. That's a common misconception, but it means Officer of the Order of the British Empire, just as the lower MBE indicates Member of the Order of the British Empire. When John's a Knight Commander of the Order of the British Empire, we'll all be happy.

Adrian Muldrew, by e-mail

Here's Johnny!

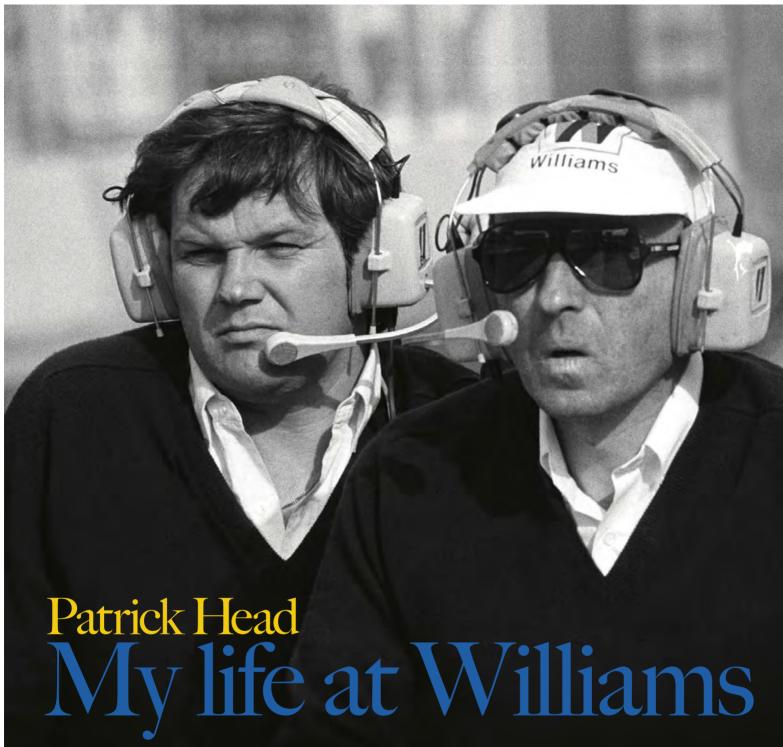
I've just listened to the audio clip 'Life's a scream with Herbert'. Brilliant, and very funny!

Thanks for making my day. Mark Ebery, Aukland, New Zealand

Close scrutiny

Sir,

I am referring to Mr Munro's pictures (You Were There, January). Please note that picture number four shows the McLaren M26E being assembled and not the M28. This was the first McLaren attempt to exploit ground effect. The car was tested by James Hunt during practice for the 1978 British GP, as shown in picture six. Piero Dessimone, Grazzano, Italy



An era closes. After 34 years as one half of Formula 1's most celebrated duo, Patrick Head has stepped back from the frontline of Grand Prix racing. Sixteen world championships – nine for the team, seven for its drivers – and 113 Grand Prix wins: that is the phenomenal legacy that Frank and Patrick have created together. Typically, Patrick is not finished with motor sport. New challenges and innovations await him at Williams' spin-off hybrid power arm. But F1 paddocks will be all the poorer without him. As Frank Williams prepares for his first season without his friend and partner since 1976, we celebrate the career of an engineer the like of which we'll never see again.

- p50 Lunch with Patrick Head, Part 1: Before the goldrush by Simon Taylor
- p54 Williams Grand Prix Engineering: the early years by Nigel Roebuck
- p61 Lunch with..., Part 2: Williams hits its stride by Simon Taylor
- p66 Mansell's title winner: the story of FW14B by Patrick Head
- p75 Lunch with..., Part 3: Brilliance before the slide by Simon Taylor
- p78 A new chapter begins: what next for Williams? by Rob Widdows



PART ONE BEFORE THE GOLDRUSH

ome big names in Formula 1 can be unrewarding to interview. For understandable reasons, they are guarded in the presence of a journalist, and swathe what they do say in the bubble-wrap of polite PR-speak. Patrick Head, in this as in many other ways, is different. An honourable and entirely honest man, he always says exactly what he thinks. Moreover, he positively enjoys sharing the multifarious experiences - the humour and fun, as well as the sweat and tears - of a hugely rich and successful F1 career that has only now, after nearly 40 years, come to a close.

Not that he's retiring: as a forward-thinking engineer, he is merely changing tack. Since 2004 he has delegated the day-to-day role of technical director at Williams Grand Prix and been engineering director. Henceforth, after 35 seasons as Frank's partner at the top of the Williams F1 effort, he will be devoting his energies to WHP - Williams Hybrid Power. It seems a good moment to ask him to lunch. We meet at the Bluebird on King's Road, in the building where Sir Malcolm Campbell once housed his recordbreakers. He orders the yellow-fin tuna starter, then appropriately no-nonsense fish and chips and a glass of Pinot Grigio.

Patrick was introduced to motor sport at an early age. His father, Brigadier General Michael Head, was military attaché to Sweden in the early 1950s. "He bought an ali-bodied XK120 and used it for ice races. Then he got a C-type, and won a lot of local races in Sweden and Finland." For the 1955 Swedish Grand Prix at Kristianstad he hired a D-type from his friend Duncan Hamilton and finished sixth, behind the Mercedes 300SLRs of Fangio and Moss and Castellotti's Ferrari. Posted back to England, he was a government advisor on military affairs. "Each evening he'd come home from the War Office and go into the garage to work on his Cooper-Jaguar. My mother and sister and I would watch him racing at Goodwood and Silverstone, happy family weekends with a big picnic hamper, stopping on the way home with the other drivers at a good pub. The racing was quite serious, but the rest of it was very social. Maybe in hillclimbing there's still some of that left today.

"We lived between Woking and Byfleet, and my parents used to throw good parties. They had one at the end of 1958, when I was 12, and lots of motor-racing people were there, but I was upstairs in bed with 'flu. Mike Hawthorn, who'd just returned from the Moroccan Grand Prix as

Aged 12 he shared a whisky with Mike Hawthorn and in 2012 he is leaving Formula 1. In between there is a career of outstanding achievement

BY SIMON TAYLOR







world champion, came up to commiserate, bringing a very large whisky and soda. He sat on my bed and chatted while I consumed most of the whisky. He admired the balsa kit of a de Havilland Chipmunk I was making, and told me he had a real Chipmunk. He said when I was better he'd take me up in it. A few weeks later he was killed, so I never got my ride.

"I don't think I had any aspirations to be a racing driver: I was always keen on the engineering side. At Wellington I started building a hillclimb car in the school metalwork shops, but it never got completed. It had a Norton engine which I was going to supercharge, using contained oxygen from pressurised cylinders in the cockpit. I'm not sure I'd done all the numbers correctly, and it would probably have barely lasted for one 30-second climb."

By a circuitous route he went to Birmingham University to study engineering. "Another of the students was a lad with a heavily modified Singer Chamois called Andy Dawson, who was well on the way to becoming a serious rally driver. I went to watch him on a rally in Wales, and he came through at the halfway stage absolutely livid because his co-driver was car-sick. When he saw me he

chucked him out and shoved me in the left-hand seat for the second half. I'd never done a rally, I couldn't read a map, and I found myself in this little sick-streaked car at dead of night, sideways on tiny narrow roads at up to 100mph. It was a massive shock, and it gave me a sort of terrified enjoyment. I'd say, 'I don't know where we are,' and Andy, without lifting his right foot, would be steering with one hand and jabbing at the map and saying, 'Look, we're there.'

"He entered us for a daytime special stage rally two weeks later. He'd been at a party all night, and hadn't been to bed. He climbed into the back of the Chamois and went to sleep while I drove to the first stage. Then he got in the driver's seat and off we went. We won the event easily. He was a seriously good driver. Later he got interested in engineering, but if he'd focused solely on the driving he'd have been one of the best rally drivers in the world.

"At Birmingham I also spent weekends with Broadspeed, helping out John Fitzpatrick and John Handley at the tracks. But I failed my first year's exams, and ended up completing my degree at University College London. I spent one summer at Harry Weslake's place in Rye. They were doing the V12 F1 engine for Eagle, with Dan Gurney popping in and out. I also raced a bit myself, sharing a U2 with Mark Sharpley. He was quicker than I was, so I did most of the work and he did most of the driving.

"When my degree course was finished in 1970 I decided I'd like to work for Lola, because they were building more racing cars than anybody. Eric Broadley interviewed me for all of five minutes, wasn't very enthusiastic, but he said, 'The only way we'll find out if you're any good is if you start on Monday. At the end of the week if you're no good we'll tell

you to go away.' So I went, and I stayed. Eric's a lovely man, and for me it was a wonderful education. I was put in the design office, and John Barnard was working there. I was paid £18 a week. In those days you could live on that.

"For the 1971 Can-Am series Carl Haas signed Jackie Stewart, and Eric came up with the fairly

radical T260. It had inboard front brakes, which were the new thing then – the Lotus 72 had them in 1970, and there had been questions about brake shaft breakage being part of Jochen Rindt's accident. Stewart came up to Lola for his seat fitting, long hair, black corduroy cap, and knew exactly what he wanted, down to the last detail: he brought up a Tyrrell-made wooden

gear knob for us to fit, and a piece of black corduroy like his hat which he wanted made into a pad on the steering wheel boss. He looked over the car, then went into Eric's office. When he came out there were lots of long faces, because the car had to go to the first round in four days, and Jackie had said point-blank he wouldn't drive it with inboard front brakes.

"The only way

we'll find out if

you're any good

is if you start on

Monday"

"So overnight I drew new front uprights, brake caliper mountings and steering arms, and they were made next day. Three days later, with new front bodywork for bigger wheels to clear the brakes, it was ready to go to Canada. Eric went to most of the rounds himself, and on Mondays as soon as he got back I'd have to draw new wishbones and

modifications to the pick-up points. In Eric's mind every problem could be solved by changes to suspension geometry." With Stewart's ability in the cockpit the car ended up racing well: against the near-invincible McLarens of Peter Revson and Denny Hulme, it won two rounds of that year's Can-Am and led three more, finishing third in the series.

"I'd always had entrepreneurial leanings, and while Lola were supplying shoals of SuperVee chassis, mostly for the American market, nobody seemed to be producing any engines. So I decided to set up an engine company in a shed in St Ives where Geoff Richardson Engines was based. One of Geoff's customers was Richard Scott, who was doing F2 with a Brabham BT38. Mike Cane, who looked after Richard, persuaded him that I should do him a new car for 1973. They shared a railway arch in Battersea with Guy Edwards, and I went down there with the idea that I'd design the Scott F2 over the winter, then go back to Geoff's place and start making some money selling SuperVee engines. A few weeks later I had a phone call from Geoff saying his shed had burned down, and my two prototype FSV engines had ended up as modern art, melted into a big flat alloy biscuit with conrods and other steel bits sticking out. That was the end of my plan to run an engine company.





Goodwood Ron Dennis was there with the Rondel Racing F2 team, very smart with a big transporter, and we turned up like amateurs with an old trailer behind a Transit van. But Richard set competitive times." In its fourth race, in the wet at the Nürburgring, he came through from near the back of the grid to a fine seventh. But then the budget ran out, although the Scott later scored a couple of wins in Formula Atlantic guise. It still exists.

"I was now building myself a schooner in the Surrey Docks, plus I worked for Ron Tauranac, who was doing the 1974 F1 Trojan, based on his F5000 car. Tim Schenken was a perfectly good driver, but the car was undeveloped, and its whole budget for an F1 season was £60,000, including buying the engines, all the travel and hotels, everything. It was pretty primitive, but all part of a very important learning experience for me. At Lola I'd been used to drawing everything, then it was made outside. Ron was much more hands-on. He was a fantastic practical engineer, a man of unbelievable tenacity. I'd look at something and think, no, that's not going to work. But if Ron had an idea he would just be determined to *force* it to work. He taught me about the blood, sweat and tears of engineering: a lot of it doesn't just fall into place, you must battle it through.

"I was now based in a Clapham railway arch with a great character called Ronnie Grant. He raced in SuperVee and I built his engines. He was known as the racing taxi driver, although he was much more than that - he had a fleet of 20 black cabs driven by characters with names like Coldhands and Lefty. One day Ronnie said, 'Oi, Patrick, some bloke called Williams wants you to ring him.' I called the number. 'This is Frank Williams. I want to meet vou. I'll see you at the Carlton Tower off Sloane Street.'

y now, with building my boat, I was very short of funds. My transport was a Renault 4 van, which had cost me £40. It was brush-painted bright green and smelt awful. I drove it up to the Carlton Tower wearing jeans and an old sweater reeking of resorcinol resin, the glue you use building wooden boats. There was Frank in his Dougie Hayward suit looking very smart, and he did a bit of a double-take when he saw me.

"It turned out that at some dinner Frank said he was struggling to find an engineer, and Guy Edwards mentioned I'd done some work on Guy's F5000 car which had worked out OK. So I was hired: Chief Designer, Frank Williams (Racing Cars) Ltd, on a salary of £100 a week. Just days after I started, working in a Portakabin behind Frank's place in Bennet Road, Reading, I got hauled into the front office. There was Frank and another guy he introduced as Harvey Postlethwaite. Frank explained he'd just sold his company to an Austro-Canadian millionaire

called Walter Wolf. The deal involved the remains of the Hesketh team, which meant Harvey and the Hesketh 308C. Frank told me I could stay on, working under Harvey, or take a pay-off of £500 and go. Since I was utterly broke, I took the former.

"Harvey gave me a lecture on what a great car the 308C was, way ahead of the F1 field. In fact it was a complete shitbox. At Hesketh during 1975 Harvey thought the 308 was wonderful and James Hunt was an average driver. Come 1976, when James started winning for McLaren and went on to be world champion, it became

> clear that it was the other way around. Harvey was a lovely character, but at that time I don't think he fully understood the things that make a quick car although later on he certainly did.

> "At Wolf the 308C was rechristened the FW05, but it was still dreadful." The team's lead driver, Jacky Ickx, failed to qualify

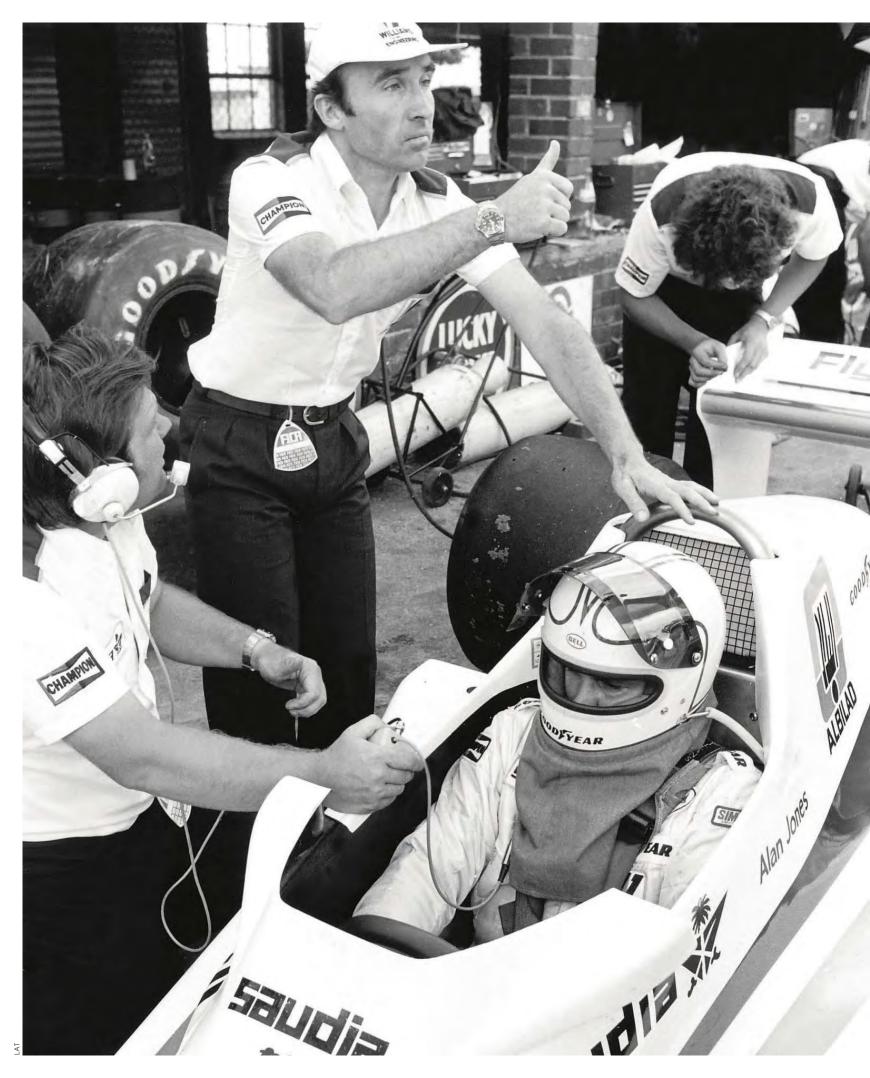
four times, and all season they never scored a point. "The monocoque wasn't stiff enough, and we embarked on a massive stiffening programme, but the real problem was it had a very narrow track, the idea being that the small frontal area would make it quick down the straights. But the turbulence from the wheels massively corrupted the airflow

over the rear wing, so it had no downforce. But, again, it was all wonderful experience for me, because poor Harvey was taking all the brickbats, and I kept my head below the parapet and started to understand how not to set about F1.

"Early in 1977 I was down in Kyalami with Jody Scheckter testing what became the WR1, which was a very much better car. I had a phone call from Frank. 'I've left Walter. I'm starting a new thing. Come and join me. We're buying a March, we've got Patrick Neve to drive it, he's bringing £100,000, I've pulled together another £100,000." Frank had got some of that from the Saudia airline, which was the beginning of a crucial relationship for the new team.

"So I joined the newly named Frank Williams Grand Prix Engineering. In F1 in those days you were allowed to run one car, and you didn't have to do all the races. So we missed Monaco because we knew we wouldn't qualify, and the races in Japan and South America because we couldn't afford them. Max Mosley had sold us the March as a 1976 car, but we found orange paint underneath - it was a Brambilla car from 1975. Max must have laughed his head off about that. It was time to do our own car, so in September I stopped going to the races and started designing."

For Part 2 of Lunch with Patrick, turn to page 62. Overleaf: Nigel Roebuck recalls the early vears of the Frank 'n Patrick double-act.





hen we started Williams Grand Prix Engineering, for 1977," said Patrick Head, "I think we had eight employees at the start of the season, and 11 at the end of it – but then of course we were running a March rather than our own car..."

When the company was formed, Frank Williams was very much starting again. Having sold his former team to Walter Wolf, he continued to run it for a while, but the new arrangement did not work out and Frank's position soon became untenable. As Wolf progressed into 1977, with Peter Warr as team manager and Jody Scheckter as driver, so Frank launched a new team, running a far from state-of-the-art March for Belgian rookie Patrick Neve.

It may sound unkind, but still it's fair to say that most of us saw this enterprise as simply 'more of the same'. Williams had been involved in Formula 1 since 1969, but after some initial success with Piers Courage (who died at Zandvoort the following season), the team had been through years of unrelenting slog, with uncompetitive cars and a chronic shortage of cash. One thought of Williams as a sort of British Gordini.

Very British, though. Frank was always obsessively patriotic, but even beyond that came his extraordinary resilience. I had met him in 1971, the year I began working in F1, and liked him immediately. Sometimes he had pretty handy drivers, such as Jacques Laffite, and once in a while there was a windfall-like Laffite's 'attrition' second place at the Nürburgring in 1975 - but fundamentally FW was viewed by many as a gallant no-hoper.

The Williams story was a slow burn until 1978 when the FW06 provided the spark that fired the team

BY NIGEL ROEBUCK



Not by all, though. I remember, for example, a conversation in 1974 with Ken Tyrrell, very much a leading player at that time: "A lot of people don't take Frank seriously, but I think they're wrong - there's no one in this paddock who wants to succeed more than he does and if he ever gets himself financially organised. watch out..."

For all that, an old March and a journeyman driver hardly seemed to herald a new dawn in 1977. Predictably results were negligible, but a new car was promised for the following year,

and if its designer, Patrick Head, was still something of an unknown quantity, we took note when Williams announced that its driver would be Alan Jones. While Jones was regarded as a competent professional rather than a potential world champion, the fact of his signing undoubtedly gave a lift to the image of the team.

Thus it was that one winter day the British press corps was invited to Didcot to the new factory to view FW06. The atmosphere was informal chummy, although Frank was very much on his best behaviour when his new sponsors – from the airline Saudia - arrived. By helicopter, no less.

At that point Williams Grand Prix Engineering precisely

employees, two of whom were named Ross Brawn and Neil Oatley. "When we went racing in 1978," Head said, "if you turned up at the factory door, there'd be a secretary and a floor cleaner and one machinist. Everyone else was out at a circuit somewhere...

"When you look back now, it's easy to forget how primitive everything was in those days. Back in '78, for example, we never even saw a wind tunnel, so you were developing aerodynamic things by strapping things to the top of your Minivan, and so on!"

As my colleagues and I talked over that day in Didcot, though, we were all of a mind that maybe this time Williams had something serious going. The new car may not have been radical, but something about it commanded your attention – as also did the team's new sponsors.

At FW06's first race, in Buenos Aires, Jones qualified 14th; at its second, in Rio, he lined up eighth; at its third - Kyalami - he finished fourth, and next time out, at Long Beach, he had a serious shot at winning. Gilles Villeneuve's Ferrari disappeared in the lead, but Alan gave Carlos Reutemann's sister car all it could handle. even when the Williams's front wings began to collapse. Eventually fluctuating fuel pressure slowed him, but after Villeneuve had tangled with a backmarker Reutemann went on to win, and Jones was confident that, without his problems, he could have beaten him.

There was no doubt that Williams was now to be taken seriously. Through that season, unfortunately, reliability was no match for pace and only rarely did Jones make the finish, but at Watkins Glen FW06 ran impeccably, and there

he was second to Reutemann.

The 1978 season was dominated by the Lotus 79, which pioneered 'ground effect', a path down which other teams were obliged to follow and Head's next car, FW07, proved to be a classic. "We were really growing," Patrick smiled. "By the end of '78, we had 18 people, and by the beginning of '79 it was up to 32! Of course, now we

were talking about a twocar team..."

Clay Regazzoni was brought in to partner Jones, and had what proved to be very much an Indian Summer. Although Alan remained the team's natural pacesetter it was Clay who scored the first Grand Prix victory for Williams, which fittingly came at Silverstone. Then came an informal press

conference where he shook his boss's hand. "Bravo, Frank," he said quietly and it was an emotional moment. Frank could hardly speak.

"A lot of people

don't take Frank

seriously, but

I think they're

wrong"

After that the dam burst. Jones, whose season had been plagued by unreliability, went on a tear, winning the next three races, and for the balance of the year FW07 was emphatically the car to beat. In Montreal Alan had opposition only from Villeneuve, finally winning by a second after one of the greatest race-long battles in F1 history.

"I was very proud of Alan that day," said Frank when I went one Sunday to his house for a post-season chat. "There's no doubt our car had the edge on the Ferrari, but the only driver I fear is that little French-Canadian, and any time you beat him is something to remember..."

Looking back on our conversation that day, what strikes me now is how willing Williams was to say exactly what he thought. Over time, as the corporate tentacles of PR increasingly enveloped F1, Frank would become much more guarded in his observations, but back then the world was a freer place, the consequences of speaking your mind less to be feared.

"I try to be as straightforward and honest with the press as possible," he said. "If you keep saying 'no comment', they'll eventually assume you consider them of no importance, and will react accordingly..." Well, he had that right.

Much else, too. After years of unrewarding toil, Frank's professional life had been transformed, and in a remarkably short time. Williams hadn't won the constructors' championship in 1979, being beaten by Ferrari, but the team had taken five victories, and Jones was confidently touted as the likely champion in 1980. Frank seemed a little overwhelmed by how well it had all come together.

"To be honest," he said, "I never saw Alan as the sort of regular race winner he's become - and I'm quite sure he didn't see it in us, either! I thought he was a good, regular driver who didn't crash cars - that was what we needed for 1978, and I wasn't looking beyond that.

"Alan's becoming as good a driver as he is, I would say, is the second-best thing that's happened to this team. The best, though - by a million miles - is Patrick's becoming as good a designer as he is. When we first got together I had no idea he would progress so much. He joined me a couple of months before the Wolf deal came about and I was quickly aware that he was a good engineer. Then, when I realised I was getting the old heave-ho from Wolf, I decided Patrick would be the best guy to have with me. That was all. He was simply the best available - I truly didn't appreciate his talents at that time.

t's Patrick's team as much as mine. He's a shareholder in the company, and therefore rewarded by its success in every sense of the word. He's a totally straightforward individual and it amazes me, frankly, that all the other teams aren't bidding for his services. If I were another team owner I'd be sending him banker's drafts for a quarter of a million guid every year until he cashed them in!

"Since I split with Wolf three really good things have happened to me, all of which combined to bring the success we've had this year: Patrick Head, Alan Jones - and, of course, my Saudi sponsors."

Already times were changing, though, for suddenly Williams was a world-class team, and drivers were clamouring to come aboard: after only one season Regazzoni was replaced by Reutemann, and Frank admitted he would miss Clay's presence in the Williams family.

"He's very different from most drivers - a gentleman who genuinely loves racing for its own sake. All right, perhaps not a number one, but not a pure number two, either - and a happy, non-political, kind of guy. We did Clay a favour - and he did us a favour. A totally adorable character..."

For all that, though, Williams and Head had concluded that Reutemann could bring

more to the team, a decision that did not go down well with Jones. "We'd had a great year with Clay," Alan said a few months later. "He got a bundle of points, he was totally unpolitical, and I really liked him. When you've got a good picture on the TV set, why the hell change it?"

As soon as Reutemann's recruitment was announced there were murmurings about potential strife within the team, but Frank was unmoved. "I believe that with the correct agreement to start with, and with good management, we'll keep a happy team. And it's my team - not the drivers' team. We're not here for the benefit of the drivers.

"I'm absolutely convinced that you cannot have equal number one drivers. Within this team there is total sincerity for Alan Jones, and our aim is to push him to the world championship in 1980. Next year we're fortunate enough to have development engineers for both drivers, and we should be lacking in nothing. If it comes to the crunch, though, Alan gets priority."

Development engineers for both drivers... Imagine that. F1 was indeed very different 30-odd years ago.

FOCA [Formula One Constructors Association] had been set up a while earlier to enable Bernie Ecclestone to do the financial deals on everyone's behalf and Williams was happy with that. "It takes up his time and makes the Brabhams less competitive! Of course Bernard makes a lot of money from it and flies to the races by private jet while I go British Airways economy we're all looking for different things, aren't we?"

Looking back on that conversation now, I'm struck by Frank's far-sightedness. This was 1979, remember, but he said this about the sport's long-term future: "What we must do is show ourselves to be energyconscious and actually active in improving the use of energy by the brilliance of our technology and by the competitiveness of motor racing. Free competition in the market-place provides the best product, after all. We must show ourselves as having a contribution to make to future energy saving."

He was also close to the mark on the way motor racing would evolve: "To be honest, I can foresee a time when Formula 1 is it, with just a couple of junior formulae on the way to it..."

We talked, too, about Jean-Marie Balestre, then the president of FISA (the sporting arm of the FIA). The choleric IMB was making no secret of his wish to curb the burgeoning power of Ecclestone's FOCA and there seemed little doubt that serious conflict loomed.

"Balestre," Williams shrugged, "seems very inconsistent in his decisions - but then he's French, isn't he? I think there's always been a certain amount of animosity between the English and the French, frankly. I've got a lot of French friends, like Jacques Laffite, but by and large I think they're a bloody nuisance...

"The other thing that worries me about Balestre is that he's announced a ban on sixwheeled cars from 1982, and on four-wheeldrive cars, and turbines and diesels and so on. He's going to ban everything, and that bothers me because Grand Prix racing has to be technically interesting. There's got to be scope for bright kids to come along with new ideas like Renault did with their turbo."

Another point of contention at the time was driver retainers, which many in the paddock felt were getting out of hand. Frank, though, was relatively sanguine on the subject. "It's free enterprise, isn't it? Yes, some of them earn very



"I think Alan is just a grossly inconsiderate person, quite honestly"

big money, but I certainly don't believe they're overpaid compared with other sportsmen. I mean, we've reached a point now where a million pounds changes hands for a footballer! And you're talking about one man out of 11..."

When I asked Williams where his future ambitions lay, his response said everything about how far he had come in the recent past. "Basically," he said, "what I want is to become the English equivalent of Ferrari, whom I consider far and away the greatest team in racing. I love what I'm doing - I never seem to have time to take holidays, but my wife says I'm on holiday every day of my life and she's right. Racing is my work, my hobby, my everything..."

Two years later I was back at Frank's house again, and there was much to discuss. In 1980 his team had progressed as expected, with Jones taking his promised world championship, and if his relationship with Reutemann were far less matey than the one he had enjoyed with Regazzoni, still the two seemed able to work together tolerably well.

The 1981 season, though, had been a different matter. Reutemann, as we said, had joined Williams on the understanding that Jones was the number one; that, if requested, he would move over and let Alan by. For a driver of Carlos's standing this was hard to swallow, but he wanted the drive and accepted the terms. Given that Jones's championship had been won, however, I was amazed that the Williams policy remained unchanged for 1981.

t Rio matters came to a head. On a wet afternoon the Williams ran 1-2, Reutemann ahead, and when a pit board ordered him to let Jones by Carlos briefly considered whether he wanted to be first or second and concluded that he wanted to be first. After the race Alan was fit to be tied: "I'd like to think that when you shake hands and sign contracts on a cold December morning the other guy doesn't pretend a couple of months later that it never happened. If he didn't like the contract, he shouldn't have signed it..."

In point of fact, Reutemann didn't disagree. "Jones had reason to be upset," he said. "I saw the pit board three laps from the end and I knew the terms of the contract - but still I was in a dilemma. I always started every race with the intention of winning, but now I was being asked to give it away. 'If I do that,' I thought to myself,

> 'I stop the car here and now, and leave immediately for my farm in Argentina. Finish. Not a racing driver any more..."

Such relationship as Jones and Reutemann had ever had now went completely out of the window, and the atmosphere in the motorhome that summer was beyond tense. "Carlos says he wants to bury the hatchet," Alan grinned menacingly. "I said, 'Yeah, mate, right in your f***** back!"

Although, in terms of pure driving, Jones's '81 season was even better than the one before, he suffered endless reliability problems and it was Reutemann who emerged as the Williams driver most likely to win the world championship. At Las Vegas, the last round, Alan won as he liked, but Carlos, having blitzed everyone in qualifying, had an unfathomably lacklustre afternoon, and lost the title to Nelson Piquet by a point.

Williams, however, consummately won the constructors' championship, a source of great pleasure to Frank, but when I talked to him in December his attitude to Jones and Reutemann - indeed to racing drivers in general - may be termed cool. At Monza Jones had blithely informed him that he would be retiring at season's end, and following the debacle in Vegas Reutemann did the same.

"Every year," Frank said, "I take a slightly tougher attitude towards drivers - and I'm probably particularly jaundiced about them at



the moment, thanks to all this messing around with Alan and Carlos.

"As with everything else, you have to learn the hard way. You have to be realistic about racing drivers, to accept that most of them are in it to make as much money as they can. As soon as they're satisfied - gone! Right? Then, later on, they start thinking that maybe they got out too soon, that they're missing the cheques. And then they start to talk about comebacks..."

"The Rio business was between Alan and Carlos. It's true that Carlos did ignore the terms of his contract, and for that we exercised a certain financial penalty. But after that the matter was forgotten as far as Patrick and I were concerned. Frankly, I just found the whole thing very boring! Why should I care which one of them wins? They're only employees, after all. All I care about is Williams Grand Prix Engineering and the points we earn. I don't care who scores them.

"Alan's departure so late in the season was a big setback for our plans, because there was nobody of his calibre - like Villeneuve or Pironi or Prost - available by September. They'd all done deals elsewhere. I don't think Alan's late decision was deliberate - it's just that he's a grossly inconsiderate person, quite honestly..."

y now, too, Williams had toughened considerably in his attitude to Balestre: "All Balestre has is an armband - he doesn't run any cars, he doesn't pay my bills, he doesn't have one penny invested in my business, or any

> of the other teams. I refuse to be administered by an incompetent – this is my livelihood!"

Frank was indeed in a lively mood that day, and it was hardly surprising given that his championship-winning team was looking at a new season apparently without any top drivers aboard. In the event Keke Rosberg tested for Williams, set a blistering pace, signed a contract, and went on to win the world championship in 1982.

All that, and much more, lay in the future, though. For the Williams team the 1981 season was anything but the beginning of the end, but perhaps, as Churchill said in a rather different context, the end of the beginning. Williams would go on to countless more Grand Prix victories and world championships, but perhaps success was never again quite so heady as when Williams, Head and Jones, three men of different skills but similar age and ambition, first embarked on the great adventure together, turning the establishment on its head, silencing all the doubters.





WILLIAMS HITS ITS STRIDE

n the winter of 1977 Patrick Head was working on his first Formula 1 car which, following the sequence of Frank Williams' earlier efforts, would be called the FW06. "The Lotus 78 had won five GPs in '77, and obviously there was something very special about it. Mario Andretti and Colin Chapman put out some flak saying the secret of the car's speed was in a high-tech differential, but it had these sidepods and not very efficient plastic skirts. I didn't really understand what it was doing or why it was so good, so in the FW06 I tried to design a simple, light, well-balanced car. And then Frank persuaded Alan Jones to join us.

"Alan was already a Grand Prix winner, and his arrival made us say, We'd better shape up here. It wasn't as if we weren't already working hard, but it gave us a focus that maybe we hadn't had before. You've got to remember that Frank's reputation from his early efforts in Formula 1 was not great. He was known as 'Wanker' Williams, and everybody thought his cars were just there to fill up the grid. It was a shock to the whole pitlane when suddenly Frank's cars were something to be reckoned with.

"Alan turned in some great drives in the 06, and we should have won two or three Grands Prix. But we had a lot to learn about reliability. He finally got Williams' first podium with second place at Watkins Glen. Alan liked the 06, felt he could throw it around. But while he was getting it to all angles in corners, he said Mario and Ronnie in the Lotuses would be just as quick apparently steering with one hand.

"Neil Oatley joined us that year more or less straight out of college, so now we had two in the design office, and a lad called Ross Brawn was in the machine shop. We bought a second-hand 4ft by 5ft wind tunnel which would take a quarterscale model. Towards the end of 1978, when we were designing the 07, Frank Dernie joined. The biggest thing he did, which he did very well, was the system which allowed the skirts to stay on the ground whatever the loading.

"Frank had now got more sponsorship from Saudi Arabia, and for 1979 we moved up to a

two-car team with Clay Regazzoni joining Alan. After Long Beach - where Alan finished on the podium in the 06 - we tested the 07 at Ontario Motor Speedway. Alan went round the twisty infield section, did four laps, came in, switched off and said, 'Bloody hell. Now I understand what Andretti and Peterson have had. This car has so much grip I can't slide it.' By the end of the test he was sliding the car, of course, but he'd had to step up to a new level. He said the grip was mind-blowing.

"We had more reliability issues in the 07's first races, and at Dijon we weren't desperately competitive. Alan only finished fourth. The next race was Silverstone. The aluminium undersides on the 07 didn't fit up close to the engine, and there was a lot of aerodynamic leakage. So we did new panels shaped to seal right up to the engine, and at the Silverstone test Alan's times literally jumped 1sec. In qualifying the other quick boys were doing 1:13s. Then Alan went out. Bang! 1min 11.8sec. His, and our, first pole. Standing there with my clipboard, I could feel the effect on the pitlane. All heads turned towards our pit, and suddenly Wanker Williams was the man everybody was looking to. It was stunning.

"Come the race Alan quickly built up a 20-second lead. But to fit those new aluminium panels tight to the engine we'd had to modify the water pump, and just after half-distance a >>>>

weld cracked. Water leaked out and a piston seized. But Regazzoni was there in the second car to take Williams' first victory. Then Alan won the next three races on the trot -Hockenheim, Zeltweg, Zandvoort - and Montreal too. If we'd got our act together a bit earlier, we'd have won the 1979 championship.

"Alan was the greatest fun, a terrific driver, and a right scallywag in many ways. Clay was a fantastic bloke to have in the team: humorous, well-rounded, easy-going out of the car but a passionate racer. He'd generally qualify about one second behind Alan, then by the time you were 10 laps into the race and he'd be about 15 seconds behind him, he'd start to go just as quickly as, or even quicker than, Alan.

"For 1980 I told Frank we'd never be able to maintain the advantage we'd had in 1979. It was a hard decision, but we agreed to replace Clay because his slower qualifying would put him in the middle of the grid. After one or two incidents at Lotus Carlos Reutemann was looking for a move, so he agreed to drive alongside Alan for '80 and '81. His contract stated that if our cars were lying first and second with Carlos in front, he had to give way to Alan."

illiams won the 1980 drivers' and constructors' titles with the FW07B, and started 1981 with a Jones-Reutemann 1-2 at Long Beach for the FW07C. Then in the wet at Rio, with Reutemann leading, Jones a close second and nobody else within half a lap, eight laps before the end Reutemann was told to let Jones by. Reutemann ignored the signal and duly won the race, leaving Jones extremely aggrieved and the relationship between the two drivers permanently damaged.

"As a team, our view has always been that if our two drivers don't get on it's a problem for them, not for us. We never allowed ourselves to get sucked into separate debriefs and that sort of thing. It probably became worse in the days of Piquet and Mansell: still common debriefs, but no doubt each would get in a huddle with his race engineer afterwards."

During 1981 the Williams duo split the victories between them, but at the final race in Las Vegas Alan could no longer win the title, while Carlos was leading Brabham's Nelson Piquet by a single point. Jones won the race – his last for Williams. Reutemann, having taken pole position, drove a lacklustre race into eighth. "From pole, Carlos came round at the end of the first lap already down in fifth place. And he went on going backwards. Piquet drove past him, finished fifth and won the drivers' championship by one point. After the race Carlos didn't really talk to any of us. He was such a private person that you never really knew what he was thinking. He just left the track and flew back to Argentina. Apparently he said to his engineer that the

gearchange was notchy. Carlos was an artist and to give his best everything had to be exactly right. We took the box apart when we got home, the dogs were perfect and we couldn't see anything wrong. Frank's view was, Let him cool down, leave him alone over the winter.

"Alan had told us at Monza that he intended to retire, and it didn't leave much time to find a replacement. In November I wanted to start evaluating the FW08 and we didn't have a test driver. Somebody said, 'Why not give Keke Rosberg a run?' Keke had been struggling manfully with the uncompetitive Fittipaldi that year. So we sent him down to Ricard to do the test, and at the end of the first day Charlie Crichton-Stuart was on the phone to Frank and Frank Dernie was on the phone to me, both saying, 'We've got to give this guy serious consideration, he's dynamite.' Frank rang Carlos, now our No 1 driver, and said, 'What do you think? And Carlos said, 'I don't know, Frank: the Gucci briefcase, the Rolex, the hand-made shoes, the gold bracelet, I'm not sure he's serious."

But Frank signed him, and in the first Grand Prix of 1982 at Kyalami Rosberg out-qualified Reutemann. In round 2, in Rio, Keke qualified third and finished second (although he and winner Nelson Piquet were later disqualified for being underweight) while Carlos qualified sixth and retired after colliding with Lauda's McLaren and then, a lap later, Arnoux's Renault. A week later he announced his retirement. "Maggie [Thatcher] had taken us off to the Falklands, and he was an Argentinian driving for a very British team, and he said to Frank, 'This is getting too complicated.' Carlos was a very articulate, intelligent man - he has gone on to a significant political career in Argentina - and he had a phenomenal memory. He could recall every gear

ratio he'd run at every track, even every engine number. Remember, drivers in those days tended to be in their mid-30s rather than their mid-20s as now. Being 10 years older they were perhaps more sophisticated human beings.

"Meanwhile Harvey had gone to Maranello and led the design team on what was perhaps his best-ever car, the honeycomb turbo Ferrari 126C2. A seriously advanced car and very effective. Either Gilles Villeneuve or Didier Pironi should have won the championship, but sadly

Villeneuve died at Zolder and Pironi crashed at Hockenheim. Meanwhile Keke, up against the turbo Ferraris, Renaults and Brabhams, was amazing. He'd stub out his cigarette with his racing boot and say, 'OK, let's do it.' He'd go out there and be absolutely on the ragged edge, all the time. His victory at Dijon, from eighth on the grid, was incredible, and with five other podiums he won the drivers' championship.

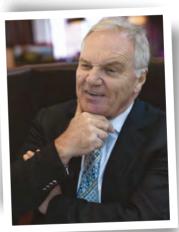
"Renault and Ferrari, having spent vast sums of money on developing their V6 turbos, were not very impressed at being beaten by a £7500 off-the-shelf normally-aspirated V8. It was difficult for them to develop fully competitive ground-effect cars. They were able to influence FIA president Jean-Marie Balestre, and by 1982 Brabham had joined the turbo brigade with the BMW, so they now had Bernie on-side. The best way to shaft the Cosworth cars, which could maintain more speed through corners, was to ban ground effects. So in 1983 we were hanging on with our fingertips against the turbos with the flat-bottomed FW08C.

> "A week before the first race, Brazil, Keke and Frank Dernie went out to Rio for a test. On the Sunday evening Keke called me and said, 'Patrick, listen to these numbers.' He read out a list of lap times on full tanks and on half tanks. Brabham were now doing refuelling stops. and Keke said: 'We have to have refuelling by next weekend.' So that Sunday night I drew up a list of what we would need. I decided one

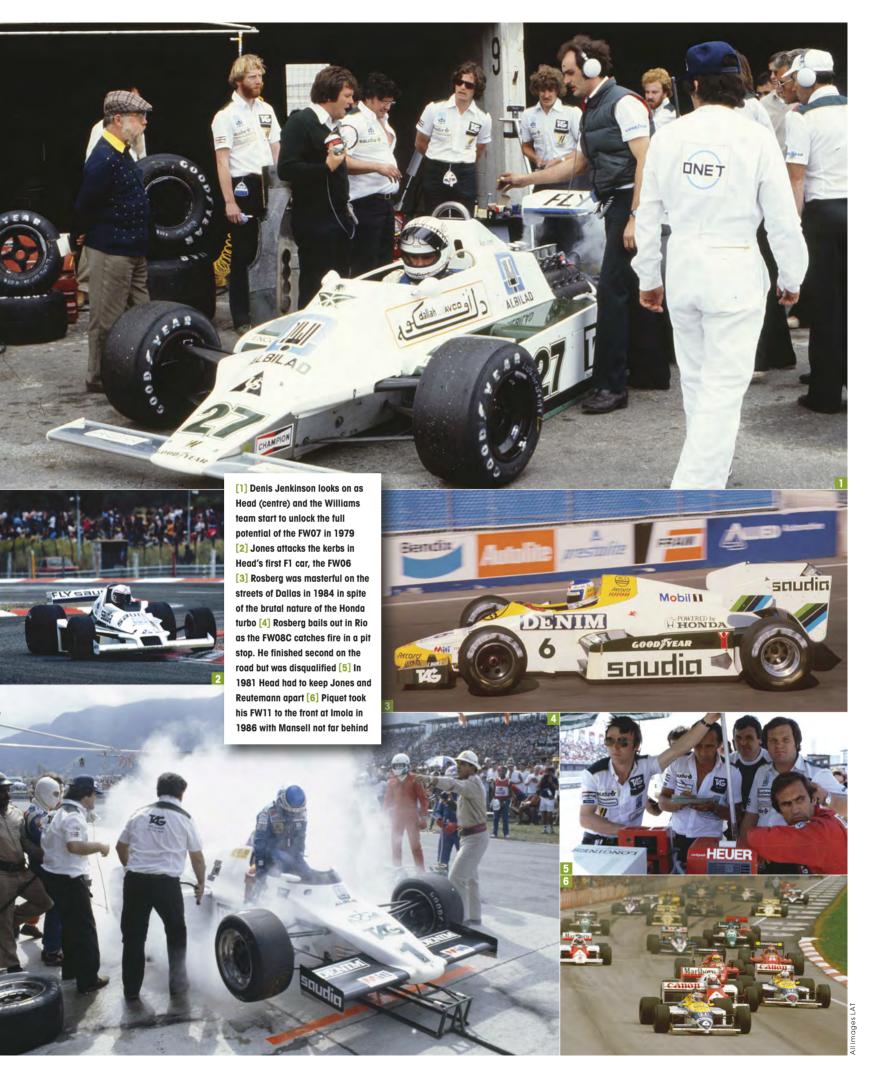
> > of those big aluminium beer barrels could do it, pressurised with air. By Monday afternoon we had the beer barrel with a two-inch Avery Hardoll aircraft refuelling connector welded on the top, a bag tank with a separate breather, and a new catch on the top of the tank with welded-on fittings. We tried it out on a spare chassis and it all

worked fine. So the kit went on the Tuesday night plane to Rio.

"Brilliantly, Keke qualified on pole ahead of all the turbos – the next normally aspirated car was Lauda's McLaren, ninth - and he and then Piquet in the Brabham-BMW led the race until Keke came in for his refuelling stop on lap 28. On went the beer barrel, but because the aluminium panel had distorted the bolts had come loose, and a little fuel leaked out. When the fuel hose came off, the hot gases from **>>>**



"Frank was close to death and suddenly l was running the team"



the exhaust ignited the splashed fuel. It went whoompf, Keke's head was enveloped in flames, and the whole of the cockpit was orange with fire. Keke came out of the cockpit like a jack-inthe-box and ran to the back of the pit. He'd decided the race was over. With a CO2 extinguisher we put the fire out. I had a look around and saw that the fuel in the tank was untouched. So I ran to the back of the garage and shouted, 'Keke, it's all fine, the fire is out, the car is OK, get back in and go!' By this time he had his helmet off, and he said, 'I am not getting back in that car. I have burned my moose-tash.' I shouted as loudly as only I can, 'Keke, get back in the f***ing car!' Totally intimidated, he got back in and off he went. He rejoined in ninth place, and it took him 24 laps, driving his heart out, to get back up to second place. That's where he finished, 21sec behind Piquet. But we'd had to push-start him to get him back out of the pits, so after all that he was disqualified.

"Three races later we were at Monaco. The track was wet. Keke had qualified fifth, with turbo Renaults and Ferraris ahead of him, so we knew we had to take a gamble. We sent him out on the warm-up lap on slicks, so he could see how it felt, and back on the grid he said, 'It's not great, but not as bad as I'd expected.' He took the lead from Prost's Renault on lap two and led to the end.

"By now Jacques Laffite was Keke's no2. A lovely man, and if the car was good he was a very quick driver. But if it was a pig he wouldn't really push it, whereas Keke drove whatever we gave him just as hard as he bloody well could, whether it was a dog or not. We had the Honda turbo now, and at first it was absolutely terrifying to drive because of the dreadful throttle response:

no power when it was off boost, and then suddenly it would all happen. Keke's win on the Dallas street circuit in 1984 was pretty amazing.

"We decided we wouldn't continue with Jacques for 1985, and our thoughts turned to Nigel Mansell. Mansell had been quick in '84 with the 95T Lotus-Renault, and he'd led Monaco until he slid off. That was when Peter Warr made his much-quoted remark, 'That man will never win a Grand Prix as long as I've got a hole in my arse.' So Frank was reluctant to sign him. I said, 'Frank, we need someone with turbo experience. Just get him on board.' So he did. A lot of people said we were mad and it was a crazy decision. Keke was very against Nigel to begin with, but steadily over time he grew to respect him, although I wouldn't say they were ever bosom pals.

"During the summer Keke told Frank he was moving to McLaren for 1986, so in August Frank signed Nelson Piquet. Nelson was a double world champion, we'd be going into the new season with Nelson as the lead driver and Nigel very much as the no2. Nothing was specified to that effect in the contract, but I don't think Nelson had ever worried much about contracts. Then in October Nigel won back-to-back races at Brands Hatch and Kyalami, so suddenly he was a winner. We went into 1986 with the Honda-powered FW11 – and on March 8 Frank broke his neck."

Returning from a pre-season test at Paul Ricard to Nice airport, Frank's Ford Sierra hire car went off the road. He was very gravely injured: his passenger, team member Peter Windsor, was unhurt. "Frank was in hospital, to all intents and purposes as close to death as you could imagine, and I was suddenly faced with running the team. Two weeks later we were at the first round in Brazil, which Nelson won. I decided that the spare car would alternate between Nelson and Nigel, and Nelson said: 'I was told I was the no1 driver, I would always get the spare set up for me.' But that wasn't in the contract. Then we had Nelson going to the London hospital where Frank was lying more or less unconscious and trying to talk to him: 'Frank, remember what you said when we signed the contract?' It was a complicated time.

rank had always been a strong, bouncy presence, lots of energy, passion, determination, and very disciplined. I think he'd say himself that he left the main operational decisions to me, because by that time he was very involved in the financial and sponsorship side. But he loved the racing, he always wanted to be there. And he was a good race engineer: he didn't know much about car set-up, never really knew what an antiroll bar did, but he was always absolutely on the ball about having the right amount of fuel in the car at the right time, knew just when it was going to spot with rain, always got the car on the track at precisely the right moment.

"Sheridan Thynne dealt with the sponsors now, but we were well into bed with Honda by that time, and I think I went to Japan 15 times

that year. Clearly the FW11 was good, and we won the constructors' championship again by a big margin. But by letting Nelson and Nigel take points from each other we lost the drivers' championship to Alain Prost. We weren't really helped by Goodyear. We'd had some tyre failures, and we told them the tyres weren't up to it. They said, 'We haven't had this trouble with the other teams.' We pointed out that we probably had more power and more downforce than the others, so we were the first to come up against the limit of the tyres. Anyway, in the final round in

Australia Nigel had that famous tyre failure. After Nigel's shunt Nelson was leading, on course for the title, but on the pit wall I had to make the decision to bring him in for fresh tyres. So Prost won and was champion. To Nelson's great credit, he never said, then or later, that my calling him in lost him the title. He was very much a team player. Nelson was a great character with a great big personality, a fantastic bloke. But not a good enemy to have, as I think Ayrton discovered."

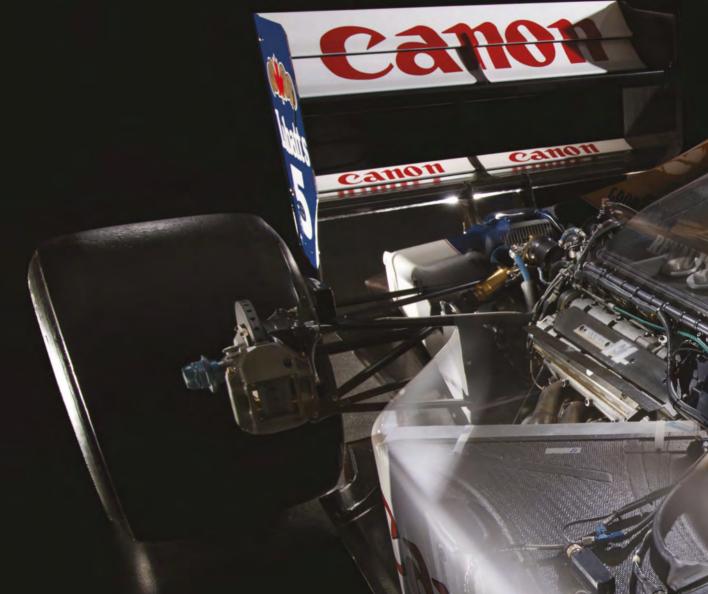
Mansell claimed famous British GP win in '87.
Inset-team partnership would be rocked – but
not broken – by Frank's road desident in '86

Canon

Umbro

Cattott

For Part 3 of Lunch with Patrick, turn to page 74. Overleaf: Patrick recounts the genesis of Nigel Mansell's 1992 title winner, FW14B.



Mansell's perfect ride

20 years ago, Williams hit a level of performance never seen before in F1 with a car that finally nailed the complexities of active suspension. And an inspired Nigel Mansell made the most of it

BY PATRICK HEAD



he initiation of FW14B goes back to the winter of 1984 when we were approached by AP, with whom we worked closely on brakes and clutches. They had been developing an active-ride system

for road vehicles and, having decided not to pursue it commercially, thought the system could have merit in racing.

At that time F1 cars were using very stiff suspension to cope with the high aerodynamic loads and to avoid using high static ride heights. AP felt that active ride offered a more compliant contact, through softer suspension and hence lower wheel frequencies - without any loss of platform control through pitch, roll and ride height changes caused by aerodynamic loads four to five times greater than the vehicle weight.

The AP system managed ride control of a 'three-legged' platform via valves controlling flow of high-pressure hydraulic oil, the valves being controlled by linkage to suspension and a parallel inertia-based system. Frank Dernie took charge of the programme with design integration from our general design office.

The first test car, a Honda-engined FW09, was not ready to run until the winter of 1985 and the first test at Silverstone was disrupted by a major turbo fire. It soon became clear that an electronic digital control system was needed, using Moog proportional servo spool valves, rather than the mechanical system.

Kurt Borman of Motion Technology US was commissioned to design the controlling hardware, once he and Frank Dernie had confirmed the control strategy and operating software.

The previously difficult characteristics of the Honda engine came good in the middle of 1985, Nigel Mansell and Keke Rosberg winning two races each, and it was clear that we could win championships in 1986. So we had no plans to experiment with new technologies that year.

An active-ride car, based on the FW11, came back into play in 1987 at the pre-season tests in Brazil. By this time we'd realised that the main function of the platform control was not so much in allowing softer suspension but in controlling aerodynamic load distribution.

Flat bottom rules were in force and with them came significant benefits of 'blowing' the diffuser which produced low-speed rear downforce when traction was critical. We identified these advantages when comparing the passive car with the active ride car in those pre-season tests. Nelson Piquet was always very keen on any new developments and did all the test driving through 1987, while Nigel Mansell was less positive.

He had done the early Lotus active ride work and had suffered more than once with the car sliding along on its skids with all the wheels driven to 'full bump' - i.e. off the ground!

Despite being in the hunt for the championship in '87 Nelson asked to race the active-ride car at Monza and proceeded to win the race from Ayrton Senna in the active-ride Lotus. It was a close result as Nelson's tyres had blistered.

Nigel then showed an interest so we converted another FW11 which we tested at Brands club circuit and he set a new track record. We then took four cars to Jerez, two active and two passive, but we suffered from bouncing in the fast corners so Nigel raced a passive car, coming second to Senna by 0.014sec.

The championship was very close, by this time just between Piquet and Mansell, so we withdrew the active-ride cars - much to the annovance of Nelson, although he won the title after Mansell had a practice accident at Suzuka.

The end of '87 brought the end of our involvement with Honda despite having won

the drivers and constructors championships.

For 1988 we moved to the Judd 3.5-litre engine and were determined to be competitive with the much-reduced boost and fuel for the turbo cars.

he FW12, which featured our first transverse gearbox, was designed exclusively for active ride. In Brazil we qualified second only to Ayrton Senna in the McLaren with Honda power but the first half of the season was dogged with problems cooling the engine oil, and with instability and bouncing - most of which was connected to the active-ride system. At Silverstone we converted the cars back to passive suspension between Friday afternoon and Saturday morning, no easy task as the active ride actuators had to be converted into spring damper units. Nigel qualified well, however, and came second in the race.

We 'retired' the active ride for the rest of the year. It was clear we still had some system problems to solve, in hardware and in the sophistication of the control software.

For 1990 we established a separate test programme for active ride, the system being installed in an FW13B. Frank Dernie had moved on to Lotus to join Nelson at the end of 1988, and Paddy Lowe took over overall responsibility for development. Steve Wise designed a new Williams controller and data recorder with more advanced processors.





This was a buoyant team, with David Lang and Paddy Lowe working hard on the development and seeing good progress. Mark Blundell, whose sense of humour certainly helped it along, did the bulk of the testing miles. In its earliest form the system was prone to leaks and David Lang recalls a test day at Pembrey in South Wales when Blundell hid a leek in the cockpit.

He went out and reported over the radio that there was a 'massive leak' in the system and that he was coming in immediately. Paddy Lowe was obviously concerned and mechanic John Cadd removed the inspection hatch, peered in, and confirmed that yes, there was a leek. He then reached in and produced the Welsh vegetable much to Paddy's relief – and everyone else's amusement.

It was clear by this stage that the active car was significantly faster than the passive car, but reliability still had some way to go.

n June 1990 we recruited Adrian Newey, who'd been let go by Leyton House, as chief aerodynamicist and within a week he was promoted to chief designer as I could see that he needed and justified a higher level of responsibility.

He focused on the new car, the FW14. The car had strong heritage, in its visible surfaces, to the Leyton House but was further developed using the wind tunnel at Southampton University. The FW14 and 14B have often been described as Adrian Newey cars but, while he was very much responsible for the outer surfaces, and general architecture, there were a great many other

people involved in the design and engineering. Adrian would be the first to accept this.

The test programme for the active-ride system was running in parallel, with Damon Hill driving, as Mark Blundell was now racing in F1 for Brabham, while David Lang, Simon Wells, Paddy Lowe, Philip Farrand and Steve Wise were responsible for the various systems and their development. So, despite limited resources, this small unit kept the programme going alongside the race team and the system was by now showing great potential.

At this point we were also working with fourchannel anti-lock brakes, traction control and a six-speed transverse sequential semi-automatic gearbox. Traction control was, I think, one of the easiest and most rapidly supplied 0.5-0.75sec gains in speed that has ever been applied to a



racing car. Paddy Lowe joked that it took him about 15 minutes to write the code for the first system. Not quite the case, but close.

Rear wheel speeds were compared with mean front wheel speed, and if overspeed was detected a 'cut number' was transferred to the engine controller, the number of cylinders being 'cut' depending upon the level of rear overspeed.

Control strategy became more sophisticated quite quickly. By 1993 it became an emotive topic and Max Mosley saw it as some kind of evil interference by engineers. All we wanted to do was to go quicker and this was a way to do that. It was right that it was banned, though, as it did remove some skill requirements from the driver, particularly in wet or slippery conditions.

Back on the track, the FW14 for 1991 was a much faster car than FW13, mainly due to

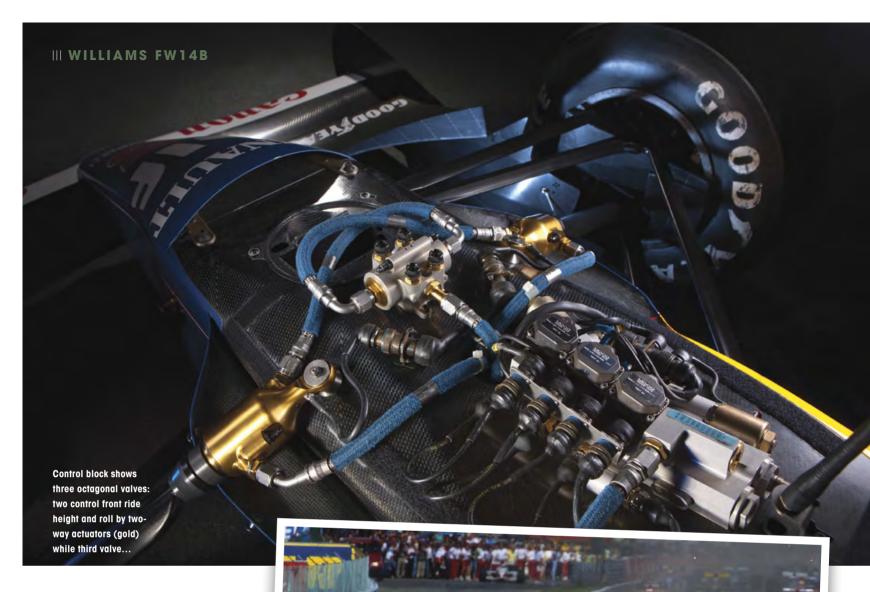
improved aerodynamics. Nigel Mansell had gone to Ferrari at the end of '88 but returned for 1991 and we should have won the title that year. Nigel and Riccardo Patrese recorded seven wins between them but Ayrton Senna's McLaren had better reliability. The McLaren was pretty conventional, but had great power from its heavy Honda V12.

It took us four races to sort out the semiautomatic transmission, the first in Formula 1, although John Barnard had introduced a hydraulically operated transmission with Ferrari in 1989.

The cause of the problems was trivial but it took time to identify, allowing Ayrton to win the first four races and, despite some race wins for FW14, it was not enough to catch and overhaul Ayrton and McLaren.

Through 1991 the active ride car was developed, moving from gas springs, with associated high rising rate, to linear packs of disc springs with little or no rising rate. This cured the high-speed bouncing on the tyre sidewalls as the suspension was now sufficiently compliant at high load. Through the winter of '91-92 we worked hard on reliability. David Lang was responsible for the active hardware while Simon Wells oversaw system development and improving our operational and support capability. Throughout that 1992 season the 14Bs were totally reliable apart from a problem with shedding the hydraulic pump belt on both cars, at identical mileage, at Monza in September. The car was on pole for 15 of the 16 races, took 10 wins, 10 fastest race laps, Mansell taking the drivers title and Williams >>>>





winning the Constructors Championship. In qualifying at Silverstone that summer Mansell was almost two seconds quicker than anyone else, going on to lead every lap of the race and taking fastest lap. That was a particularly satisfying performance for the team.

Nigel proved to be particularly adept at getting the best from FW14B, whereas the car troubled Riccardo Patrese - even though he'd been fully competitive with Nigel the previous year in FW14. Nigel showed little interest in active ride in 1986 and '87, when we ran the Honda engines with him and Nelson Piquet, and when he came back from Ferrari in '91 he still wasn't that interested until he heard about the lap times Damon Hill

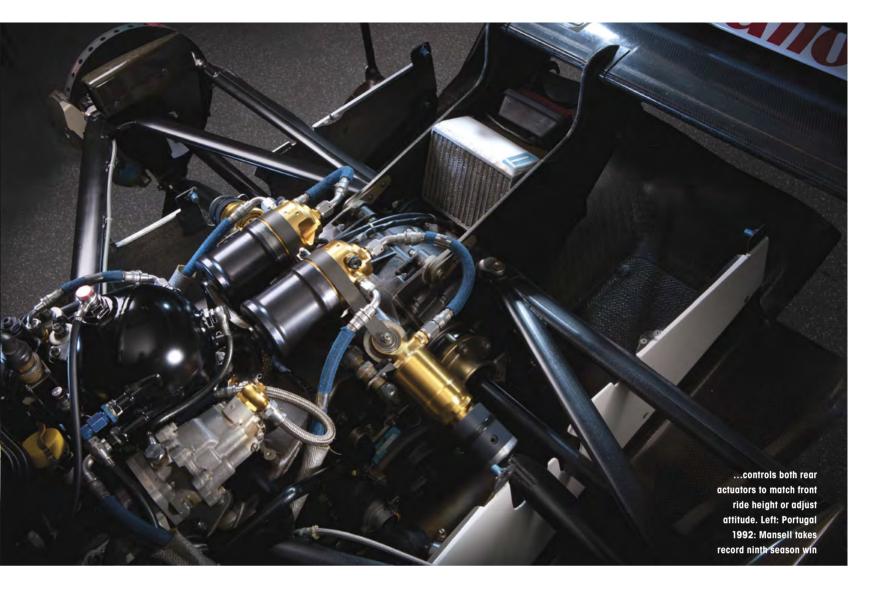
had been achieving in testing. By that time he too was also more convinced about its safety. Our active control responded to changes in

load distribution, but there was always a small period before the system corrected, and during that period the usual feedback to the driver was not present. There was a fraction of a second delay and it felt to the driver as if he didn't have roll stiffness or roll resistance. Riccardo found that hard to deal with but once Nigel had worked out that, on the other side of this

correction, the grip was still there, he learnt to ignore the slightly floaty initial feel of the car.

Our active system had fixed front to-rear-roll stiffness distribution, but we were able to powerfully adjust the balance of the car by altering the angle of attack - in effect changing relative front and rear target ride height. We could do this 'on the fly', eliminating any understeer or oversteer characteristic, applying the correction continuously to each metre of the track. To partly overcome the response lag of the system mentioned above, Paddy applied 'feed-forward' [an 'early warning' signal], in part predictive and in part responding to sensed lateral and longitudinal acceleration.

Had active been permitted in 1994, we would have moved away from the AP-based 'tripod' system towards the [four-channel] system eventually used by McLaren, and now partly present in pitch and roll control on the MP4-12C road car. So active ride has not completely gone.



The FW14 had Adrian Newey's Leyton House-style very tight cockpit and Nigel, with his strong hands and big knuckles, was using a very small steering wheel. We had power steering at the time but his upper body and arm strength probably helped him deal with the loads and the kick-back in the steering.

At the time of FW14 we appeared able to think of an idea and apply it very quickly. Now it seems to take a long time between initiation and application of a new system. The rules are now more limiting, the cars more complex and more tightly packaged.

Most teams now have braking systems that change the brake balance depending on whether the driver is increasing, or decreasing, line pressure. When we introduced ABS braking to the FW14, it was a more sophisticated system than that already used by Volvo and other road cars, but not yet on an F1 car.

There were more freedoms within the regulations in those days but I would not call it a 'golden period' for engineers.

I have heard the FW14B described as one of the most technologically advanced racing cars ever built but the technologies we see today are of a very high standard right across the field and things like KERS and DRS are still a strong engineering challenge.

The ultimate development of the active ride programme was the FW15 of 1993. At Donington that year the European Grand Prix was run in extremely wet conditions and we had both cars on the front row, Alain Prost on pole and Damon alongside him. But the race was a very different story. The active car was controlled to run a few millimetres above the ground, certainly a maximum of 5mm, and this was a problem because the water on the track was deeper than that. The cars were aquaplaning, not so much on the tyres, but on the large flat bottom of the undertray.

This explains why Prost made seven stops for tyres and Hill made six. In fact there were controls available in the cockpit to raise the target ride heights but we never thought to use them. I cannot remember why.

This is not to take anything away from a great drive by Ayrton Senna in the McLaren, but simply to illustrate what can go wrong in extreme conditions.

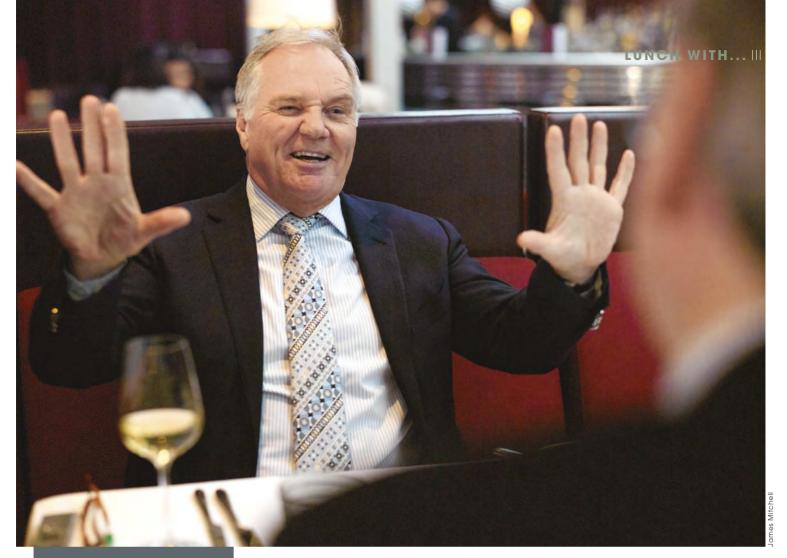
As is now history, the active-ride cars won World Championships in 1992 and in 1993, but there was a lot of talk about active ride being a driver aid and it was eventually banned. It was never a driver aid, but Max and Bernie called all the team principals together at Hockenheim in 1993 and told them that if they

didn't agree to ban some of the new technology, including active ride, and sign an agreement that night, they would be witnessing the death knell of Formula 1 as they knew it.

At the time Ferrari was struggling with both its aerodynamics and its active ride development, so a ban would, let's say, have helped Ferrari while we would be disadvantaged. So, in the end, this abrupt changing of the technical regulations effectively marked the end of the active-ride car.

But I have to say that I'd much rather be in a position where we are inventing technology that gets banned than trying to prevent other people applying new technologies. Last year, for example, we tried to get 'hot-blown diffusers' banned and that's because we were not able to use the system to full effect ourselves as the Cosworth had not been validated for it. an expensive process.

Historically, regulation changes have gone against the winning teams and Williams was often on the receiving end of that because for many years we were winning races and titles. That's how it's always worked in F1. I hope to see Williams at the receiving end of such imposed limitations again in future - it will only be because they are being more creative than other teams.



Lunch with

n 1987 Nigel Mansell's FW11B won six Grands Prix, Nelson Piquet's three. But Mansell's practice shunt at Suzuka, which injured his back, handed the title to Piquet. Then the Honda engine went to McLaren, and Williams used the Judd V8 for a season until the Renault V10 arrived for 1989. By now Mansell had gone to Ferrari, and Thierry Boutsen had joined Riccardo Patrese in the team. But Mansell was back for 1991. There were some great battles with Ayrton Senna's McLaren-Honda, and then in 1992 the wondrous FW14B took 10 victories, six of them one-twos, and the drivers' and constructors' titles. Beside Mansell the quiet, courteous Patrese is often forgotten, but Patrick Head has high praise for him.

"Riccardo was very serious opposition for Nigel in 1991. It went a bit wrong for him when we did the active-ride conversion of the FW14, because in its cruder early stages it would go into a corner, develop roll, and then correct itself. While it was rolling it would momentarily lose aerodynamic downforce and slide, and when it corrected the grip would come back although later it became more sophisticated as we were able to put predictive feed-forward into it. Once Nigel realised that the grip would be there he could drive through that, whereas Riccardo always liked to feel instant feedback, so it suited him less well. But Riccardo was a seriously fast driver.

"As for Nigel, he was certainly highmaintenance, but bloody quick. Bloody quick all the time. Remember how it was for Graham Hill when Jim Clark came along? Clark was an artist at the wheel, so Graham somehow picked up this media reputation that he made up for being less talented with determination and hard work. Actually, look at his record - five Monacos, Indianapolis, Le Mans - and you realise that Graham was very talented. Nigel was given the Graham Hill mantle of the gritty grafter who didn't have the skill and artistry of Senna or Prost, overcoming it through sheer determination. I don't think that was fair. I would put him right in the same class as Prost. Whenever Nigel was

out there, he was on it in the biggest possible way, dry or wet. He didn't have the joie-de-vivre and humorous personality of Nelson, but when he turned up everybody sort of snapped to it, because they felt: This guy is going to be pushing the boundaries, and we've got to do our job well. People made fun of his moustache and his Brummie accent, but he won 29 Grands Prix for us. I agree in '92 he had the best car, but he did a brilliant job with it. And only nine of the 29 were with the 14B. I won't accept anybody saying Nigel was anything but top, top drawer."

Mansell had already clinched the 1992 drivers' title when, on the morning of the Italian GP at Monza, he called an impromptu press conference and announced that he was retiring from F1. In a quote that made headlines in the tabloids, he said: "To say that I have been badly treated [by Williams] is, I think, a gross understatement." Twenty years later, Patrick's dispassionate memory of the events that led up to Mansell's departure is somewhat different.

"The manner of Nigel's leaving was a shame. Back in April he'd told us he wanted to talk about 1993, get his deal done. Frank came up to an early Silverstone test, and all I can tell you is a deal was done. I was there. Frank shook hands with Nigel; I shook hands with Nigel. The terms of that agreement were sent to the Isle of Man, and three weeks later they had not been >>>>

III LUNCH WITH...

returned. Frank spoke to Nigel's accountant, who said, 'Nigel has reconsidered, and he thinks he's worth more money.' Frank felt that was out of order, because we'd done a very significant financial deal, with a big increase on what he'd been paid the previous year. Frank has always been a man who believes a deal is a deal.

"In Hungary in August, we reluctantly improved the deal to considerably more than what we'd agreed at Silverstone. At Monza four weeks later Frank was not told that Nigel had called a press conference, and didn't know that Nigel was already talking to Carl Haas about an Indycar deal. Frank would have preferred Nigel to have been a man of his word. I don't think Nigel was dishonest: I just think he was very badly advised by his management. I still get on very well with him - and of course he drove for us again, two years later, did four Grands Prix in 1994, and won in Australia."

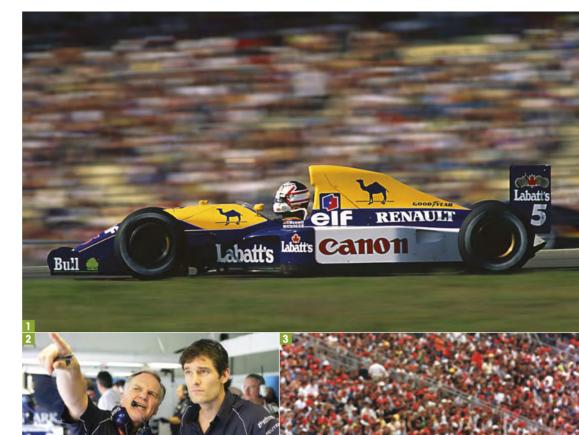
Without Mansell, and with Alain Prost, the drivers' and constructors' titles were won again in 1993, with Damon Hill scoring three of the wins. Then Prost retired, and for 1994 Ayrton Senna arrived. But on May 1 came Senna's fatal crash at Imola.

"Imola was a dreadful weekend altogether. Following Ayrton's death, quite rightly the Italian authorities wanted an investigation. To start with they were prosecuting everybody the race organisers, the circuit owners, the tyre manufacturers, and of course us - but eventually the other prosecutions were dropped, leaving us. The whole thing went on for years. We were able to show that the steering column had been intact up to the accident and that it was broken in the impact, but in the end their verdict was that something, they couldn't say what, must have broken on the car and that as the senior person involved in the design of the car I had to bear the responsibility for that." By the time the court reached that verdict in 2007, 13 years had passed, and no further action was taken. "Ayrton's death was a dreadful and much regretted tragedy, and in its way the most significant event in my entire career."

In the aftermath of the Imola tragedy Damon Hill found himself, still in only his second full season of F1, leading a top team.

"Damon had travelled a long, hard road to get to F1. By the time he joined us he was already 32. In his battles with Schumacher I always remember Suzuka 1994. It was very wet, the race was redflagged and after the restart Damon had to turn round a seven-second deficit to Michael. The Williams didn't have any real advantage over the Benetton – a bit more horsepower, which in the wet didn't mean much, and the same tyres. For 37 laps he was right on the limit in really dreadful conditions, and he beat Schumacher in the end by 3.4sec. It was maybe his finest race.

"In 1995 our car was better than the Benetton-Renault, not by a mega margin but certainly a



few tenths a lap. But Benetton were streets ahead of us in strategy. In a two-stop race we'd rather dully run three equal fuel loads, but they'd do a short fill on their first stop to get Michael ahead of Damon, so in the second stint Damon would not only find Michael ahead of him but also running a lighter car. Damon's head would go down and he'd lose a few more seconds. Then Michael's second stop would be slower and heavier, but by then he'd have broken the back of the race. So the fact that we got well beaten in 1995 wasn't all down to Damon. But over that winter he sat down and decided: I'm going to win the championship next year. There'd been all this talk that Schumacher was incredibly fit, so Damon got himself super-fit and he came back for the 1996 season not feeling inferior to anybody. That was a very large part of it." Hill won eight races, Jacques Villeneuve four, and once again Williams were double title winners.

In 1997 Villeneuve won Williams' seventh drivers' championship, and Williams its ninth constructors' championship. "Jacques' coming to Williams in 1996 was our decision, but very much pushed by Bernie Ecclestone. Bernie thought, rightly, that Jacques was a colourful character who would be great for F1. We gave him 22 test days before the start of his first season, and the way he competed with Damon right from the start was impressive. He was always outspoken, very much his own man, yet paradoxically quite shy. He had a very good working relationship with Jock Clear, his

engineer. You got the impression he wanted to suck Jock into his own little world. In 1997 in particular it was almost as though they thought the rest of the team was against them. It was a rather immature attitude because that was never the case."

Covering four decades of Formula 1 with Patrick is impossible over one lunch, even an extremely long one, for we are still talking in the now deserted Bluebird long past 4pm. We have no time to talk about his non-F1 projects, like the Le Mans-winning BMW LMR, the Metro 6R4 rally car, and the championshipwinning BTCC programme for Renault. But I persuade him to comment briefly on two more F1 drivers: Ralf Schumacher, who joined in 1999 and staved for six seasons, and Juan



Pablo Montoya, who started his F1 career with Williams in 2001 and stayed until 2004. "Ralf was enigmatic, because on his day he could be very dominant. He won six GPs for us, but he wasn't as single-minded and committed as his elder brother. We gave him a good car in 2003, the FW25-BMW, and he and Juan Pablo were competing strongly for the championship. Juan Pablo wanted the people working with him to be only for him, not for the team. As far as he was concerned, Ralf's mechanics were his enemies. He was very confrontational, almost

We pass rapidly over Williams' difficult recent seasons. Patrick confines himself to saying, "I want to see Williams get back to being a winning team. They're not going to do it overnight, but they are capable of doing it. A lot of good decisions have been made. I participated in the decisions about the people we've taken on board and in the decision to go with Renault, which I think will be good. I don't like seeing

as if he had a persecution complex. Jacques had

an element of that, so did Nigel."

Frank looking grumpy and ill-tempered behind his screen in the pits, I want to see him with a big grin all over his face. And any time Frank wants to ask my opinion I shall happily give it, as I have always done..."

Meanwhile Patrick will continue as a director of Williams Hybrid Power. "We have a lot of significant projects on the go. Porsche's hybrid GT3 car has won races already. Its energy storage system, instead of using a lot of supercapacitors or a very heavy bank of batteries, is done within our filament-wound carbon-fibre flywheel spinning at 50,000rpm in a vacuum. The Porsche system stores braking energy and turns it into linear kinetic energy. Our unit turns it into rotary kinetic energy and thence it is fed back as drive energy. It's very efficient and the losses are low. There are other serious motor-racing applications for this technology, but it also has great possibilities for trucks and city transport."

inally, I have to ask Patrick about his extraordinary personal relationship with Frank Williams, which has so far lasted 36 years since he turned up at the Carlton Tower in dirty jeans reeking of marine glue. "We've managed to survive over a long period of time because each respects the other. I've always respected Frank's determination and passion for racing, and the way he will never, ever give up. I realised early on that he had skills I didn't have, particularly in charming people to support him and his team, and Frank realised that I had engineering skills that he didn't have. So I

looked after the engineering and the machinery and Frank stuck to generating the money. Also we complemented each other. Frank could be indecisive and, rightly or wrongly, there were

> times when I said, 'Sod it, Frank, let's do it' and go off and make it happen.

> "I don't think I'm quite as gruff and intimidating as I sometimes read I'm meant to be. I don't go round shouting at people. The trouble is, when you do something like that once - like when I shouted at Keke in Brazil - it tends to stick. There has been the odd occasion when I have been forceful. There have certainly been times when Frank and I have disagreed. I'll always say what I think, whereas Frank - it's part of his skill - sometimes finds the best way to get what he wants isn't to shout and bang the table. But if he believes in

something strongly he will never give up.

"Frank has always been a great pragmatist. You've got to remember that in his early days, Frank was rebuilding his own DFVs using outof-life parts because he couldn't afford to get Cosworth to do it. So he got stick when his engines blew up. His resilience is phenomenal. He will always look at whatever situation is in front of him and work out how to make the best of it. His wife Ginny's book is called A Different Kind of Life, because after the accident Frank said to her, 'We've had one type of life so far, and from now on it'll be a different kind of life.' You see his pragmatism all the time. He deals with his physical limitations, and sometimes serious health problems, by bringing extraordinary discipline to bear. He organises himself, his diet, all the other things, with military precision. That's how he has been able to continue running a large company in the 25 years or more since his accident - he's 70 in April – and why the prognosis is good. Formula 1 is still is his passion and he remains the guiding force of the company.

"When Sherry Thynne died in November Frank was in Qatar chasing budget, so I called him with the sad news. At the end of the conversation I said, 'Frank, you know, one of these days either somebody is going to ring you to tell you I've snuffed it, or somebody is going to ring me to tell me you've snuffed it.' There was a long silence. Then Frank said, 'Patrick, the competitive instinct in me rather wants it to be me getting a phone call about you, rather than the other way round.' That's Frank - still a competitor in everything."

That's Patrick too - an extraordinary competitor whose remarkable talents have brought Williams 113 Grands Prix wins and 16 championships. Clearly, in the very different world of hybrid power, he will be just as determined to oversee engineering that is good enough to beat the competition.



The post-Patrick Head era begins. We ask Williams' new tech chief Mark Gillan how the team plans to recover from the disaster that was 2011

BY ROB WIDDOWS

illiams Grand Prix Engineering's annus horribilis is behind it, there's a new engine in the back of the car and new faces on the front line. The team is making a fresh start. The only way is up, and next month in Melbourne it will know just how much progress has been made. The newly appointed chief operations engineer at Grove, Mark Gillan, has been fielding questions ahead of the new season, a task he will continue to perform at the circuits in 2012.

The new Formula 1 regulations for 2012 include a ban on exhaust-blown diffusers as seen - and heard - in 2011. How does this affect you?

"It is a significant change. The exhausts can no longer go along the floor of the car, and the engine mapping is quite prescribed, so that limits a lot of what can be done in terms of (blown diffusers) next year. We were behind the curve in developing the system in 2011: we were late in the wind tunnel and we had less flexibility with engine mapping on the Cosworth. Now we have certainty in the regulations, better mapping potential with the

Renault engine, and we can still have some blowing - through a much more convoluted path - to get the exhaust gases back to where we want them on the floor of the car. With the Renault package we've been able to look again at every aspect of the car, the integration of the engine into the whole drivetrain and its mating onto

So what are the immediate targets for the FW34 as Williams attempts to haul itself back to its glory days?

"Firstly we had to understand the problems we had on the FW33 and

make sure we didn't carry any of those into the FW34, so we've worked on eradicating the inconsistencies we had between the two cars and on understanding why certain components didn't work. I've been very pleased to see such a strong team spirit at Williams and a general desire to get ourselves out of the situation in which we found ourselves in 2011. Any repeat of that would just be unacceptable for a team with the history of Williams. In particular we've looked closely at tyre wear, cooling, aerodynamics, engine integration, KERS efficiency and driveability. To give you one example, the Renault engine allows us to run higher oil and water temperatures, which improves cooling and aerodynamic efficiency because we don't have to open the car up so much."

Has the arrival of new personnel in senior design and engineering positions resulted in a new-found desire to recover?

"I joined the team for the last six races of 2011 and I was surprised to find that things had got to the level they'd gone to, but with Mike Coughlan coming in as technical director, Jason Somerville as head of aerodynamics and Ed Wood continuing as chief designer we

have taken a comprehensive and unbiased look at the FW33 and made a number of design changes for the new car. The last few races of 2011 were really more like extended test sessions for us while we tried to get to the bottom of the problems we had with the car. We've been able to taraet all those areas where we were at our weakest. With the Renault rigs we've been able to do endurance and reliability testing through the winter, and so when we hit the track in February we'll have done a lot of endurance testing, which we didn't have time for with the FW33. We are on schedule with the new car and making our way steadily through all the final criteria to be on time and ready for testing. Then it's quite a savage season ahead with 20 races and flat out through to November."

Unlike in previous seasons. Williams is not making any grand claims for the new car from Coughlan and his team, but it is abundantly clear that there is a strong desire to leave behind the trials and tribulations of last year. As testing gets under way in Spain we will begin to get a picture of how the FW34 will stack up against the opposition. A great many fans are fervently hoping to see a Williams-Renault back at the sharp end of the Grand Prix grid.

CHAPMAN'S LAST

ven at the height of summer, Snetterton can be a bleak and chilly place, so imagine how it must have been for members of Team Lotus on December 17, 1982 as they prepared to run their new Grand Prix car, this car, for the very first time. "It was the day after we lost Dad," recalls Clive Chapman. Peter Wright was there too and remembers: "We had expected Colin to come. Instead Peter Warr arrived to give us the news."

There must have been those who wondered if

Lotus could even exist without Colin Chapman. His genius and maverick approach didn't just influence everything Lotus: it defined it.

Still there was work to be done, for this was no normal Grand Prix car.

You might scratch your head at the mention of the Lotus 92. Doesn't quite spring to mind like a 25, 49, 72 or 79 might, does it? And there's good reason for that. It only raced for half a season and never once came close to the podium, despite the undoubted talents of Nigel Mansell at its small, suede-bound wheel.

So why is it here? Well, alongside its Renault-

powered 93T sister, it was Chapman's last racing car, the final offering from probably the finest, most creative brain this country has ever brought to the field of automotive engineering. It was also the very last Lotus to be powered by a Cosworth Double Four Valve engine. Seeing as it was Chapman who had gone to Walter Hayes at Ford to provide the funding for Cosworth to develop the DFV, and that it had won first time out in 1967 fitted to the back of a Lotus 49, and that it was fitted to every other piston-powered Lotus F1 for the following 16 seasons, its final departure from the fold is worth noting.



The Lotus founder was famed for his drive to innovate; even his final racing car boasted one principle that would change the face of F1

BY ANDREW FRANKEL

But like all important Lotuses – and believe me, this is a really important Lotus – its real significance has nothing to do with the past. Like Enzo Ferrari, Chapman only focused in one direction: dead ahead. And the real reason that almost 30 years later it's now being unloaded again just up the road from Snetterton at Lotus's Hethel HQ is that it pioneered a suspension system that changed the face and direction of Formula 1. It was an innovation as important and influential as ground effect, turbo engines or even the mighty DFV. It was called 'active' and this was the first F1 car to have it.

Today active suspension is thought of as a child of the early 1990s with cars such as the Williams FW14B scaling hitherto unimaginable technological heights, but it is here, with this, the only surviving Lotus 92, that it all started.

"It was incredibly ahead of its time; you could do almost anything with it," says Tim Densham, the recently retired Renault F1 chief designer, then an engineer at Team Lotus in his late 20s. "It wasn't just a device for controlling ride height, but was a fully active system. Its principal benefit was not to aerodynamics, but mechanical grip."

The idea of active was not new and it was not Lotus's. Since 1976 Lotus had been working with the Cranfield College of Aeronautics. The collaboration occurred when Peter Wright asked Cranfield's Dave Williams to provide a system that would allow a car to be fully instrumented attests, allowing an unprecedented level of data analysis. As the battle to understand, harness, control and exploit what became known as ground effect wore on, the ability to record objective data from a car in action became ever more important.

They worked together for three years



III LOTUS 92

until one day, during a 1979 test with the latest Lotus 80, the car started to porpoise violently. The 80 sought to use its entire body as an aerodynamic surface rather than just wings, but this had made the car hideously pitch-sensitive, an issue exacerbated by the colossal spring rates and minimal wheel travel mandated by the need to make the most of ground effect.

"A mathematical model of the vehicle with coupled aerodynamics demonstrated that it was an aeroelastic problem, but did not reveal a solution," says Williams. "At the time I was developing an artificial feel control system, one that would respond to applied loads, but not to inertial loads resulting from aircraft manoeuvres. That led me fairly naturally to suggest that the Lotus 80 required a suspension that would respond to road inputs, but not to changes in aerodynamic forces, and that it should be possible to achieve that separation with hydraulic actuators replacing the normal dampers." In a word, active.

But Lotus already had its own ideas about how to solve the problem. They appeared the next year in the twin-chassis Lotus 86 "technology demonstrator", but when the Lotus 88 racing car it begat got banned, Peter Wright returned to Cranfield and asked Williams to get to work.

Chapman wanted Williams to work directly on a racing car, but he was persuaded to provide an Esprit test bed to establish "basic principles". Soon enough the Esprit was running with computer-controlled hydraulic rams in place of its springs and dampers.

Development duties were entrusted to Team drivers Nigel Mansell and Elio de Angelis and a lot was learned. Despite the extra weight and the power sapped from the engine to drive the hydraulic pump, it was just as quick as a passive Esprit and much admired by its drivers. It was awesome over bumps and could be programmed to provide pretty much any handling condition. Today Wright maintains that "it was Elio's demonstration of that car to Colin at Snetterton that convinced him to build the 92".

The 92, (or at least this 92) started life as a Lotus 87 back in 1981 and was raced as such by both drivers. It was converted to 87B spec for 1982, then sat out most of the season as de Angelis's T-car before becoming the focus for the 92 project.

At the time Lotus's chief designer was Martin Ogilvie, and while most of his efforts were concentrated on the Renault-powered 93T turbo car he does recall that "the proposed benefits of the active suspension were a lower and more constant ride height, and immediately adjustable handling parameters". Indeed so: within reason, the 92 could have any spring and damping rate it wanted at any wheel of the car. And it could have it in an instant. At the time Wright explained it thus: "The car works



in the same way as a skier's leg would on the slopes. As his leg reacts to the different bumps, so his brain receives the message, instantly changing the posture of the leg. Our suspension will receive its commands from our brain on board and immediately obey!"

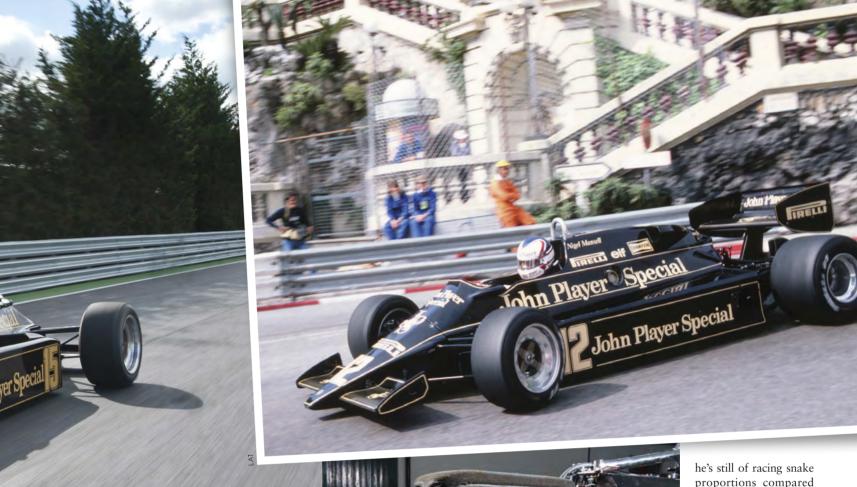
In a 1983 interview with Car magazine Mansell pronounced himself "amazed" by the first time he drove the racing car. "The car had no pitch whatsoever. It kept a constant ride height. And when you turned into a bend there was no roll whatsoever. I had the feeling the car was even more competitive than we thought... it had potential for much greater things."

But potential is one thing and realising it another. The system was heavy, sapped power and was at first unreliable. For instance, it was controlled by an aerospace-quality master switch that was fine in the Esprit but, according to Wright "had its insides scrambled by the DFV's vibrations under full acceleration, turning the suspension on and off. Poor Elio took me aside and told me that, while he was not afraid to drive the car, he was not sure he could keep it out of the wall. We finally found the problem when he remembered that the engine misfired while he fought for control! Lovely guy."

Mansell made the car's race debut in Rio in

March 1983, while de Angelis was given the one and only turbo Lotus 93T, which was passively sprung on account of Renault not permitting the active system to be driven off one of their camshafts. "I don't think Nigel was wild about that," says Wright before recalling that Mansell used to try out the system at the back of the circuit where the team couldn't see him before committing to a quick lap. Nigel qualified 22nd out of 26 but fought through to finish 12th. Elio's 93T retired with a blown turbo on the parade lap. At Long Beach Mansell was 12th again but in both races the system had reacted inconsistently leaving Nigel to rely even more heavily on his immense car control to keep it on the track. With Renault turbos due mid-season for both drivers, the active was removed and the 92 raced on as far as Detroit in June, where it came home sixth, scoring the only point of its career.

he project was scuppered by many things, not least its weight, complexity and the power required to operate the system. As Mansell put it at the time, "We lost five or six horsepower to power the system and in this business the first 450bhp just gets you around the circuit. It's the last 50bhp that decides how fast you're going to



go. Out of 50bhp, five or six is a lot to give away." Add to that the clearly finite shelf-life determined by Renault's refusal to let its engine climb into bed with active and it's perhaps surprising it saw the light of day at all.

Union of Lotus 92 and DFV was

final performance of double act

that began in 1967. Top: Mansell battles with 92 at Monaco in

1983 before Renault turbo arrived

The project, however, had not been in vain. While other F1 teams, most notably Williams, took note and put their own spin on the technology to finally realise its true potential, it was Lotus that would claim the first 'active' win when Ayrton Senna triumphed at Monaco and Detroit in 1987. But perhaps more significantly for Lotus was General Motors' interest in developments. GM had been toying with active for road cars at a theoretical level for a decade and sent two senior engineers to Rio to film the 92 in action. "Some little time later, GM signed the first active suspension development contract with Lotus," says Wright. "It was the start of a relationship that resulted in GM buying Lotus."

I tweeted a picture of the 92 the day I drove it and asked if anyone could name it. No one managed, though one guessed it was a 93T and you'd need an unusually thick anorak to spot the difference. It's not been 'active' since Long Beach '83 but it's still fascinating to pore over the last race car designed in Colin Chapman's lifetime and think that it was with this actual

chassis, number 92/5, that Lotus's relationship with the Cosworth DFV finally came to an end. Having spent most of the intervening years in the Donington Collection, it is now owned and raced by Kiwi enthusiast Roger Wills and

kept battle-fit by Clive Chapman and his staff at Classic Team Lotus.

It is a truly beautiful racing car. Not perhaps the most beautiful Lotus ever produced, but it is beautifully proportioned and so exquisitely finished it seems like it was actually styled. As it turns out, this may well have been the case. "I'm not sure it went in a wind

tunnel," says Densham, "but it did look nice for the sponsors."

There was some speculation as to whether I'd even squeeze into the 92. Mansell was one of the larger men to drive F1 cars in the 1980s, but proportions compared to me. There is enough room for my backside on the floor and my legs in the pedal box (just) but the top of the cockpit is so narrow I have to hunch my shoulders forward just to get in.

It's amazing how slowly the environment of a Grand Prix car evolved through the

'60s, '70s and '80s. There's a central rev-counter flanked by two small analogue Smiths dials, one displaying water temperature and fuel pressure, the other the temperature and pressure of the oil. The stubby lever operating the five-speed

> transmission sprouts just perfectly where my right hand naturally lies. Architecturally the 92 cockpit is no great advance on a Lotus 24 of 20 years earlier.

In construction. however, this car could hardly be more different. Instead of a flimsy aluminium spaceframe, here you find a carbon fibre and Kevlar sandwich

monocoque clothed in carbon-fibre body panels. In period the 92 only raced on Pirelli rubber but today, as with all other historic F1 cars of the era, stout Avon slicks are the order of the day.

"The car was the start of the relationship that resulted in GM buying Lotus"



475bhp, lasted most of the season and got you nowhere, or one that only worked properly between 8000rpm and 11,200rpm, made

520bhp and needed regular rebuilding.

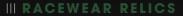
Now it seems you can have the best of both worlds. As I rolled out onto the new FIAspecification test track at Hethel I was completely dazzled by the way this engine worked. You can drop it down to 4000rpm and it'll still pull, it's working hard at 6000rpm and whips round to 10,500rpm with a vengeance. Yet it makes better than 520bhp. With little more than half a tonne to propel, it makes even the very fastest supercars seem utterly impotent.

It consumes gears relentlessly right up until fifth when, at around 150mph, it just seems to competitiveness, and emphatically the Lotus 92 is one. The idea was spot on; what tripped it up was the fact that realising its full potential required knowledge that simply did not exist.

Clearly Colin Chapman would have preferred to close his account with a winner, but instead he went out with a car whose only fault was to be just a little too far ahead of its time. For any F1 constructor there would be no shame in that. For a man like Colin Chapman who lived on and over the creative edge, you might even call it a fitting finale.

Thanks to Roger Wills, Joe Twyman, Clive Chapman, Chris Dinnage, Lotus Cars and everyone at Classic Team Lotus

Frankel literally squeezed into 92's narrow cockpit, but loved muscular feel of now passive-sprung car





SAFETY OVER ALL

Yves Morizot's race accessories company Stand 21 has clothed some of the sport's biggest names – and helped keep them from harm

BY PAUL FEARNLEY

famous photograph taken at the 1986 Portuguese Grand Prix depicts Ayrton Senna, Alain Prost, Nigel Mansell and Nelson Piquet – all 'friends' together – posed perched on Estoril's pitwall (see right). Each is wearing a Stand 21 race suit.

Company founder Yves Morizot (above) has been in the business of motor sport safety for 41 years. A frustrated racing driver, by the time friend Guy Fréquelin borrowed his Renault 12 Gordini to lap insouciantly five seconds faster at the nearby and recently inaugurated Dijon-Prenois, Morizot had turned his inquiring mind to the darker side of the sport. Like Jackie Stewart, he's worked tirelessly since to help pull its head out of the sand.

Born into a family of bakers – "Bread is bread yet every customer has an opinion, and only a

few ever thank you" – an impecunious Morizot bought an ailing racing accessories company. The catalyst was French Formula 3 racer Jean-Pierre Cassegrain's fiery accident at Dijon's makeshift airfield circuit in 1970. By 1972 Morizot was pioneering with multi-layer flame-retardant suits. Two years later Stand 21 Racewear – stand is French for pit; 21 is the département number of Côte-d'Or – was in Formula 1 on the backs of Jean-Pierre Beltoise, Emerson Fittipaldi and Jacques Laffite.

By the '80s it had its own factory in Dijon, was sourcing materials directly and making everything in-house. Its innovations included outside-seam gloves to prevent blisters and improve feel; 'floating sleeves' to provide greater movement in cramped cockpits; and a breathable material that's also stretchable – hence Sébastien Loeb's celebratory backwards somersaults.

In '91, with the help of designer Tim Halsmer,

brother of two-time IMSA champion Pete, it branched out into helmets. That same decade Jim Downing, another multiple IMSA champion, selected it to be a licensee – improver and promoter – of the HANS device.

Although Stand 21 has continued to expand – its shoes and gloves are made by Stand 21 India, opened in 2001 near Chennai – Morizot's 160-strong company remains niche and nice, focused yet friendly.

"It's no good forcing people to buy," he says. "It's much better that they do because they believe in a product. Perhaps your watch might not be the most beautiful, nor the biggest, but you have chosen it because it shows that you have a certain way of thinking, a certain approach on life: strong, clean, reliable."

Safe to say Stand 21's products are reassuringly expensive. But then any item that is hand-made, tailored and rigorously independently tested



tends to be. And exactly what is the ultimate price in this instance? Precisely.

That said, with its small market, seven-figure development costs and tortuous turnarounds from white sheets of paper to some of the folding stuff, it's easy to believe Morizot when he says that he has always been more interested in product than profit, although the understated Audi A8 parked outside probably says more about his attitude of mind than financial status. When in the late 1980s Formula 1 drivers began to ask for money to wear a particular brand, and demand 10, then 20, then 30 suits, not three or four, he began to drift away. He could neither afford it nor agree with it.

"I am not against Formula 1," he says. "Compared to 1974, it is so much better today, so much safer. Bernie [Ecclestone] and the FIA have created something incredible. And I learned a lot from the drivers: Didier Pironi, Prost, Senna



- they were always pushing me to innovate.

"F1 is everything for some people. For me, the club racer's life is as important as the world champion's. People who know that come to us."

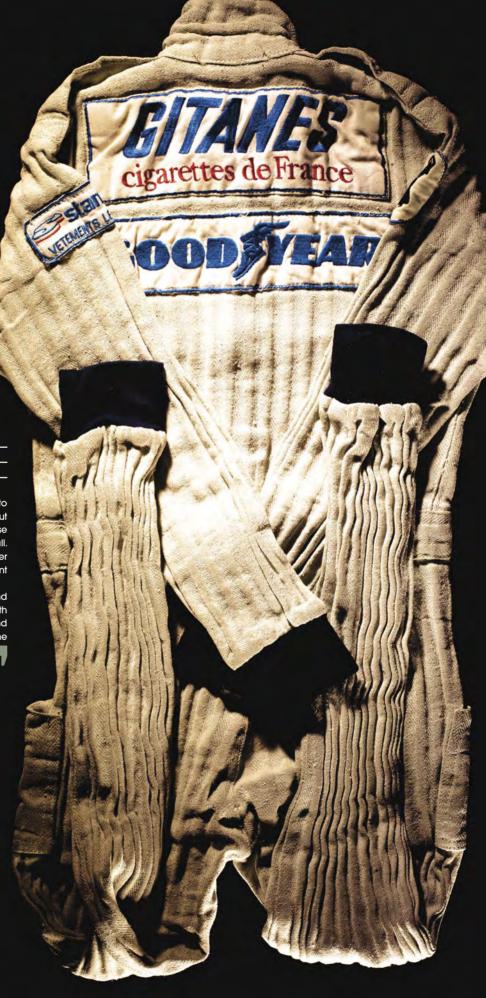
America is a case in point. The headline fatal accidents of Dale Earnhardt (2001) and Funny Car drag star Eric Medlen (2007) triggered safety re-evaluations from without and within

the cockpit, and NASCAR and the NHRA have become Stand 21's most recent emerging markets. This is not the result of an expensive, aggressive ad campaign, rather of relaxed, calm meetings, some of them by chance, fact-finding visits, not missions, deep-seated knowledge, hard won yet generously shared, and understated e-mailed approaches from potential customers. For Morizot mixes his deadly concerns with a love for life. Yes, he's happy to chat about some of his friends, the famous racing drivers, but he's at his happiest as we watch X-ray film footage of his company's latest innovation: a tailoring addition to the traditional balaclava that allows a helmet to be more easily and smoothly removed from an injured, even unconscious, driver without destabilising the bones of the neck.

Perhaps Morizot is one of those unseen figures who rate a quiet 'thank you' on behalf of those who risk their lives behind the wheel.

I first met Jacques when he was in Formula France (precursor to Formula Renault) in the early 1970s. We were both starting out and became good friends. He is really my buddy. I love him because racing was just a part of his life: fishing, tennis, golf - he enjoyed it all. We co-owned a golf course for a time with Alain Prost. We bought it after Gilles Villeneuve had been killed; Jacques wanted something different for his children to have, just in case...

"Formula 1 changed him not one bit. He has close to no ego and has always been great fun to be with. He is one of those drivers with the talent to become world champion but not the inclination to spend enough time on becoming world champion. But I tell you - what is he today: 67, 68? - he has the best life after F1 of any driver I know. Absolutely the best.









The recruitment of a senior technical trio should allow team principal Ross Brawn to refocus on a kick-start for Mercedes GP BY ADAM COOPER



here's no question that 2012 is a crunch season for Ross Brawn and Mercedes GP. Last vear the team finished a distant fourth in the World Championship, and while an opportunistic Nico Rosberg briefly led a couple of races, the silver cars were never really in the hunt. Indeed, neither Rosberg nor Michael Schumacher recorded a podium finish.

Given that as Brawn GP the team won the World Championship in 2009, and that the subsequent arrival of Schumacher and the support of the Stuttgart manufacturer promised so much, the performance has been a huge disappointment.

Two years into the Mercedes adventure - and into Michael's comeback - there has been little sign of real progress. But there's a mood of optimism in the Brackley camp, and with good reason. Since the start of last season the team has added not one but three big names to the squad. Bob Bell, Geoff Willis and Aldo Costa have all been technical directors elsewhere, and since that job means different things in different teams, they each bring their own skill sets to the table.

Of course, too many chefs can be a problem as well as an asset and the task now will be to make everyone gel. Bell has the day-to-day job of ensuring that the technical department runs smoothly, but ultimately as team principal it's Brawn's responsibility to ensure that everything works and that the team puts a more competitive car on the grid. He readily admits that in the past he had too much on his plate.

"If I'm honest I think probably the biggest thing is that the task was pretty broad," says Brawn of his previous workload. "We didn't have a technical director and I was carrying some of that role and not doing it well enough because of the need to cover other things. Now we've got Bob on board and, particularly with Aldo and Geoff joining us, we've got lots of experience at the top end. That's what's going to be making a huge difference.

"It was the same with Ferrari. I went to Ferrari and we had Aldo, we had Rory [Byrne]. I know in Red Bull the focus is on Adrian [Newey], but there are some very strong people there. Adrian alone won't carry it, the same as I can't carry it. There's no one that can carry an F1 team from a technology point of view."

Bell joined as technical director last April after a decade at Renault that included two world championships with Fernando Alonso and a brief stint as team principal in the immediate aftermath of the departure of Flavio Briatore. Brawn says his impact was quickly apparent.

"It was pretty much straight away. Bob was able to give particularly the factory-based staff a day-to-day reference, which is what they were missing with me, because I was going to the races and then coming back. From day one there was a benefit and with the new car we've certainly seen Bob's organisational influence having a strong effect."

The simultaneous addition of Willis and Costa to the mix could not have been planned, but when they came onto the market - Costa was dropped by Ferrari while Willis became disillusioned with HRT - Brawn jumped at the chance to bring both on board.

"I think any team in the pitlane will strengthen its position when it gets an opportunity because there's only ever one team winning and the teams that are not winning have to look at improving their situation. Bob and I were looking at how we could strengthen the group and with two people of the strength of Geoff and

Aldo available it was an easy decision.

"Geoff fairly quickly identified areas where we're strong and areas in which we need to strengthen. That is encouraging. With Aldo, once he'd made the decision that he was prepared to come and live in England I was very excited. That move was obviously critical, that he was prepared to make that commitment."

Brawn is confident that everyone will work

together efficiently as they have different job descriptions: in essence Willis is the factory organiser in charge of the wind tunnel and other R&D tools and Costa is the designer, with Bell overseeing both.

"The first level is for Bob to manage and then ultimately it's me if there are any major issues," says Brawn. "But I honestly don't expect there to be. Everyone knows from the very beginning what's expected of them, what their roles and responsibilities are. I think it's healthy if there is, let say, an overlap of debate, but not an overlap of responsibility.

"If Aldo has an opinion about something in Geoff's area of technology I would expect Geoff to listen and respect it. But ultimately that area is Geoff's responsibility, in the same way that the design of the car and the engineering of the car

Brawn believes that the

arrival of experienced

him to do a better job

senior personnel will allow

will be Aldo's responsibility, but Geoff will have an opinion. It's fairly well defined."

The new technical team has much work to do to pull Mercedes up the grid. One of the biggest problems is that during the Brawn GP season the team shrank and Brawn was reluctant to expand it again on the understanding that rivals would have to downsize in line with the aims of the Resource Restriction Agreement.

"I think we moved forward, we just didn't move forward enough," says Brawn of 2011. "Perhaps we underestimated the task at hand, underestimated the resource we needed to get the job done at the right level. It sounds a bit like an excuse, but I think we were outdone in various areas where, with more resources, we could have done a better job.

"I think we've learned a lot from it. We've



Brawn's team of new aides provide much-needed experience and expertise



TECHNICAL DIRECTOR AGE: 53 JOINED: APR 2011

An aerodvnamicist by training, Bell ioined McLaren in

1982 before moving to Benetton in 1997. After a spell at Jordan he rejoined the rebadged Renault team in 2001. He became technical director in 2003 and held that job during Alonso's title years. After the departure of Flavio Briatore he was steered into an unwanted management role and he left in October 2010



TECHNOLOGY AGE: 52 JOINED: OCT 2011

From a background in yachting, Willis made his name

as head of aero at Williams before joining BAR (later Honda) in 2001, where he was technical director. He was dropped by the team in 2006 but later emerged at Red Bull as technical director and, in effect, no2 to former Williams colleague Adrian Newey, where he played a key and largely unheralded role in creating the structures that allow Newey to flourish. He's spent the past two seasons with HRT.



AGE: 50 JOINED: DEC 2011

Costa was designer and later technical director of

Minardi before joining Ferrari in 1995, initially under John Barnard. He was then no2 to Rory Byrne, taking on the chief designer role before the 2005 season. He later became head of design and development and in November 2007, technical director (chassis). He lost the job last summer after the team's poor start to the season.

added strength to the organisation for 2012, but the important thing was to retain the strengths we already have. Fourth place is not where we want to be, but it's not easy to be fourth. There are a number of teams up and down the pitlane who would be very, very happy with fourth! We've got to make sure we keep all the good things that we've got in the team and strengthen and enhance the things that need to be improved."

Mercedes has now increased the size of its production staff, filling gaps created during the Brawn downsizing, when a lot of the work was outsourced.

"Doing work outside is expensive and sometimes takes longer, and sometimes you struggle with the quality. We want to be able to react quickly to improvements which we want to make to the car, and we need to do that in-house."

The team's poor form in the first half of 2011 did have one advantage, in that it was able to write-off the season and turn its attention to the 2012 car. While other top teams were also able to make the switch to some degree, given that the championship didn't exactly go down to the wire, Mercedes did it particularly early. A similar focus on the future during Honda's awful 2008 season paid dividends in spectacular style the following year, although Brawn plays down the comparison.

"In 2009 there were fairly dramatic new regulations and there's less of that this year. We're obviously doing away with the exhaust technology, but there's easier carry-over from what we're doing in 2011 to what we need in 2012. It's a slightly different programme. But we did start the 2012 car as early as we could. Certainly in the last three months of the season we didn't use much resource at all to keep the 2011 car going."

hile the technical team is new, there are no changes on the driver front, as Rosberg and Schumacher head into their third season together. Indeed the former has now been signed up well into the future, although for the moment, Michael is on board only for 2012.

"I enjoy having continuity with drivers, you can debate about who's the best. We've got two drivers who are more than capable of winning races with the right car and having continuity means that from the day they sit in the new car and drive it we can judge their comments and their feedback without learning how to work with a new driver. That's very important to us."

The jury is still out on Rosberg's ultimate potential, and it remains to be seen whether he can elevate himself to the exclusive club of contemporary superstars that includes

III ROSS BRAWN INTERVIEW

Messrs Vettel, Alonso, Hamilton and, after his stellar 2011 season, Button. It's been hard even for the team to judge Nico against Schumacher.

"You're never completely sure, and it's true that the reference of Michael is not an easy one, because he was away for a while. But I think Nico is very, very good. We wouldn't have signed him again if we didn't have faith that he was special.

"He's shown already that in times when he's had an opportunity to lead a race it hasn't fazed him, he's dealt with it. We've not managed to keep him there unfortunately, but it's not been a problem for him. I think he's first class, and

we're going to give him a car to demonstrate that to everyone in the future. And I hope that we can give Michael a car that he can have a lot more fun in."

chumacher was given the benefit of the doubt over the course of his first comeback season as he found his feet again, and while last year there were signs of real spark, Rosberg still had the upper hand more often than not. Inevitably, the clock is ticking - still 'only' 40 when he first signed for Mercedes, Michael turned 43 on January 3.

"Race-wise he's been excellent, first-class. Probably in the first year our expectations were too high, but we didn't have a great car and coming back after three years is still a

mighty challenge for anybody. With Nico in the car as well and obviously demonstrating he was pretty quick, it was a tough year. But I think Michael can take a lot of reward from his race performances in 2011.

"He's making a massive effort to support the team and do everything he can to make this team work and I think when the team works he'll be able to take some pleasure from being a part of getting it there. If we give either of them a good enough car I'm convinced we'll become very excited about the results they'll give us."

The danger for Michael is that if Mercedes moves up the grid this year any discrepancy in qualifying performance will be even more apparent.

"Let's see if we have that problem! You balance speed and experience, and there are very few people as experienced as Michael in F1. I'm sure he uses his experience to the maximum and,

as I say, his race performances have been a delight to see. Let's carry them on in 2012, but from higher on the grid."

It's easy to be optimistic now and the real picture will emerge during testing and at the first race in Melbourne. The Mercedes board, who took a big gamble just as BMW and Toyota pulled out of F1, expects results. The burden is on Brawn's shoulders.

"First of all the pressure is on me, but it's also on a number of people. One of the good things about the team is that we do share the pressure, and that gives you some strength within the team.

> "I think I've probably been involved long enough for the pressure to be largely internal. I'm not involved because I have to be, I'm involved because I have a passion for the sport. I have a passion to try and win. So the pressure comes from that.

"As Mercedes we have a strong heritage and we want to live up to that. We want to be able to create some history to be proud of. Mercedes is a world-leading brand and

we want to demonstrate that in the field of F1, as well as elsewhere.

"The good thing is that our board members have been involved in motor racing long enough to realise what it takes, that it isn't a five-minute job and you don't solve the problems by making chops and changes. I can't ask for any more than what we're getting in

terms of support from the board."

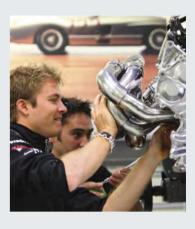
If the clock is ticking for Schumacher, it is too for Brawn, who turned 57 in November. However, the sabbatical he enjoyed in 2007 between leaving Ferrari and joining Honda has undoubtedly extended his working life and he's in no hurry to stop.

"I'll do another few years, for sure. I still enjoy it, still get out of bed in the morning, still put up with the flights. But there will be a need to pass the baton on, even if it's in small pieces. Who knows? You follow your instincts on what's the right thing to do. I certainly wouldn't want to be hanging around unless I can contribute something.

"Some of the people we've got, Bob, Aldo, Geoff, probably have at least 10 years on me so they've got more scope for the future. It will probably be a gentle process and there will come a time. But not yet."



"Michael is doing everything he possibly can to make this team work"



INSIGHT

Power-recovery technology is here to stay, and come 2014 Mercedes aims to turn up the heat on its rivals

BY ED FOSTER

INETIC ENERGY RECOVERY Systems. They're controversial topic. Some teams in Formula 1 have them, others don't. They're expensive, and questions about their real-world value still loom large after they were used during the 2009 and 2011 seasons

But talk to anyone at Mercedes AMG High Performance Powertrains, which supplies KERS to the Mercedes team itself, plus McLaren and Force India. and they'll tell you that isn't necessarily the case. The company built the SLS AMG E-Cell power pack, a road-going electric prototype that wouldn't have been possible without the lessons learnt in F1. It's also adamant the technology, which harvests kinetic energy from the car's braking process and turns it into a boost in power available at the driver's discretion, has greatly improved the racing.

Take the Indian Grand Prix as an example. Michael Schumacher had qualified a lacklustre 12th, but come the end of the first lap he was up to eighth. It was certainly a good first lap, but what many didn't realise at the time was that those four places were all made up on the long back straight thanks to his KERS. The Mercedes driver made the decision to not use any of the extra 60KW (80bhp)



of power off the line, instead deploying all 6.7 seconds of it coming out of turn three. The 11.2mph advantage over cars without KERS - and the 7.4mph gain on those with the system - meant that he could cruise past the Toro Rossos, Adrian Sutil's Force India and Vitaly Petrov's Renault.

"The problem with KERS is that from a spectator point of view you don't recognise the value of the system," says Thomas Fuhr. The company's managing director is taking a short break in the run up to the 2012 season to talk to Motor Sport about KERS, and is flanked by Andy Cowell, the engineering director.

"The only thing you hear", he says, "and the bit that sticks in everyone's head, is that 'so and so had a problem with their KERS'. The only time you hear about it is when it's not working!"

Mercedes may not have made it onto the podium last year, but one place where it is considered to be a market leader is in KERS technology. Indeed, the group in Brixworth in Northamptonshire was awarded the prestigious Dewar Trophy in 2009 by the Royal Automobile Club in recognition of their system.

Mercedes started working on its first KERS in the summer of 2007 - when the components weighed an unwieldy 120kg so that partner team McLaren would be able to use KERS, competitively, at the start of the 2009 season. By the time the Woking-based outfit tested it in 2008 it weighed 40kg, and by the first race of 2009 it had shed another 15kg. "We are now down to just under 24kg for the entire system," Cowell says about the 2011 version. Whatever your views on the expense of Grand Prix racing, you can't deny its ability to improve a product.

There are two main types of KERS mechanical and electrical. The mechanical version uses the braking energy to spin a flywheel at over 60,000rpm, which is then connected to the rear wheels when the extra power is needed, while the electrical version converts the braking energy into electrical energy and stores it in a battery of some sort. The process is then reversed when the driver needs the

extra boost. In 2011 - thanks to the better packaging - every car equipped with KERS on the F1 grid used the electrical version.

"We spent a lot of time working with the Daimler hybrid group trying to

understand where they and their technology were at," Cowell says, referring back to 2007. "We looked at the regulations and it was clear that some of the road car components we could use and others we would have to adapt and evolve.

"Some of the Daimler people actually came to work here on

secondment, which was really useful. We've employed some specialists. but also a considerable number of the (KERS) team used to work here on things as diverse as connecting rods on engines. They've just applied themselves."

"The challenge was to come up with a hybrid system that had very good power density (storing the power in the smallest space). In the road car world it's all about energy density (how much you can store and how far you can go on the charge)."

"The basic problem with hybrid systems," Fuhr cuts in, "is that they are big and heavy and therefore difficult to package - even in a passenger car. Whatever you can do in terms of getting it as light as possible and the (battery) chemistry as suitable as possible, you are going in the right direction. This is what they're trying to do on the road car side and what we've been doing in F1.

"One of the big challenges was trying to get the electrical energy to flow well without loss. Energy is very precious and the rate at which we wanted to transfer it meant we ended up losing a lot. We're now running at about 80 per cent efficiency so we only need to harvest 500KJ a lap to have the 400KJ to deploy." The KJ measurement is what some call the size of the 'tank' of energy, whereas the KW figure is the power that is deployed.

Even though there is an energy cap - at 400KJ - KERS is another area on an F1 car that can be improved all the time. As Andy points out, "if you say something's perfect it's probably time to retire." As well as the weight dropping from 120kg to 24kg, the volume has been dramatically reduced.

The first battery pack Mercedes used in 2007 was the same size as a fridge. Although Cowell and Fuhr are not keen to talk about the current system, they don't disagree when I suggest it is the same size as an Oxford Dictionary. That's

not just the battery pack - that's the entire system.

However, given there is a specified minimum weight of 640kg for the car, can saving weight and volume really deliver a better lap time? "Reducing those as well as improving the round-trip efficiency does reward you with lap time, but not to a huge degree," admits Cowell. Of course, if the

system is smaller - as it had to be last year thanks to the ban on re-fuelling and subsequent larger tanks - then the packaging is made easier. Even with the energy cap Andy says that a car with

Fuhr (left) and Cowell head the KERS team at Brixworth that is the best in the business



KERS has a 0.45-second advantage over a lap on a car without the technology.

Whether or not this advantage is enough to warrant the millions of pounds that have been spent up and down the

"In 2014

we will

be allowed

to double

the power

grid is a matter of opinion. In 2014, though, there will be plenty of changes in F1 and KERS will then become much more important. The V8 engines will be replaced by turbocharged V6s and more importantly for KERS enthusiasts. the system's impact on lap time will be a lot more significant.

"The big thing (for 2014) is that KERS will become ERS," says Andy. "The 'K' stands for kinetic - harvesting energy from the velocity of the vehicle under braking - and even though this will

still be allowed there will also be heat recovery, too

"You are permitted to connect an electric machine to the turbine shaft (on the turbo) to recover heat energy that would otherwise go into the atmosphere through the exhaust system. That energy is absorbed into the electric machine and can go freely back into the system.

"With the two processes combined - the current system and the heat recovery - it will have a significant laptime benefit. Not only that, but you're not allowed to burn any fuel in the pitlane so it'll be purely electric power there. The system must be capable of doing that and the battery pack must also be capable of having enough energy and power to do that.

"The other major change for 2014 is that we will be allowed double the power for propulsion." At the moment F1 teams are restricted to 60KW, but this will become 120KW when the 2014 season aets underway. As well as that

the total amount of energy going into the propulsion machine has been increased 10-fold and will be 4MJ rather

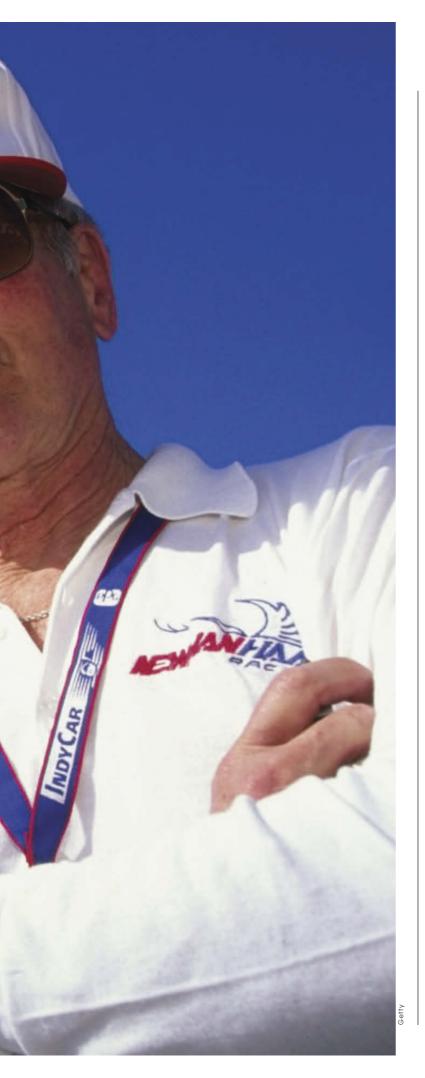
"It's a nice challenge for us," says Andy. "As in 2007 there is support coming from our Daimler R&D facility and I'm pretty confident that there will be more road car projects spinning off from what we do in F1."

When KFRS was first introduced in 2009 it was done in order to make F1 more environmentally friendly. Some laughed; however, with the new rules in 2014 including a limit on fuel usage - 100kg per hour - the emissions will be reduced by 35 per cent. This - unsurprisingly - is exactly what the road car industry is aiming for in the same amount of time.

"At the moment," says Fuhr, "KERS technology is confined to small-volume road cars because it is very expensive. In series cars you just can't afford it. The rules learnt in F1 do apply to everyday cars, though. Everyone is working in the same direction - smaller volumes, lighter weight, higher efficiency. And the usual process is for a technology to be tested in F1, then fed into the supercar world. After that it does gradually feed back into everyday cars."

Whether you like KERS or not, it is here to stay. Not only that, it will become an even more important part of F1 in 2014. It's safe to say that it will also become a more important part of everyday motoring, thanks to the work done by the engineers in F1.





NEWMAN

THE FINAL SCENE?

It's been a long-running and heroic story, but the 'Williams of IndyCar' has taken its last bow, leaving a gap in US pitlanes

BY GORDON KIRBY

he sad news came on December 1, 2011 that Newman/Haas Racing would not compete in IndyCar in 2012. Like Williams in Formula 1, Newman/Haas in 2011 was a pale shadow of its glory days when it set the standard that all Indycar teams wanted to match - including Team Penske and Chip Ganassi Racing. Nevertheless, the withdrawal sent shock waves around US motor sport. Indycar racing without Carl Haas? It'll never be the same again.

Founded by Paul Newman and Haas at the end of 1982 as a one-car team dedicated to Mario Andretti, the outfit went on to win eight Indycar-type championships, taking 107 race wins and 110 poles over a 29-year run. The team's heritage also includes seven Can-Am and Formula 5000 titles won by Carl Haas's own squads between 1974-80. Newman/Haas general manager Brian Lisles says he hopes to keep the team in business, possibly in Indy Lights or running an LMP2 sports car in the ALMS, but its days as a major player in American motor racing appear to be over.

The past few years have been tough for Newman/Haas. Paul and Carl remained loval to CART/Champ Car to the bitter end, but even as Sébastien Bourdais won four consecutive Champ Car titles between 2004-07, the team found it harder and harder to sell sponsorship, and its move to the IRL in 2008 did not help the situation. With Newman passing away later in '08 and Haas ailing in recent years, one of America's great race teams was reduced to running pay drivers.

As the struggle continued Carl and wife Berni finally took the difficult and painful decision not to continue. Carl Haas Auto remains in business, and a skeleton crew has been retained by the race team.

Lisles, however, refuses to be beaten. "We've been compelled to let a good deal of our workforce go but we are not closed," he says. "The last chapter of Newman/Haas has not been written. We're going to do our best to regroup and reassess the realities of modern motor racing and see if we can't pick ourselves up. This is not an obituary of the team. The announcement is a reflection of the state of American open-wheel racing."

ewman/Haas was formed thanks to Carl's persistence and the particular driver he'd lined up. He convinced a sceptical Paul Newman to become his partner, but the catalyst was Andretti who agreed to drive as long as it was a one-car team for him alone. Andretti had quit Formula 1 the year before and Newman/ Haas proved the perfect place for him to rekindle his Indycar career. Tony Cicale was brought in to engineer his car and Nigel Bennett designed an all-new Lola for Newman/Haas's second season in 1984, when Andretti took the CART championship - his fourth and final Indycar title - in style with six wins and eight poles.

Andretti spent the last 12 years of his career up until 1994 with Newman/Haas, winning 16 races. "Carl and Paul would always surround themselves with the best people and keep them," he says. "To me, that's huge. Look at the success of any team in the history of our sport. No matter where you go there's continuity in the key people. That's why Newman/Haas were successful for so many years and have the championships to show for it.

"The thing I appreciated from day one about Carl was the fact that he was 110 per cent a racer. He was an icon in the sport because he was a part of Lola and Hewland, two manufacturers who have been so important in the broad history of racing in the United States, and he depended on the sport for his financial success.

"Paul was a great support system. He was a real strong shoulder to lean on at any time and a security blanket for the team. Everyone, especially the key members, felt supportive of

him. Everybody had a function and contributed to something that was very positive. You don't get results by luck only. Consistent performance comes from the effort of everyone over a long period of time.

"And Berni was an incredible stabilising force behind it all. She was very cool and collected. I think she probably showed the least emotion. She was a great partner for Carl in making a lot of key decisions."

A vouthful Adrian Newey had engineered Andretti's car at Newman/Haas in 1987. Mario dominated that year's Indianapolis 500 only to drop out late in the race with a blown engine. But he was on pole at six races - Indy included - and won at Long Beach and Elkhart Lake.

"It was a thoroughly enjoyable season and a real privilege to work with Mario," says Newey.

"We got on well straight away. I managed to earn a certain degree of respect from him, which always makes life easier for a race engineer. We understood each other's language, similar to the way Bobby [Rahal] and I had developed two years previously and we had a cracking year.

"Carl was a very decent guy to work for. He was always very straightforward. The refreshing thing about Carl and those days was that people did what was right rather than turning everything into a game

of personal gain all the time. What impressed me about Carl was that he is a genuinely nice guy who has tremendous loyalty to his people. He was also very sharp. He knew exactly what was going on and if you wanted or needed something technically, he would do whatever was required to provide it."

After Andretti's success

Newman/Haas went on to win three more titles with Mario's son Michael in 1991, Nigel Mansell in '93 and Cristiano da Matta in 2002, before Bourdais' winning streak. In fact Newman/Haas finished 1-2 in the championship in 2004-05 with Bruno Junqueira and Oriol Servia backing up the Frenchman. Among its other winning CART and IRL drivers were Paul Tracy (1995), Christian Fittipaldi (1999-2000), and Graham Rahal and Justin Wilson (2008).

Michael Andretti, who had two stints at Newman/Haas from 1989-93 and 1995-00, scored 31 of his 42 Indycar wins with the team before going on to run Andretti Autosports in

IndvCar. "This is a very tough business, and for Carl to be successful over so many years is rare and impressive," he says. "I've got a lot of respect for him. He was a big part of the history of American racing for many years. He sold a lot of cars and parts to a lot of people and made a great living out of it. But he gave a lot to the sport, too.

"He's one of the most unique people you're ever going to meet. Some days you just wanted to hate the guy, but the next day he would do something to make you laugh. He's [cartoon character] Mr Magoo! That's the best way to describe Carl. He'll go cruising down the road and have pile-ups behind him. I loved him for that. And Berni played a way bigger part than many people think. She ran a lot of the show in the background."

Andretti recalls Newman's "sheer love" for

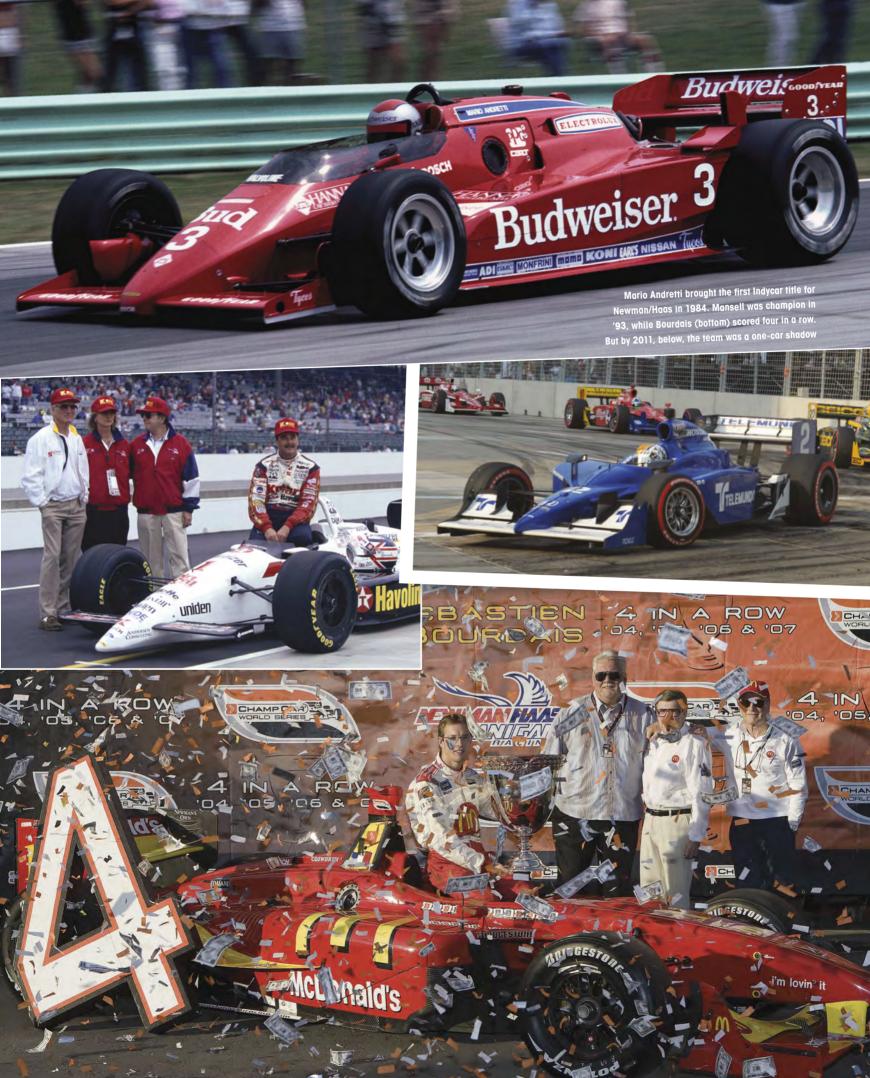
the sport. "He let Carl and Berni run the show but he still had a big influence on a lot of things. The relationship between Carl and Paul just seemed to work. It's funny because they were such enemies [in Can-Am] but they became partners and it worked. I had a ton of respect for Paul. There was no bullshit about him. He just loved racing and wanted to be involved in it. But he was a nice guy, too. He was humble and talented, and he was honest and straightforward."

> There's much more to the heritage of Newman/ Haas, however, than 29 years of single-seater racing. Movie star Newman was himself a renowned amateur driver, of course, and also ran his own Can-Am team from 1978-82. It won 10 races during that time but was always beaten to the title by Haas's boys.

Like so many great team owners, Haas started out in the cockpit himself. He began racing in 1952 aboard an MGTD before trying a series of Porsches and Elva sports cars. He'd grown up in the Chicago suburb of Lincolnwood and began selling race car parts and gearbox pieces out of the basement of his mother's home. He formed Carl Haas Auto in 1960, moving into a small showroom on Chicago's Northside and selling Elva cars and Hewland gears and transmissions. A few years later Haas Auto moved to nearby Highland Park where Carl sold McLaren and Lola Can-Am cars, becoming Lola's US agent and distributor.



"Carl made a great living out of the sport, but he gave a lot to the sport too"



III NEWMAN/HAAS

Haas sold thousands of Lolas - Can-Am and F5000 cars, Formula Atlantics, Formula Fords, Super Vees and Sports 2000s - and would later sell Reynard Atlantic and FF2000s. Back before the days of FedEx he ran 'Haas FasPac', an overnight delivery service that established Carl as the country's leading supplier of road racing cars, parts and gearbox components in the 1960s and '70s.

Haas hung up his helmet in 1966 and fielded his first professional race team the following year, with Masten Gregory driving a Can-Am McLaren in the United States Road Racing Championship. In 1968 Carl's team contested both the USRRC and Can-Am series with Chuck Parsons and Skip Scott, and in 1969 the former finished third in Can-Am behind the unstoppable Bruce McLaren and Denny Hulme.

Peter Revson drove Haas's Can-Am Lola in 1970 and in '71 Carl hired double world champion Jackie Stewart to drive his L&M Lola. Stewart went on to score Haas's first two Can-Am wins and finished third in the championship behind Revson and Hulme's works McLarens.

"I loved driving for Carl and Berni," says Stewart. "It was like Ken and Norah [at Tyrrell], the same kind of relationship, like a family. There was a great spirit in the team. They were very keen winners and whether it was Can-Am or F5000 or Indycar, Carl always had winning drivers and teams. He's been a tremendous stalwart of motor sports and particularly road racing in America. To many people in Europe and around the world Carl Haas represents American road racing more than any other man."

Carl turned to F5000 in 1973 in a partnership with Chaparral man Jim Hall, and Haas/Hall won three titles in a row from 1974 with Brian Redman driving. F5000 was replaced in 1977 by the 'new era' Can-Am and Haas's team continued to dominate, winning four straight titles with Patrick Tambay (two), Jacky Ickx and Alan Jones. In total Haas's teams have won 15 major American racing championships and more than 140 races.

"Carl gave me every opportunity to have the best engine, the best set-up and the best testing," says Ickx, who won Can-Am in 1979 aboard Haas's Lola T333CS. "What made the difference was that Carl was a great coach. The only reward in racing, or any kind of sport, is when you fulfil your contract by winning and that's what we did with Carl. I have only good memories of Carl and the team, but also of the racing world and the openness to the public and other teams at that time. The whole series was like a family. Everyone raced hard but the teams were very friendly with each other.

"The spirit and professionalism given to the team by Carl and Berni was the best. They are



really nice, sweet people. It was outstanding to know them and drive for them, and maybe that's more important than the results we had together. It was a beautiful partnership, like Ken and Norah Tyrrell. They are charming people and I would say maybe they don't belong to the modern world. And the other thing is Carl did it his own way. It's like the song, I did it my way."

Off track, we can't forget Carl's role in the Sports Car Club of America. He was chairman of the SCCA's board of directors from 1993-96 and served on the club's Pro Racing board from 1993-2001. And of course there was his brief foray into Formula 1 in 1985 and '86 with bountiful sponsorship from Beatrice and turbocharged engines from Ford. His design staff included Adrian Newey and Ross Brawn with Alan Jones and Patrick Tambay driving, but Beatrice was taken over in a leveraged buyout and the team came to a quick end before it could achieve its potential.

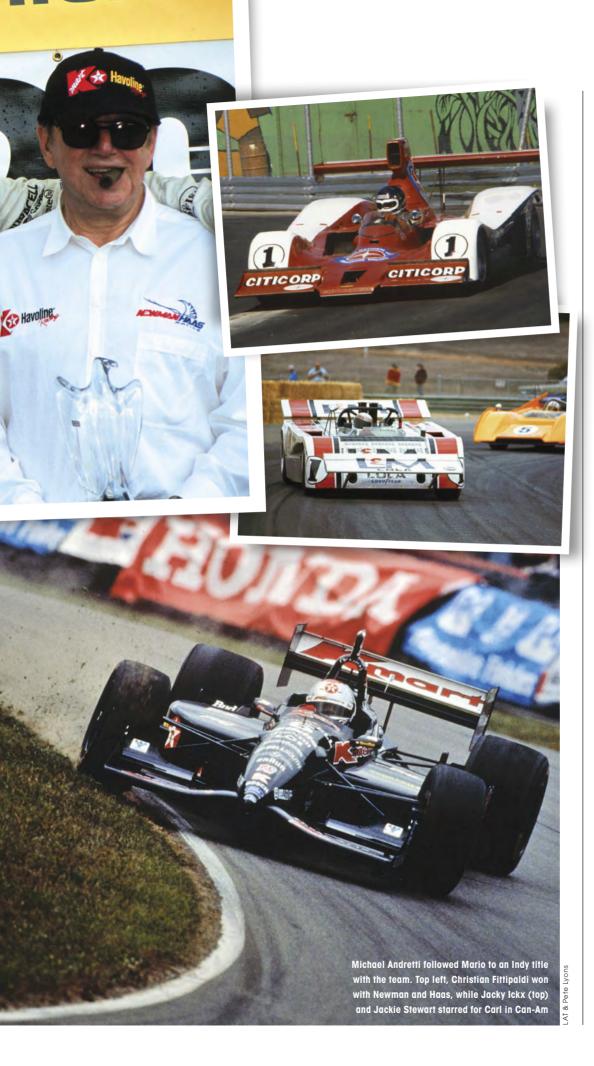
y then Newman/Haas Racing was in full flight and the fleeting Beatrice sponsorship allowed Haas Auto and the team to move into much larger new digs in Lincolnshire, near Highland Park. The team is still there, its remarkable heritage evident in the superb collection of trophies on display in the lobby.

Tony Cicale, Mario Andretti's race engineer at Newman/Haas from 1983-85 who returned for a second stint from 1988-91, looks back with great warmth on his time with the team and tells many funny stories about Haas's ability to recover from an embarrassing episode.

One tale involves a rainy test day at Elkhart Lake: "Carl was in the back of the truck wearing a new pair of beautiful \$400 loafers which he didn't want to get wet," grins Cicale. "But he wanted to come and talk to us. So he walked out onto the truck's tailgate and hopped onto one of the wooden posts supporting the Armco guard rail in the pitlane. He got one foot on the post, slipped off and went backwards into a vat of mud! He was smoking a cigar and had a suit on and he was completely covered. And he got up and walked over to us like nothing had happened.

"He kind of ran his race team like that. It was a little on the loose side, yet in control. Carl liked gambling, but he wasn't a wild gambler, he was more of a speculator. He liked to go out on a limb and if the limb broke, well OK, no problem, we'll do something else. Carl was a unique individual with no pretence about him at all. There were no apologies for the way he was."

Carl and his fabled partner are much missed these days at American race tracks. Their dissimilarly unique characters forged a team of endearing appeal that helped define 25 years of US racing. Their memorable run at the pinnacle of the sport may have passed, but it will never be forgotten.





INSIGHT -

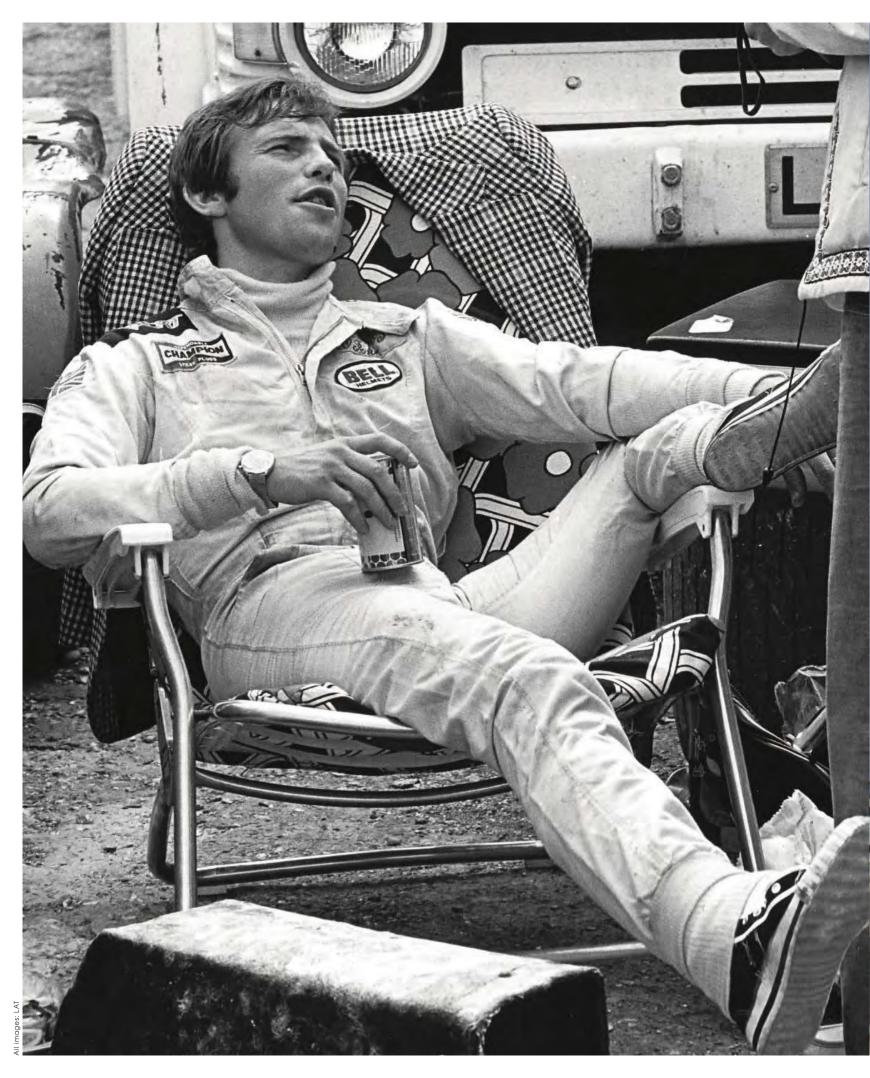
With thinning media coverage, IndyCar struggles for sponsors

The terse statement announcing Newman/ Haas's withdrawal from the IndyCar Series said it all. "The economic climate no longer enables Newman/Haas Racing to participate in open-wheel racing at this time," it read. These are the worst of times for IndyCar as America joins the rest of the world in facing up to the direst economic climate in living memory.

Sponsorship is exceedingly difficult to sell, even for Roger Penske and Chip Ganassi. They have been compelled to be creative and use every ounce of leverage to induce different sponsors to come on board, with specific brands and car liveries keyed to individual races and markets. Long ago Penske and more recently Ganassi expanded into NASCAR, of course, in order to maintain the commercial viability of their racing enterprises.

It was only as late as December 22 that an IndyCar Series schedule of races was released for 2012. The 15 rounds include a new street race in China, but just four oval events - including the Indianapolis 500, of course, but not the Las Vegas speedway where Dan Wheldon lost his life.

The derth of sponsorship and the late publication of a calendar has not helped the teams sign drivers for the new season as Newman/Haas discovered to its cost. But there is good news for a driver left high and dry by the team's withdrawal. Canadian James Hinchcliffe has secured a seat with Andretti Autosport, ensuring that the promise he showed in his rookie season last year will not go to waste (see p126).



More than a Token effort

He's had tough times in F1, taken titles in F5000, and switched from sidecars to Learjets. Still racing 46 years on, Ian Ashley relishes it all

BY RICHARD HESELTINE

e smiles in a manner that appears more resigned than amused. It's clear that Ian Ashlev has heard the same question in various guises all his professional life. "Ah, the 'Crashley' thing," he says, raising his eyes to the ceiling. "James Hunt and I came up through the ranks together and were friendly rivals. Certainly James' works March F3 drive did see him write off several chassis and I too was perhaps a little erratic in the early days. Mike Ticehurst, a mutual friend, coined 'Crashley 'n Shunt' and it stuck. We were both learning in the harsh glare of the limelight, having missed

out on karting or club racing, but if something broke and I slid off into the undergrowth, it was still my fault!"

And with that there's a sudden jump in register and the return of his infectious laugh. "I suppose I did rather scrape the barrel with some of the cars I raced but you have to go where the drives are, don't you?" he continues. "I remember dear old Tony Lanfranchi, who had rather a cynical attitude, braying after my '68 season in F3 had ended miserably, 'Oh poor Ashley, he's 20 years old and already a has-been.' I cannot count the number of times I've been labelled a has-been. Then you get a good result and suddenly it's a case of 'Oh, I always knew you'd make it..."



Should you ever meet Ashley, prepare to cancel the rest of your day and perhaps the weekend, too. A playful and digressive interviewee, the stories just tumble. He first ventured trackside in late 1966 and in 2011 he was a front-runner in historic Formula 2. In between he has competed in just about everything on four wheels or fewer, before you factor in his polo playing exploits. Oh, and his secondary career piloting every conceivable strain of commercial aircraft.

"The funny thing is, I was never interested in flying even though my father was deputy-chief test pilot for the Concorde programme," he says. "My idea at 17 was simply to race a Mini. However, in July 1966 I went to the Jim Russell racing school instead, which was my father's way of proving to me that it was all a fatuous idea. I defied his expectations and won three school races. Simultaneously, my grannies bought me a £200 Austin-Healey 'Frogeye' Sprite in which I won a handicap race at Mallory Park and obtained signatures for my licence. Then for '67 a friend acquired a Merlyn F3 car on tick; it was a typical low-budget privateer deal with the car on the back of a VW pick-up. We did eight races that season, which culminated with the opportunity of a works seat with Merlyn for '68, but better still was an offer from Graham Warner's Chequered Flag team.

"Graham ran 'quasi-works' McLaren F3 and F2 cars. Mike Walker was number one in the F3 team and won the opening race at Oulton Park. My car wouldn't even start! I think the M4A could've been good with some development, but [sponsor] Esso abruptly pulled out of racing at the start of the season which meant there was no funding. For 1969 I was forced down to Formula Ford, driving the works Alexis in which I recorded the first-ever 100mph lap of Silverstone

in the category. Then there was a works Lotus for the Brazilian Temporada series, which was a great adventure."

Yet it was in Formula F5000 that Ashley made his mark. Having dipped his toe in the water at the end of 1969 aboard a Kitchener K3, he found greater success in a succession of Lolas. Then came Formula 1 - sort of.

"In August '74 I'd just finished an F5000 race at Brands Hatch driving for Jackie Epstein's ShellSport/Radio Luxembourg team when someone from Token approached my friend/ manager Mike Smith about a possible drive in the RJ02 for the German Grand Prix. Following a quick natter with Graham Warner and [oil trader] Richard Oaten who were involved financially, I agreed to do it so long as I could

"At the Nürburgring, the right-front tyre

went flat at the bottom of the Foxhole on the third lap of practice. In second practice a mechanic effectively sabotaged my efforts as he'd mistakenly installed the wrong top gear, so instead of having 11,000rpm, I had only 9000. We qualified, but for the warm-up lap [car

Tuesday before the race, I did maybe 12 laps.

designer] Ray Jessop told me to be careful and lift off at the Foxhole, what with all the extra race fuel on-board. I did just that but the right-front tyre blew again at precisely the same spot. I continued on for another 10 miles, arriving at the pits without the tyre and the right-front wing. Ray was concerned that vibrations might have cracked the top front

wishbone so he changed it in record time, eyeballing the camber and toe-in settings. There was no replacement wing so they simply taped up the wing pole to keep it in place, increased the left-front wing and reduced the rear wing. Ray then wished me luck.

"I remember Jackie Stewart sauntering along the grid. When he finally arrived at my car he looked at the somewhat excessive right-hand camber/toe-in and the bandaged right wing pole then shook his head and smiled!"

Our hero finished 14th following another identical front-right puncture, the issue in time being traced to a batch of porous wheels.

"For the next race, the Austrian GP at the Osterreichring, there was only the one flat tyre, this time the left front. I was doing 180mphplus at the end of the pit straight heading into the flat-out right-hander at the time. In the race, a left-front tyre began bubbling: the glassfibre front wings were flexing at high speed and this reduced front-left grip and overheated the inside tread. Ray then called me in for another lightning two-minute pitstop. Then my left-rear wheel came loose. In I came again and while they replaced it the engine began to overheat. They thought the car was on fire so hauled me



"Jackie Stewart looked at my car's bandaged front wing pole and shook his head"



tied with Epstein for F5000. I didn't know what to say to Graham who'd purchased the darn Brabham. I knew I'd do well in the Oulton Gold Cup in the Lola T330 (he won...) and the Brabham was potentially a good car so I phoned Surtees and declined his offer. He wasn't impressed! The Brabham we'd been sold was a total bitsa, though, and I failed to qualify for the Canadian or US Grands Prix. Just to rub salt into the wounds, when I arrived at Watkins Glen I was greeted with the news that my father had been killed. In hindsight, I probably should have accepted the Surtees drive but then the fellow who took it, Helmuth Koinigg, crashed and was killed at the Glen. There but for the grace of God..."

Following a catastrophic mechanical - and leg - breakage at the 'Ring with Williams in '75, which in turn destabilised his F5000

campaign, 1976 began with Stanley-BRM but failed to launch when the team withdrew after only the Brazilian GP opener. Back in F3 aboard Lola's T570 prototype for '77, Ashley returned to the top table with the Hesketh squad at the tail end of the season. It would prove an exasperating experience, one which came to an abrupt halt with a 195mph shunt at Mosport.

"Going over the hump at the end of the back straight the whole nose section collapsed. The 308E and I did two-and-a-half backward somersaults 30ft in the air, flying over the Armco before hitting a TV stand. The car was buried 10 inches in the ground, which crushed my ankles. When I came to I was full of morphine. Emerson Fittipaldi, his personal surgeon, Jochen Mass and the mechanics were cutting me out with small hacksaw blades, with Mike Wilds behind gripping a plasma bag. I woozily thought I was in practice for the US Grand Prix two weeks earlier - 'Just change the springs, down a notch on the roll bar..."

He also sustained two shattered wrists, and it marked the end of the road for the F1 dream. Not that Ashley is embittered, just irked. "When you envisage F1 you perceive it as being incredibly professional but it really wasn't at the back of the grid! When I think of some of

the cars I drove, just hopping in and hoping for the best... You just want to get stuck in."

Ashley changed tack and became a Learjet captain based out of New York, flying the great and the good including an incredulous Jackie Stewart, yet he couldn't stay away from racing completely. "Following an eight-year sabbatical, 'Emmo' persuaded me to have a look at Indycar. He said it was just like F5000. I came back in November '85 for the final round in Miami and qualified well, but I was taken out in the race by Jim Crawford. I did a few more races, including one in Indy Lights, but I couldn't put a deal together. It was not dissimilar to F1. Then at the end of '87 I got into motorcycles, attending several superbike schools so as to ensure I kept my head on my shoulders. Shortly thereafter, and purely by chance, I was persuaded to race a friend's bike

> at a very wet club meeting. I won and that was all it took. I particularly enjoyed doing endurance races all over the USA.

> "However, upon hearing about Steve Webster and Tony Hewitt winning the World Grand Prix Sidecar championship, I returned to Britain in 1990 determined to do some Grands Prix even if they were on three wheels! The racing was wonderful and I was successful, too.

"Around that time I became aware of what was going on in the British Touring Car Championship. I looked at the Sierra Cosworths and thought they looked like a laugh but by the time I got around to entering the series it was being run to

Super Touring regs, which meant 2-litre engines and [predominantly] front-wheel drive. I did the 1993 season but my '90 Vauxhall Cavalier was outdated and a poor choice although I led the privateers class for most of the year. I then tried both the TVR Tuscan Challenge and the Lotus Sport Elise series, but again innumerable reliability problems scuppered the dream."

ast-forward to 2005 and Ashley was employed as an instructor at the Ron Haslam Superbike School before returning to flying seaplanes out of Alaska and Vancouver Island. His latest comeback followed a friend's suggestion that he take a look at historics. In 2008 Ashley bought a 1961 LDS-Alfa Romeo Grand Prix car and hasn't looked back. "You know, I was incredibly lucky with the flying in that so many amazing opportunities presented themselves. Everything came easily to me but I didn't appreciate it. In motor racing it was a different story. I should have made it in Formula 1 like my contemporaries. It didn't happen but I'm still here and I'm having a wonderful time racing." The more you listen the more it's clear that retirement isn't in Ashley's personal lexicon. His remains a life less ordinary, and one that is lived well.

out, only to realise it was just steam. I clambered back in and off I went to finish eight laps down

[on winner Carlos Reutemann].

"By now Graham and Richard were pretty pissed off and did a deal to buy an ex-John Watson/ex-Hexagon Brabham BT42. John Surtees then phoned and invited me to Goodwood for a test. Finally starting at 4pm, I did one lap before returning on seven cylinders. They checked a couple of things and I went out again only to come back in immediately. Without proper power the car just understeered. Afterwards they asked me what I thought. I'd just had a bellyful of this with Token but I was diplomatic!

"'Well, you've got the drive,' Surtees said the following day. 'You can finish the season -Monza, Mosport and Watkins Glen.' I asked for two days to decide since I was contractually

Private View

A 'You Were There' special

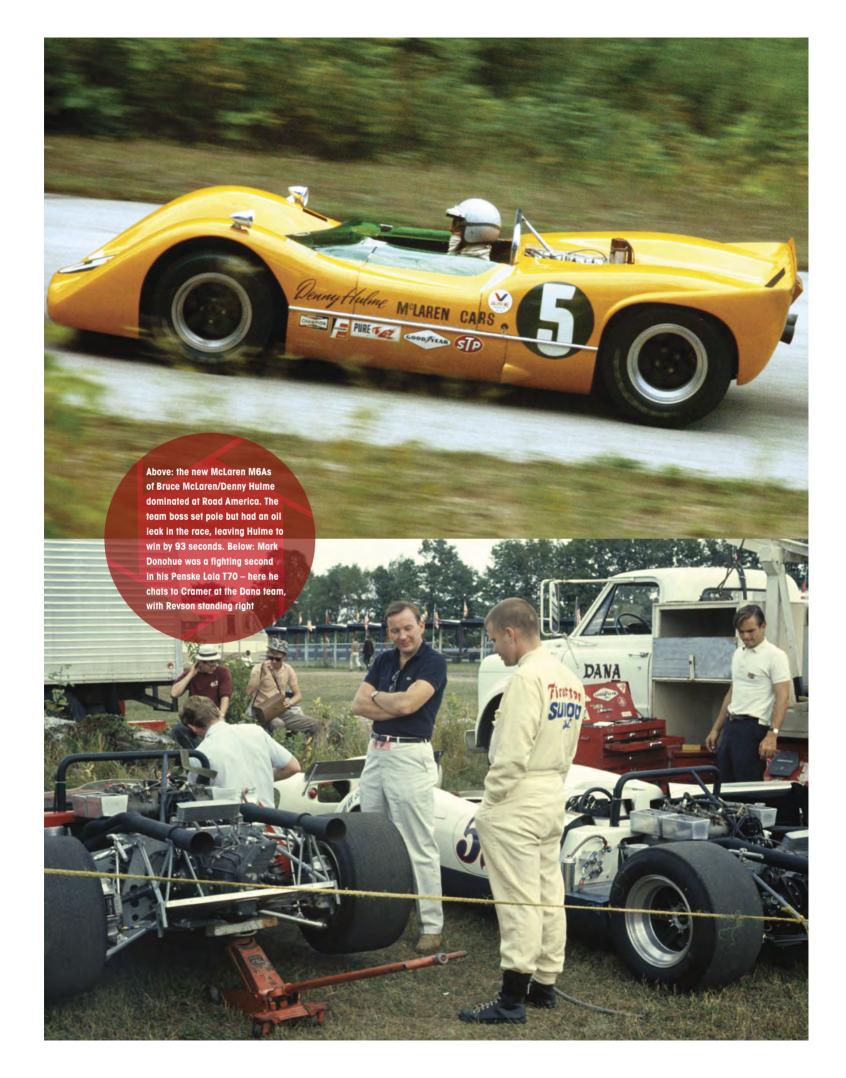
Road America's historian takes us back to Can-Am's first visit to the scenic US circuit

t was Tony Curtis who got Tom Schultz into motor racing. In 1956 Tom saw the film Johnny Dark about a cross-country sports car race and was enthralled. Shortly afterwards he went to his first race, and he's been going ever since - he reckons he's visited 42 circuits over 602 race weekends, following F1, Indy and sports car racing. But, he adds, "I absolutely abhor NASCAR and assiduously avoid it". And if keeping those statistics makes you think he might be a historian - correct. After a career in the US Army and then banking, Tom is now track historian for Road America. He went there first in 1958 and has since put in some 300 weekends at the Wisconsin track which replaced the Elkhart Lake road course. In fact, as they say, Tom wrote the book: it's called Road America - Celebrating 50 Years of Road Racing, just one work among his many racing writings. He began photographing the racing in 1960, and because his personal archive of 37,000 images is entirely in colour it has proved a useful record of livery for those restoring cars of the

In all those races Tom selects one nine-day period as being "in many ways the highlight of my spectating career, what with the magic of discovery". The discoveries began with driving 650 miles to his first Grand Prix, the inaugural Canadian race at Mosport in 1967, and returning to Road America next weekend for its, and Tom's, first Can-Am event, the subject of these photographs. "I spent all three days there and the weekend was pure heaven," he says. "As you can see from the photos, I met and spoke to John Surtees, Dan Gurney, Bruce McLaren, Denny Hulme, Jim Hall, and other greats who were a young man's heroes. It was a spectacular weekend. I, like everyone else, was blown away by the McLaren M6A, which made its debut there and simply dominated the weekend." It remains a memorable event for Tom: "imagine me walking about slack-jawed taking all this in for the first time. I was not looking at photos or reading a magazine; here they were, right in front of me. I was truly blown away."



era, as well as contributing to many racing books.







he European Car of the Year shortlist has been announced. The winner will come from among the Volkswagen Up, Fiat Panda, Range Rover Evoque, Toyota Yaris, Citroën DS5 and Ford Focus. As predicted last month the new Porsche 911 didn't make the final reckoning, not because there's anything wrong with it, but because jurors tend not to vote for cars beyond the financial grasp of most of their readers. The fact, therefore, that the Evoque has made it to the shortlist speaks volumes for the esteem in which it's held.

I voted for five of the final seven, including the 911 and Peugeot 508 in place of the Yaris and DS5. Given its position in the largest car class in Europe, the Yaris was always a likely (though many would say unworthy) finalist, but the Citroën really does surprise me. This is an allegedly luxurious car but, thanks to some incompetent suspension settings, is one of the least comfortable cars I drove last year. It doesn't matter that the rest of the car is likeable and capable: like a Ferrari with no performance or a Land Rover that's useless off road, the DS5 fails at the one thing at which it should truly excel. Once Citroën made cars that rode better than any others, so it's sad to see those skills have been lost.

t had to happen: just as the Chevrolet Volt/Vauxhall Ampera looked like it might help pull the world's largest car company out of its long-term doldrums, fears over its safety now threaten to undermine its future. Why? Because in three cases fires have broken out in cars that have been crashed so heavily that their batteries have been damaged.

Does this mean that if you crash your Ampera you're likely to end up in a conflagration? It does not. The fires broke out not minutes or hours after the crash, but weeks and not once to a customer-owned car - each fire happened in a car that had been placed in storage after official crash testing.

But this has not stopped the hysteria. "Chevy Volt fires threaten all electric vehicle makers," screamed a headline across the Forbes website despite the National Highway Traffic Safety

Administration stating it had no concerns over the safety of other electric vehicles. Even so, GM CEO Dan Akerson still felt obliged to offer to buy back any one of the 6000 Volts already sold in the US should their owners lose confidence in them.

I hope they don't. The US has a history of gross over-reaction to the slightest sniff of a safety concern, be it justified or not. Audi's business in North America was all but destroyed in the 1980s through claims its cars indulged in 'unintended acceleration'. Every alleged incident turned out to be nothing more than owners treading on the wrong pedal. And the market is likely to still be jittery following the rather more justified outcry in the US in 2009 concerning Toyota hybrids being crashed thanks to ill-fitting floor mats interfering with the accelerator.

Unlike Toyota, and perhaps learning from its mistake, GM has been swift and decisive in its action. It immediately recalled all its Volts to be modified and all Amperas sold in the UK and Europe will be built with the fix incorporated.

But I still think car buyers need to be careful what they wish for. It is not possible to propel a tonne or more of metal at high speed from one place to the next, in close proximity to many other millions of tonnes of metal moving at similar speeds and for no danger to result. Were

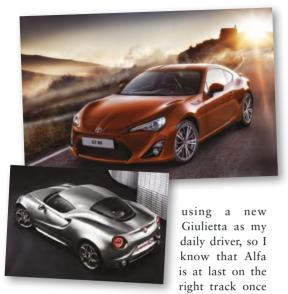
> that to be the case, those cars would be so slow, heavy and expensive we'd neither want nor be able to afford to buy or use them. For the entire future of a car which is as important as the Volt/Ampera to be threatened by three fires that broke out in cars

that had already been written off, the most immediate a full week after impact, is simply nonsensical. It is down to the NHTSA to put these incidents in their proper perspective and reassure the public accordingly.

ast month I promised a look ahead to the road cars I'll most look forward to driving in 2012. One I already have. It's Toyota's GT86 front-engined, rear-drive coupé (above right) that I drove in Japan late last year and which time and space have so far precluded writing about here. This I'll rectify next month.

In the meantime the car I most want to drive is the Alfa Romeo 4C mid-engined sports car. If the production version looks as good as the concept, if it really does weigh less than a tonne and is powered by an engine with at least 250bhp, and if it really does cost less than £40,000, Alfa is going to have a stampede on its hands and rightly so. I spent most of last year





more, but it is the 4C (above) that will really help restore Alfa Romeo's reputation. Odd to recall now that back in the 1960s the marque was so revered it could sell a Giulia coupé with a 1600cc engine for almost as much as Jaguar would charge you for a 3.8-litre E-type.

I'm also looking forward very much to trying the high-performance ST versions of the Ford Focus and Fiesta. I have been more vocal than most expressing disappointment in Ford's failure to retain the Focus's traditional driving appeal with the latest generation, but the last time I drove a fast Ford I didn't like, the Focus was still called Escort.

At a more mundane level, the 208 is a critical car for the credibility and long-term health of Peugeot. It looks good enough, but will need to do more than that to compete not only with the Polo and Fiesta but also the entirely credible threats now posed by rival Korean products from Hyundai and Kia. We should also see the 208GTI by the end of the year and, having recently spent a day in a 205GTI, I am reminded how massive a mountain this car must climb.

This is also the year we'll see a whole slew of supercars, from Ferrari's 700bhp 599GTB replacement to more versions of McLaren's fascinating but flawed MP4-12C. A convertible seems certain and a road-going version of its GT3 race car can't be far away. We'll also see an all-new Mercedes-Benz SL and, possibly, even the next DB9 Aston Martin.

But the most important car of the year will be the BMW 3-series. Too much time has passed since BMW last produced a truly world-beating car, a run of fair to middling form I'd hoped would end with the M5 but hasn't. But BMW always throws everything it has at the 3-series, which is why in the four generations I've seen in nearly 25 years of driving them, it has consistently been the most capable and desirable car in its class. I have a funny feeling this one is going to be no different.

MOTORING



FIAT RETURNS PANDA REEDING GROUND

SPENT ONE OF THE LAST WORKING days of 2011 in a car factory. These are not places I usually seek out, my interest being rather more in the product than the process, but every so often it does no harm to see what an extraordinary procedure the making of a modern motor car has become. Even one as simple as a Fiat Panda.

For years now Pandas (and Fiat 500s) have spewed out of a plant in Tychy, Poland but following the complete renovation of Fiat's Pomialiano d'Arco factory near Naples, the Panda is once more built in Italy.

Those who know their Italian car industry history will recognise its location in the shadow of Vesuvius. This is the factory built in the late 1960s by the then Government-owned Alfa Romeo outside Nicolo Romeo's home town It was located on the site of Alfa's old aero engine facility not for reasons of nostalgia, but to bring some much needed employment to a region that even today can seem almost third world compared to the rampant sophistication of Milan and Turin. The idea was noble and the little family car it was to build nothing less than a work of genius. And it was so inextricably linked to its location it was even named after it: Alfasud

But then it started to go wrong. Alfa Romeo found that the density of skilled labour required even to build a car was not what they'd hoped for. Then the workers for whom the factory had been built appeared not to appreciate the fact and

regularly went on strike. Even when 'Suds were being made, each one contained a timebomb guaranteed to destroy the car. If you ever find yourself plaving word association with a bunch of car enthusiasts say 'Alfasud' and I bet the next word you hear will be 'rust'.

How extraordinary then to see the same factory, fresh from its 12-month, €800 million refit packed with immaculately turned out workers producing immaculately turned out small Fiats. The Panda may not be as glamorous, innovative or fun as the 'Sud, but it's been in production from one generation to the next for over 30 years now and I reckon it will be around for a while yet.

By contrast with the brilliant but flawed 'Sud, the Panda is fairly predictable. Fiat exudes confidence with cars like this and it's a usefully updated. capable runabout that will doubtless perform well in the market place. That said, the market is about to be drenched in Volkswagen Ups which, while conceptually just the next in the Lupo/Fox line of sub-Polo entry level VWs, is in reality so fluently executed I expect it to cause Fiat a real headache.



IOWLEDGE FROM

A MORE REGULAR RITUAL OF MY year is the trip to the What Car? awards. Eighteen gongs were given out, precisely half going to cars built by the VW Group, which is an amazing hit rate and a terrifying insight into the state of the art for everyone else.

I was on the same table as Audi's chief marketing man over here and he told me that today the typical customer will visit just two dealers before deciding which car to buy. Ten years ago that number was seven. The good news is that if someone walks across your forecourt. there's a 50 per cent chance you will sell a car. The bad news is that customer foot fall has never been lower.

There is another problem too. Not only are customers going to fewer dealers, those dealers that do receive a visit can now expect a completely different kind of punter. Armed with the internet, they will likely have boned up not only on the type of car they want, but which specific model, Instead of walking in looking helpless, they stride across the floor with the specification of a fully configured car in their hands.

More frightening still for the sales team is the fact that since the collapse of the traditional car classes, the number of different models has gone crazy. By my reckoning in 2002 Audi had five distinct ranges. That number is now 12. Consider also the number of five-door, estate. convertible, coupé, S and RS versions that each range offers, plus all the different equipment grades, engine specifications and options available on each one. It's almost enough to make vour brain melt.

So now put vourself in the shoes of a showroom salesman with an effectively limitless number of model permutations to learn, faced with a customer who's spent the last month researching just one. If he or she has done their homework. the chances of you actually knowing more than the person to whom you are attempting to appear knowledgeable are precisely zero.

If you believe knowledge is power, the tables have turned in the last decade and placed all the power in the hands of the customers. All they have to do is exploit it.



n at least one respect, BMW has taken an important step to recapturing the essence of the original M5. Naturally this all-new model has more of everything in general (and power and weight in particular) except that visually it is far more discreet than the car it replaces.

This is exactly as it should be. M cars never should - and once never did - brag about their power: the more subtle the appearance, the more discombobulating the performance.

The original M5 was leaving the scene just as I arrived on it but our careers coincided for long enough for one unforgettable drive. I was *Autocar*'s most junior road tester in the summer of 1988, my job prospects so shaky that my

editor refused to put my name on the masthead because 'I'd only have to take it off again'. But working late one night in a futile attempt to show willing I noticed an M5 that had come in for testing was still in the car park. I can't remember why - I expect it was meant to have been collected - but I do remember finding its keys on the hook. Borrowing it was a dismissable offence, but as I reckoned I was heading out of the door anyway I figured there was not much to lose.

Two hours later I was back, an ever so slightly changed man. The fastest car I'd been allowed to drive up to that point was a Lancia Prisma and if you don't know what that is, I envy you. It wasn't just the amount of performance the M5 had to offer, but the sheer

class with which its 3.5-litre straight-six motor delivered it. It scarcely seemed possible.

You could say as much about the performance of this new M5. With 560bhp, it has almost twice the power of the original but the devil is in its small print: namely the 501lb ft of torque it develops at 1500rpm. That's twice the torque at one third of the revs.

Seen in the context of a large four-door saloon, it is explosively fast. Indeed driving one on winter roads while wearing summer tyres makes you realise that the electronic systems, such as traction and stability control are not simple safety nets whose purpose is to save you as a last resort, but a fundamental, essential and integral component of the car's design. Now developed to the point where, if



you choose the most defensive (and default) strategy, your greatest awareness of their operation is a small, blinking light on the dashboard. But if you turn them off and play fast and loose with the power you soon realise that cars like this could never have been brought to market without so many effective checks on their performance.

Locking it in gear I found it would happily spin its wheels in second, third and, once, even fourth gear on wet and slippery roads. It felt like you were battling some immense force and one that, unaided, you did not possess the tools to tame. Through the right kind of corner, and if you took care to blend in and bleed off the power correctly, it would drift quite nicely, but most of the time the tricks-off



BENTLEY CONTINENTAL V8

IME WAS WHEN YOU could be born, grow up, aet married and have children between launches of aenuinely new Bentley products. Now you seem barely able to pop to the pub for a swiftie. After the new GTC and the Supersports ISR (Ice Speed Record), this is the third Bentley in as many months with a claim to being new, at least in part. And it is by some distance the most important.

Whether Bentley likes it or not - and for reasons that will become clear, they may not - this new bottom of the range Bentley is going to transform the buving habits of its clientèle. On paper introducing an engine with only two-thirds of the cylinders and capacity its customers have come to expect might seem problematic. But when you see what can now be done with four litres and eight cylinders, relative to what has been achieved in the past with six litres and 12 cylinders, only the most myopic will fail to appreciate what's on offer.

Like the 12, the new V8 is sourced from within the VW Group. It produces an even 500bhp and uses a clever

cylinder deactivation system that turns it into a frugal V4 at part throttle. Coupled to an eight-speed automatic gearbox (the big engine soldiers on with the old sixspeeder) and a host of other efficiency savings, the V8 offers the same acceleration as all bar the most recent W12s yet uses 40 per cent less fuel. Forty per cent! If a normal car manufacturer found one auarter of that saving for no loss in perceived performance, you wouldn't be able to hear yourself over the bombardment of champagne corks.

It starts with a distant snarl. instantly more characterful and promising than the flat woofle of the W12. If you ao slowly at first, you notice how skilled each gearshift is, and it pulls from low revs with damn near the same conviction as the W12. No lack of low-end torque here.

FACTFILE

ENGINE: 4.0 litres, eight cylinders,

TOP SPEED: 188mph PRICE: £123 850

POWER: 500bhp at 6000rpm

FUEL/CO2: 27mpg, 246g/km

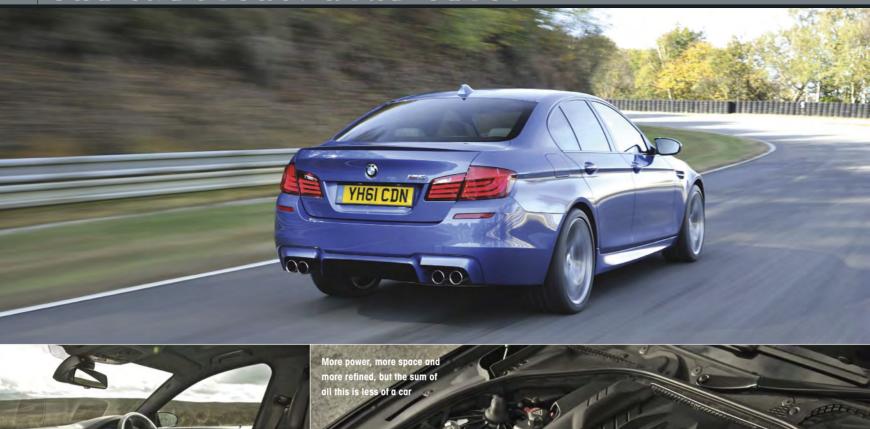
www.bentley.co.uk

When you really want to see what it will do, jam your foot to the floor and vou'll find performance to match that of any Continental GT that predates last year's facelift.

It sounds wonderful when extended and Bentley have retuned the chassis from front to back to help make the car appeal to a vounger audience, and it has worked brilliantly. It's better balanced and feels more precise and therefore easier to place. In a vehicle of this size on British back roads, that is an important consideration.

This is Bentley's best product in many years. The reason this might prove problematic is that it is also its cheapest and, I speculate, that brand new 4-litre engine with all its clever technology will be quite expensive for Bentley to buy relative to the 10-yearold W12. Bentlev thinks that half of all the Continentals it sells will continue to be W12-powered, and if you consider likely demand for such cars in places such as Russia and the Middle East, I quess that's possible.

But if ever there was an example of less being more this, surely, is it.



entertainment it offered on cold, wet asphalt was altogether too X-rated for me to enjoy on public roads. How different to that old M5 which had so little power and even less torque, yet in which mild oversteer was easily achieved and an eagerly awaited component of any drive in any weather on any quiet and open road.

Of course this is symptomatic not only of BMW's attitude to its M cars but the way almost all car manufacturers build performance machines today. The development of electronic stability programmes may not be responsible for the arms race that has led to engine power outputs doubling in recent years, but it has facilitated it. It serves as a further reminder of how susceptible the motor industry is to the law of unintended consequences. Designed as an active safety system to help drivers maintain control of their cars in unexpected emergencies, ESP has proven just as adept at providing manufacturers with the ability to sell four-door saloons with Ferrari-rivalling power while keeping drivers safe from themselves.

The question is whether the M5's power and the manner in which it is delivered makes it more or less of an 'M' car than the car it replaces. Despite the huge gain in performance something has been lost. The sound of the twinturbo 4.4-litre engine doesn't stir the soul like the old normally aspirated 5-litre V10 routinely would, nor is its throttle response so sharp. This V8 delivers maximum power before that V10 even delivered maximum torque. It may be far faster and massively more frugal, but much of the drama and occasion has been lost.

Yet this is a far less flawed car than the old M5 whose clunking robotised manual gearbox alone provided grounds to avoid buying one. By contrast the double-clutch transmission used by the new M5 is as good as any I can recall.

The new M5 is a soothing and sensible way to pass a few hours on the road, which you'd never say about the last one. A little more spacious, a lot quieter and incomparably more comfortable, it is a car best seen not as a supercar saloon, but more as an unusually practical GT. Witness, for example what has happened to its range. A full tank of fuel would take the old M5 just under 300 miles, but the new car is capable of extracting nearly 10 extra miles from each gallon and being furnished with 10 more litres of tank capacity can go a little over 500 miles.

Whether all of the above makes the new M5 a good or bad choice depends on the buyer's expectations. Despite the welcome return to more conservative styling, this is not a traditional M car, where driving pleasure in its



purest form is pursued, often at the expense of too much else. It is the most powerful car ever to be produced by the M division, but it is also the most pragmatic.

One measure of accomplishment I use when assessing cars is the three Rs: Ride, Refinement and Range, and in all these regards the M5 doesn't just improve on the old, it wallops it. Problem is, this measure applies far more to pure luxury cars than to overtly sporting ones. Were this a Rolls, a Bentley, a stretched Jag, an S-class Mercedes or even a 7-series BMW, these improvements would count strongly in its favour. But this is an M5, and while it is undoubtedly less flawed, it is equally apparent that it is also less fun.

I just don't like the idea that it's okay for an M5 to weigh almost two tonnes. Nor does the notion that you can just bludgeon the performance out of it by using ever more power strike me as anything other than inelegant and inappropriate for an M car. The drive for this generation of M5 should not have been to add more power, but to remove weight. It should weigh 100kg less than the old M5, not over 100kg more. Had BMW done that, a sharper, better driving machine would have resulted that would have used even less fuel while still improving performance. As it is, BMW have created a far more broadly capable car, and a far less engaging driving machine. From an M5, I know which I would have preferred.

Under E63 AMG bonnet lies "the best turbocharged engine in the performance car world"

MERCEDES-BENZ E63 AMG

OR AS LONG AS I'VE been doing this job, high-performance Mercedes-Benzes have rarely reached the heights of rival products from BMW. But now, it seems, in one area at least, they may have sneaked past.

Lactually drove the BMW M5 featured on page 118 and the Mercedes-Benz E63AMG back to back, and had planned to brina vou a straightforward comparison of the two. But in the event the Mercedes was supplied on winter tyres and the BMW on standard rubber and the variances resulting in ride, refinement, steering feel, grip and handling progression would have skewed subjective judgement, one way or the other, in all these areas.

But I can tell you this: were it the old M5 meeting the E63

before it was given a new twin-turbo 5.5-litre engine, my strong instinct is that the BMW would win. Now and thanks in part to the M5's changed priorities, the rejuvenated E63 is the one in which I'd prefer to spend more time.

On paper the performance, economy and emissions of the two are all but inseparable, once on the road their two characters strike real contrasts. And it's the Mercedes that is the more gruff, responsive and eager, and the BMW that is more

FACTFILE

ENGINE: 5.5 litres, eight cylinders, twin turbocharged TOP SPEED: 155mph (limited)

PRICE: 974 895

POWER: 525bhp at 5250rpm FUEL/CO2: 28.5mpg, 232g/km

www.mercedes-benz.co.uk

comfortable, relaxed and urbane. In other words the E63 is more like an M5 than an M5.

To begin with, it is the Mercedes that feels lighter (because it is, to the tune of over 100kg) and more nimble, but the thing that really makes the difference is what I believe to be the best turbocharged engine in the performance car world. The high-displacement, lowboost strategy that Mercedes has adopted appears to achieve the best of both worlds: normally aspirated throttle response and sound combined with turbo torque and fuel consumption.

What I really want to know is what this engine would do in a C-class, but apparently it doesn't fit so we'll have to wait for the next generation.





LAND ROVER DEFENDER 90

say that getting back in an F1 car after the winter break was always a shocking experience.

I feel that way about Defenders. No matter how many you've driven, no matter how rude and crude you expect them to be, the moment they rattle into life you know that you are in for an experience unmatched

AMON HILL USED TO by any other car. Just like Formula 1.

> It takes a little getting used to. The latest Defender now comes with a 2.2-litre diesel engine with the same power and performance as the old 2.4, but which meets the emissions standards it needs to in order to be sold in European markets. But it's no more refined. In fact I think it could show my 25-year-old,



three-cylinder Kubota tractor a thing or two when it comes to noise and vibration.

But it's amazing how quickly you get used to it. Just like Damon in his FW16, within an hour or two life in the Defender appears almost normal. Of course it's not, for just like an F1 car the Defender was built to do things other cars can't even contemplate. are forest tracks around my home in Wales that are pretty terrifying at this time of year and I'm ashamed to say I ran out of courage long before presenting the Defender with an obstacle that caused it even a moment's hesitation.

Of course these cars are pitifully slow and hopeless on a long run, but you might as well criticise F1 cars as being rather impractical for takina to Tesco. In the environment for which they are built, they remain at the pinnacle of their respective disciplines.

FACTFILE

ENGINE: 2.2 litres, four cylinders

TOP SPEED: 82mph

PRICE: 620 995

POWER: 122bhp at 4000rpm

FUEL/CO2: 27.5mpg, 274g/km www.landrover.com

AND THAT REMINDS M E . . .

Procrastination brings the rich talent of the incomparable Russell Bulgin into focus

esperate to find any excuse not to face the keyboard, I picked up a 1991 edition of Car magazine and started browsing.

To be fair, Car was probably already in the process of peaking by the time the magazine I came across was produced, but if all you did was look at their 'Frontline' columnists, you'd know it still drew from a deep and rich pool of talent. There, over many thousands of words every month, you could download the collected wisdom of LJK Setright, George Bishop, Phil Llewellin and Russell Bulgin. Extraordinary.

I knew them all, but most not well. Bishop revelled in the role of curmudgeon, while Llewellin was his polar opposite. Setright was as lunatic at the wheel as he was gifted at the typewriter and Bulgin was simply the best motoring writer of his generation.

Of course I mean 'our' generation because were he still with us, Russell would only be 53. Shockingly, cancer took him 10 years ago this June.

Of that generation of Frontliners, Russell was the only one I knew well. He was also the only established freelancer I met who didn't try to dissuade me from pursuing a similar path. Instead he sat me down and explained: "It's quite simple really: write to length, to brief and on time." It's a mantra I live by to this day.

How good was Russell? Good enough for friends closer than me to publish a small book of his greatest work in aid of the Royal Marsden Hospital who'd cared for him during his illness. Bulgin: The very best of Russell Bulgin is hard to find these days and expensive when you do, but is more densely packed with pure writing talent than any motoring book I know. Failing that, you could just buy old issues of Car and read the words of Russell and his Frontline colleagues for pennies. They're all gone now, but their words will outlive us all.



ot many people like change, especially when it involves something they have loved for many years. Formula 1 moving away from Europe, smaller engines in 2014 and the 'push-to-pass' DRS: there are plenty of people who are strongly against all of them.

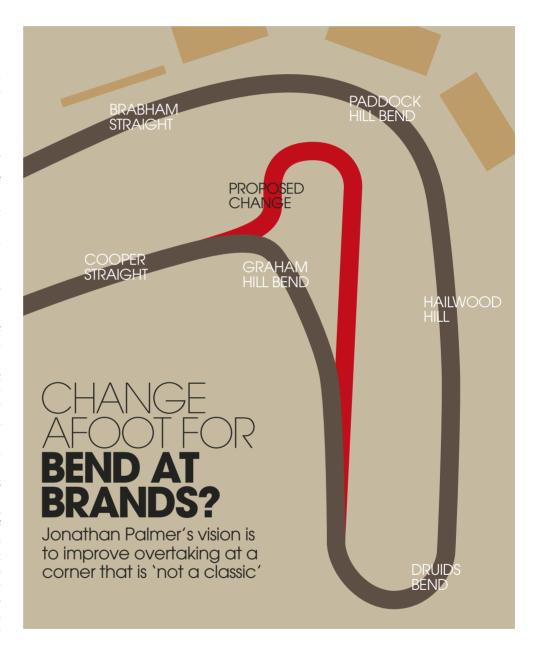
It seems there are also plenty of people against a planning application received by Sevenoaks District Council on October 20, 2011. This wasn't for a sprawling new housing development, though; this was for the "reconstruction and re-profiling of Graham Hill Bend on Brands Hatch motor racing circuit".

On hearing about the plans, motor sport forums around Britain erupted with cries of "leave Graham Hill Bend alone!" and "the new corner looks dreadful!". Soon there was a petition being sent around via Twitter, and it seemed that Jonathan Palmer, boss of MotorSport Vision who own Brands Hatch, had made a very rare mistake. "I'm not particularly concerned about the backlash," he admitted in December. "A lot of people just don't like change and I'm not surprised, especially with things like circuits. But these people aren't the ones who are trying to operate them commercially."

Of course, the current Graham Hill Bend is far from the corner that it was. In the winter of 1998-99, under Nicola Foulston's guidance, the bend was changed from a very fast, sweeping left-hander to what it is now. The reason? To promote more overtaking. The fact that in May 1999 Brands Hatch Leisure launched a bid to host the British Grand Prix from 2002 onwards may well have had something to do with the building work as well.

The new Graham Hill Bend failed to produce the overtaking that it promised, and that is exactly why there are more possible changes in the pipeline. Note the word 'possible'.

"The first point to make is that we're not definitely doing anything," said Palmer. "We applied for planning because we are considering making a change to Graham Hill Bend and in order to be in a position to do that - if we choose to – we need to have permission.



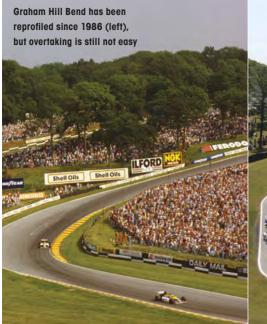
"The second thing to note is that the plan we filed is only indicative, an early iteration of what we're looking at. Of course in an ideal world these things would remain out of the public domain until we were doing them, but that's not how planning permission works.

"At the end of the day this is our circuit and we are the ones that need to look at evolving it and making the business more viable. We won't do anything unless we're pretty damn

sure it is going to be successful and it will promote overtaking.

"We don't have the space that Silverstone has, and, given that we aren't going to build an oval, anything that's going to promote overtaking is going to involve a tight corner. You can't get one without the other.

"The main problem is with the higher-grip cars in the Formula 3, Formula 2, DTM and British Touring Car championships. The best





solution would be to change motor racing so that all cars have more power and less grip, but that's not going to happen so we need to look at the circuits.

"Of all the corners at Brands, Graham Hill stands out, firstly because it's not a classic corner and secondly because it's been changed a few times in the past. It's nothing like it used

to be, and I don't like the current iteration. It really doesn't do anything much: it's not very characterful and, with the kink on the way down from Druids, it's not even a good overtaking spot. On top of that it's not even challenging for the driver!"

It's only halfway through our conversation that another, and perhaps a major, reason for the change is mentioned. Of course everyone would like more competitive overtaking, but

apparently one championship has been leaning on MSV to provide exactly that. "There has certainly been pressure from the DTM to make overtaking easier," Palmer admitted. "It's the only championship that has put pressure on us, but the fact is I think DTM has a more proactive approach to the whole business of entertainment. Most championships quite rightly assume that a track would never change for them. In a way, the DTM deserves credit for pushing not just with their own cars and the technical rules, but also seeing if they can influence track design to make the whole show more exciting."

The real question is whether or not the redesign will be good for drivers and spectators. If it purely promotes overtaking it will not necessarily be warmly received by everyone. "For people who race historics – and I'm pretty sure the guy who started the petition [to stop the planning permission going ahead] does - it tends to be that slow corners are not so much fun," Palmer (below) pointed out. "The way we're looking at doing Graham Hill, though, I think it will be. With a clever new layout it will be much more of a driver challenge.

> "If the critics want to spend their efforts making suggestions and emailing them to us we really would be very grateful to look at them. We're going to spend another six or nine months mulling over what really would be good. It's not easy, but everyone can rest assured that I'm not just an appointed manager. This is my business and I do not intend to mess it up. I'm not saying that I'll definitely get it right. However, I

will definitely do something that I believe will be better for the future of Brands Hatch. We're not going into this lightly."

For many people Brands Hatch is sacrosanct and they won't welcome any change, but they shouldn't ignore Palmer's words. After all, he's the reason we're still using Brands, Oulton Park, Snetterton and Cadwell Park.

So what other changes can we expect at MSV's circuits in the near future? Well, the only other one at Brands Hatch will be an asphalt run-off at Druids to encourage people to "have a go" on entry. At the moment the gravel trap tends to dampen some of the enthusiasm. As for Paddock Hill Bend... "None at all!" said Palmer, slightly shocked. "Paddock is an absolutely classic corner." Phew.



FORMULA 3 SIT UP AND

Barrie 'Whizzo' Williams recalls the glory days of F3, when it was affordable and sociable



N FRIDAY 13 AT AUTOSPORT International a small and select group of people and cars gathered to celebrate

the history - and success - of Formula 3.

Machinery from all seven decades of the series was on show, from this year's 2012 Dallara to a 1951 Cooper Mk 5 with the name 'Bernard Ecclestone' emblazoned down the side in black.

Jonathan Palmer, British F3 champion in 1981, was at the photocall, as was Barrie 'Whizzo' Williams who I caught up with after he had stood for the obligatory pictures. Williams, typically, had just reduced three friends and himself to complete hysterics.

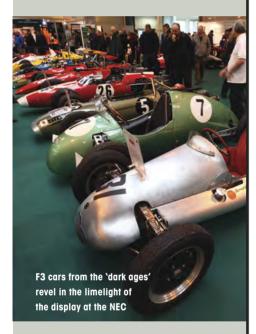
"I actually raced the last Formula 3 car that the Cooper Car Company ever built - the T83B," he told me once he had calmed down. "It belonged to a friend of mine called Alan McKechnie and we both went down with Nigel Mansell's uncle Bob to collect it from the factory. It wasn't quite closing down then, but it was on the way and I remember we had to pay cash for it because John (Cooper) needed to pay the wages at the end of the week!"

His Cooper - fitted with a Holbay engine - wasn't as fast as the Brabhams of the day, but he did manage to win the Wills International Trophy Meeting at a typically wet Silverstone.

"I came from gearbox karting, as did a lot of us, and we just jumped into the F3 cars. You can always tell the ones who came from karting because they sat up in the car and didn't like lying down like you were supposed to.

"We raced at all these strange places in Sweden and I actually got married because of it. I met my ex-wife while over there for one of the races - they were good days. There was a big queue for starting money at the end of the day so that you could get to the next meeting. That never happens nowadays!

"I think Formula 3 is still the championship that everyone needs to do on the way to F1. Although it is becoming very expensive and it's getting a bit processional, whereas Formula Renault has picked up the cudaels very well and it's a little more exciting. Renault has put a lot into it and I'm just wondering whether Formula 3 at present is a little bit out of touch. The cost of doing these race series now is terrifying."



Williams didn't spend long in Formula 3. His friend Chris Lambert was killed at Zandvoort in July 1968 driving a Brabham-FVA BT23C, and it didn't take much for fellow driver Tony Lanfranchi to persuade him to try something else.

He did exactly that and has gone on to forge a career competing in almost every other type of car. "I've been fortunate," he told Simon Taylor when our editor-at-large had lunch with him for the October 2006 issue of Motor Sport. "I've made a lot of friends. I've never made any money, but I don't owe anybody anything. I've just cracked along."

If you ask anyone who races against him he still very much 'cracks along' when he's behind the wheel.



HINCHCLIFFE HEADS FOR THE FUTURE WITH AN EYE ON THE PAST

Canadian IndyCar star was relieved to land Andretti seat after Newman/Haas's withdrawal, but there is more than a hint of sadness

HE 2011 INDYCAR SEASON WILL always be remembered because of the tragic death of Dan Wheldon at the Las Vegas race on October

16. The two-time Indy 500 winner, who had sat out most of the season due to lack of funding, was just about to announce a deal with Andretti Autosport for 2012.

It sadly wasn't to be, but a new driver has just been announced by the team. Last year Canadian James Hinchcliffe stepped onto the IndyCar scene after two years in the Indy Lights Championship. Three fourth-place finishes for Newman/Haas Racing and 12th place in the 2011 championship standings secured him the Rookie of the Year title.

Things looked good for a second year in the single-seater championship, but on December 1 disaster struck. After 107 race wins Newman/Haas was withdrawing from IndyCar racing.

"I was somewhat aware of the fact that the team had recently received some bad news about potential sponsors," Hinchcliffe said on hearing the news. "But it's Newman/Haas... You just always assume that they will find a way to make it work."

With Andretti Autosport looking for a driver to ioin Marco Andretti and Rvan Hunter-Reav. and Hinchcliffe looking for a seat, it wasn't long before the announcement came. Even though the Canadian is understandably delighted about getting the drive he did say that the fact he was taking Wheldon's seat weighed on him from the first phone call. "I am going to think about Dan every time I get into that car," he said.

For now, though, it's off to the Rolex Daytona 24 Hours (January 29-30) for the first time where he will be sharing a SpeedSource Mazda RX8 with Jonathan Bomanto, Sylvain Tremblay and Marino Franchitti. When I spoke to him he had just stepped out of the SpeedSource race shop in Florida and was delighted about his first step into endurance racina.

"It's such an historic race," he tells me, "and it's one of the big ones in the world. Just the thought of doing a 24-hour race, being on it for that long and

sharing the car with other guys really fascinated me.

"In every race there is an opportunity for things to go wrong, but when you're doing a 24-hour race there's much more opportunity! It's going to need a completely different mindset, but it's a cool challenge."

So is the Daytona 24 Hours a precursor to more endurance racing? "It's definitely something that I want to do two or three times a year," he admits. "A lot of

IndyCar drivers do the (Daytona) 24, Sebring and Petit Le Mans - I just want to get in on the action. I'll drive anything, anywhere, anytime."

With his second year in IndyCar promising some more good results Hinchcliffe is one to watch, whether it's in the single-seater arena or the endurance racing world.



istoric Scen WITH GORDON CRUICKSHANK



ho'd have thought that MPs fought a constant battle on behalf of the historic car community? Or that David Cameron was 'one of us'? That was the surprising message from a trip I took to the House of Lords in January. The occasion was the release of a survey by the British Federation of Historic Vehicles Clubs into just how big the old car business is in the UK, and if the people who responded aren't exaggerating, then the answer is - it's huge.

We knew that Lord Steele was a keen old-car man – he has competed on many historic rallies, and turns out on a hard winter's night to marshal on LeJog as it passes his Borders locale. So it was no surprise that he was on the microphone once we had found our way though the security checks to the River Room and been welcomed by Lord Montagu and the Lord Speaker - who's a lady. "Sorry to rush off," she concluded, "but I have to go and sit on the Woolsack..."

In this lofty green and gold apartment, thick with Pugin's gothic detailing, David Steele and members of the Federation told us that while old cars rack up only 0.24 per cent of vehicle mileage, the historic car business totals an astonishing £4bn a year and supports 28,000 jobs. Most of this is in maintenance, and before you assume that it's all due to multi-car millionaires restoring Figoni & Falaschi Delahayes, it turns out that while our 850,000 pre-1981 cars are collectively worth over £7bn, two-thirds of them come in at under £10,000.

Even in these tough times most businesses reported that they were stable, if not expanding, so it seems that even as the crunch bites, we are still looking after our prized machines - even if half of them cover under 500 miles a year. Some only come out for an MoT, and even that won't be necessary if the current Euro proposal to exempt pre-1960 cars from the test goes through.

We sometimes hear tales that Brussels wants to clamp down on using old cars, perhaps by limiting mileage. Our gathering overlooking the Thames was a chance for that faceless entity 'the Government' to tell us that far from seeking restrictions on old-car use, there's an all-party group of Westminster car enthusiasts working on our behalf. Mike Penning MP, who is Under-Secretary at the Department of Transport and a keen car man - he spent several chilly hours last November on a 1902 Mercedes heading for Brighton with his mate Nigel Mansell alongside - told us that the group meets regularly with the Federation, FIVA, and DVLA to fend off any restrictions. "Usually," said Penning, "these are due to simple ignorance of our needs." He went on with a cheering message: "the Government has no plans to restrict old car usage. In fact we want to see more use made of them." And if you need some confirmation that this isn't just a minority view, it transpires that the PM himself used to be on the all-party group.

It's not easy to keep up with your neighbour when there are Formula 1 cars in his garage

HIS MOTOR RACING BUSINESS follows you everywhere, even on holiday. A few years ago I was revelling in the hospitality of a racer friend at his house in the South of France. It was early Sunday morning on my last day there and I was hoping for a lie-in, so I wasn't thrilled to be woken by the sudden noise of an engine being revved. Not just an engine, but a race engine, working gradually up to piercing high revs. In fact, the phrase 'Cosworth DFV' leapt into my fuddled brain. Which was absurd, as the house was on a corner of Cap Ferrat and bounded on two sides by the Med. No one could even drive past, let alone at speed. Before long the racket died and I fell back to sleep.

By the time I rose and found my host on the terrace I'd decided I must have dreamt it. Slightly hesitant, I said that I thought I'd heard some funny noises...

"Yes," said my host. "That was the man next door warming up one of his F1 cars. Did it wake you?"

I had to finish my coffee before I could proceed with the conversation. It transpired that 'the man next door' was Count 'Guggi' Zanon, the wealthy one-time patron of Ronnie Peterson, Michele Alboreto and Lella Lombardi, and that he kept a collection of racing cars in the garage of his villa. Frustratingly, I had to leave for the airport before I could ring his doorbell and ask "can I look at your cars, mister?".



A HOTEL WITH RACING HISTORY

Now it's a multi-story city block, but this site once echoed to blare of race engines on test

WRITE THIS IN BETWEEN ARRANGING my visit to Retromobile, the Parisien classic car extravaganza. This time I'm forsaking my usual hotel, the Mercure on the corner of Rue Vaugirard, where I used to stay partly because it's close by and partly because I could park underneath. That's an adventure in itself, which starts with launching the car over a precipice of a ramp down a dark plunging concrete tunnel, then swinging it into a tiny box of a lift a bare inch larger than the car

and waiting with sweating palms to see if the guillotine doors are going to slice off a bumper, followed by horrible graunching as some unseen ancient mechanism lowers you further into the underbelly of Paris. And oh, the relief of getting the car back to street level again without being mangled like a mouse in the clockwork.

But there's a strong racing connection to this place: it's built on the one-time site of Amedée Gordini's headquarters. From this corner of suburban Paris The Sorcerer, as he was known, conjured up ever quicker machinery from simple Simca and Renault origins, achieving success in F2 and minor F1 races and through the '50s progressing to beautifully engineered straight-eight Grand Prix cars of his own design.

That heritage is remembered in the hotel, where shelves of 1/43rd-scale models of Gordinis and other racers line an upper corridor. One day I was marvelling at how many variations of Gordini there were when a familiar voice boomed "loovely, aren't they, lad?" It was Tom Wheatcroft, bending his bulky frame over the tiny cars. "Ah've only 'ad one Gordini. I think it were that one. But," he continued, moving on to models of other makes with a gleeful twinkle, "I've got one of those. And that one. And that one. Only mine are full-size. Hee, hee, hee..." And he stomped off towards the show.



IN THE WORKSHOP

Classic Restorations

WHAT'S YOUR HISTORY?

This business started in 1983 with two employees and built up to our present 18, which includes mechanics, panel beaters, coachbuilders, trimmers and painters. Over 57 years working on veteran, vintage and classic cars, I've concluded it's best to cover all trades in-house. We also train our own apprentices. As a result we can claim to have some of the most skilled craftsmen in the field.

WHAT'S YOUR RANGE OF SKILLS?

Our skills and facilities cover all aspects of restoring and maintaining veteran, vintage and classic cars. Our workshop includes a machine shop, clean area for building engines, gearboxes etc and working area with wheel-free ramps. The panel shop has a folding machine, English wheel, rollers, swaging machines and louvering equipment. We also have a paint booth and oven and paint-mixing facilities.

DO YOU HAVE A SPECIALISATION?

High-quality work on all types of car. Rolls-Royce, Bentley and other top marques form a large part of our business but we apply the same degree of care to all our work.

WHAT'S IN THE WORKSHOP NOW?

A 1929 Phantom II tourer rebuilt from a wreck, being readled for display at the RREC rally. A 1938 Rolls-Royce Wraith for complete coachwork rebuild, including replacing the entire frame with new seasoned ash. A 1952 Bentley Special being built on an altered MkVI chassis. A Jaguar XK150DHC, ready for paint and re-trim after complete restoration, and a Corniche convertible having new hood made and fitted.

WHAT PROJECTS ARE YOU PROUD OF?

Restoring a Radford Countryman Bentley MkVI which won a recent concours award, also a rare BMW-Glas coupé (top). Converting a Bentley SIII saloon into a two-door convertible with power hood, involving complex structural alterations. One of our technicians winning a major award for developing an electronic fuel injection system for Rolls/Bentley V8 engines.

GC was talking to Charles Palmer www.classicrestorations.co.uk

DREAM GARAGE WHAT WE'D BLOW THE BLOGET ON THIS MONT



LOLA MK6-CHEVROLET

A pretty monster, and sire of the GT40 project. Built in 1963 for John Mecom, it has plenty of history, not to mention a potential 540bhp from its big V8.

> £POA www.hallandhall.net



CARCLASSIC ALPINE-RENAULT A110 1600S

Biggest, fattest version of the French rally rocket. In rare Gp4 spec with all the best options, this did a few rallies in early days but retains a pleasing patina.

€90,000 www.carclassic.com



ZWAKMAN JAGUAR XJR-15

Road-going one-make series car, with race-developed V12 inside lovely Peter Stevens-styled bodywork. Loud, raw adrenaline pump. Total mileage – 350!

£350,000 www.zwakmanjaguar.com



JAGUAR XJR-9

And here's the ear the XJR-15 is based on, the design that recaptured Le Mans victory for the marque. Raced by Lammers, Dumfries and Brundle in 1988-89.

£POA www.fiskens.com

Auctions |



ound the house

-ARTCURIAL-

The French auction house is hosting one of the two sales at Retromobile this year on February 3. Most would agree that the star of the show, in road car terms, is the 1959 Ferrari 250GT California (POA) once owned by French producer, screenwriter, actor and director Roger Vadim, who discovered and married Brigitte Bardot.

Other interesting road car lots include a pretty 1947 Fiat 1100S MM with streamlined body by Rappi (£83-99,000), a low-mileage

1984 Lancia Rallye 037 (£107-150,000), and a never-rallied Fiat 131 Abarth Rally (£41-50,000).

For race enthusiasts, though, attention will be on the 1971 Porsche

911S/T (£210-290,000). This

Group 4-specification car (above)

finished sixth in class in the 1972 Nürburgring 1000Kms and in 1973 was sold to the Kremer brothers who upgraded it again to 2.8 RSR spec and then to a 935 in 1980.

If you're a Nigel Mansell follower you might want to take a punt on the 1989 Ferrari F40 (£265-315,000). The 1992 World Champion drove it in 1989 when he was racing for Ferrari.

- BONHAMS -

The day before Artcurial's sale Bonhams will also be hosting an auction at Retromobile. The 'drive through' sale includes a 1926 Amilcar C6

voiturette which has been in the USA since WWII. Fully restored, it's expected to find a new home for £380-450,000. There is also a striking 1935 Delage D8-105S streamlined coupé (£230-300,000), which has been shown at Villa D'Este.

As usual there's no shortage of Ferraris and amongst the four 250GTs is a 1957 Boano 'lowdrag' coupé (£290-375,000) which is eligible for the Mille Miglia. If that's beyond your budget then how about this one: a wonderful,

> rusty, unrestored 1978 FIAT 900T Ferrari service van (left) that was bought new by Jacques Swaters' Garage Francorchamps SA. Be warned, the estimate of £5-7500 may well be surpassed - mainly because Motor

Sport's art editor and associate editor have both taken a serious fancy to it.

- HISTORICS AT **BROOKLANDS** -

On February 18 there'll be a couple of interesting racers for sale in Weybridge. First up is a 2008 Radical SR8, maintained and prepared exclusively by the factory team. The car has only ever been raced twice and is expected to fetch £40-55,000.

Historic racers will be represented by a 1962 Jaguar E-type Series 1 Coupé (£60-75,000) that is eligible for the Masters and HSCC series as well as the Nürburgring Oldtimer, Spa 6 Hours and the Le Mans Classic.

- SILVERSTONE AUCTIONS -

As always the Race Retro sale on February 25 is packed with affordable racers: a 1963 Ford Anglia (£20-23,000), a 1972 MGB (£16-19,000), a 1961 Maserati 2500GT (£37,500-50,000) and a Group B 1987 Metro 6R4 (£47-52,000). All of them are race/rally ready. Perhaps the most interesting racer in the sale, though, is a 1964 Lotus Cortina with FIA/FTP papers. Unlike many, this one has period race history and the estimate certainly reflects that: £70-80,000.

- RM AUCTIONS -

On February 24-25, RM lifts the gavel on the Milhous Collection, with various Indianapolis racers being offered, including a 1962 Lesovsky Roadster (£100-160,000), a 1984 March Cosworth 84C (£60-85,000) and the 1949 Rounds Rocket (£160-230,000), driven at the Indy 500 in 1949 and 1950. Although failing to qualify on both occasions it was the first mid-engined, rear-wheel drive Indy racer.

- PROFILES IN HISTORY -

Even before Steve McQueen's Porsche 911 sold for £897,195 in August we knew memorabilia connected with the 'King of Cool' fetched serious prices. It seems there is no limit: in December, Profiles in History sold the race suit he wore filming Le Mans for a whopping £641,820.

There will be a full review of the Scottsdale auctions and preview of Amelia Island in next month's issue.

FORTHCOMING AUCTIONS FEB 2 BONHAMS Collectors Motor Cars and Automobilia,

Paris, France Tel: 020 7447 7447 ARTCURIAL Motorcars at Retromobile, Salon Retromobile, Paris Tel: 0033 1 4299 2056

Pavilion Gardens, Buxton, Derbyshire Tel: 08458 334 455

3 HISTORICS AT BROOKLANDS Collectors Cars and Automobilia, Brooklands Museum, Weybridge, Surrey Tel: 01753 639 172

FEB 24 WORLDWIDE AUCTIONEERS The Classics at the Trump Taj Mahal, Atlantic City, New Jersey Tel: 001 260 925 6789

RM AUCTIONS The Milhous Collection, Boca Raton, Florida Tel: 001 519 352 4575

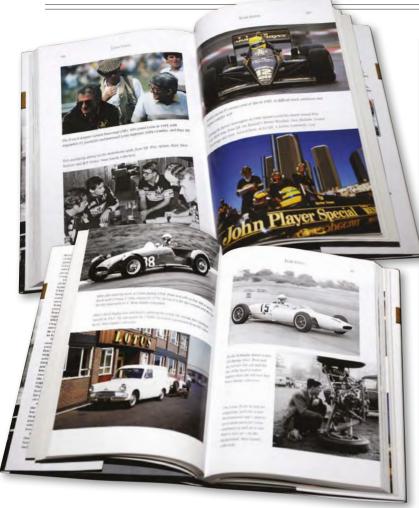
25 SILVERSTONE AUCTIONS Race Retro Sale Stoneleigh Park, Warwickshire Tel: 01926 691 141

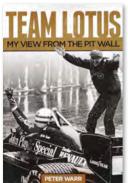
FEB 28 BARONS CLASSIC Collectors and Sports Car Auction, Sandown Park Exhibition Complex, Esher Hall, Surrey Tel: 023 8066 8413

FOR FULL AUCTION LISTINGS

www.motorsportmagazine.com

Reviews |





TFAM LOTUS MY VIEW FROM THE PIT WALL

bv Peter Warr

There is nothing that could be described as 'run of the mill' about this autobiography. For one thing, it is published posthumously, its writer leaving it unfinished upon his unexpected death in October 2010. For another, it actually says little about the life of the man it is about, and more about the people he knew. And one more thing: it's written by Peter Warr, the Lotus team manager - so it's full of spikey opinion and is gloriously subjective. A terrific recipe.

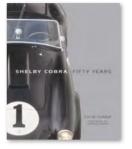
We have Warr's son, Andrew, and Motor Sport's

own Simon Taylor to thank for bringing this book to publication. Back in 2008 Simon spent two wonderful days at Warr's home in south-west France to interview him for one of our popular 'Lunch with...' stories, collating more material than we could ever hope to print. It would come in useful when publisher Haynes and the Warr family asked him to pick up the project after Peter's death.

Biographical facts and useful context have been woven in and around Peter's five chapters on Colin Chapman, racing mechanics, drivers, engineers and Bernie Ecclestone. It's never less than fascinating. On the drivers, he eulogises about Jochen Rindt, Ronnie Peterson and Ayrton Senna, is cool in his enthusiasm for Emerson Fittipaldi - and shows total disdain for Nigel Mansell. His loathing for the man who "threw away two world championships for Williams" is wince-inducing.

Three more chapters were left unwritten when Warr died, one of them on the F1 journalists he liked - and those he didn't. A shame we'll never read that one! DS

Published by Haynes Publishing, ISBN 978 0 85733 123 6, £19.99



SHELBY COBRA FIFTY YEARS

by Colin Comer

Amazing to think it's a full 50 years since a young racer called Carroll Shelby first had the bright idea of dropping a bia Ford V8 into a tinv, liahtweiaht sports car, the AC Ace. And still the Shelby corporation are turning out handmade cars in the spirit of what was conceived all that time ago.

The author, Colin Comer, is clearly a hardcore Shelby enthusiast who not only writes with a passion, he even used the money he'd saved for a house to buy his first Cobra, having never even driven one before!

There are a huge amount of Shelby and Cobra books already on the market, but what sets this apart is the terrific quality of images that make up the majority of the book. This is really only going to appeal to lovers of the Anglo-American legend, but nonetheless, is a very attractive way of showing the genesis of the early race-cars, through to today's 'continuation' cars. DC

Published by Motorbooks International, ISBN 978 0 7603 4029 5, £26.99



100 YEARS OF THE BRITISH AUTOMOBILE RACING CLUB

by Gareth Rogers

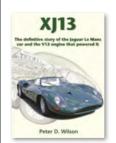
The history of the British Automobile Racing Club is a colourful one.

From its humble beginnings back in December 1912 in the Sussex countryside to its current state as an international race organiser, the BARC is worthy of a book such as this. Too often organising clubs are overlooked in favour of books on little-known racing drivers and long-forgotten cars.

Rogers does a good job of making the informative text interesting, and, with its blend of some great images and quotes, the 170-page work is a fitting tribute to the club that helps run the Abu Dhabi Grand Prix.

If you happen to be a professional or amateur racer this book should be next on your 'must read' pile because it's more than likely that you will have competed in a race it has organised, and perhaps you've even needed its marshals' help to get your car out of the gravel trap. I know I have. EF

Published by The History Press, ISBN 978 0 7524 6180 9, £25



THE DEFINITIVE STORY OF THE JAGUAR LE MANS **CAR AND THE V12 ENGINE THAT POWERED IT**

by Peter D Wilson

This whopping volume has to be the last word on the curvaceous cat that never raced. Written by one of the men who built the car, it's the inside tale of the V12 that was meant to win Le Mans in 1965, but having roundly missed its deadline became something of a problem

child, hidden away and only driven in public in 1973.

Backed by a wealth, even a surfeit, of information - spec sheets, memos, sketches - Wilson explains the design and build, and how its completion chimed with the run-down of the competition department, despite talk of a 3-litre Le Mans racer for 1968. The crash and rebuild are well covered, as are replicas and models. Fascinating to learn that in '64 Jaguar tried to buy Lotus, using the as yet unbuilt V12 race engine as bait - for a Lotus Indy entry! GC

Published by PJ Publishing Ltd, ISBN 978 0 9566857 1 1, £75

YOU WERE THERE

Sixties Grands Prix and Seventies sports car racing feature this month, as we swing from Silverstone to Sebring, with a brief stop in Canada too



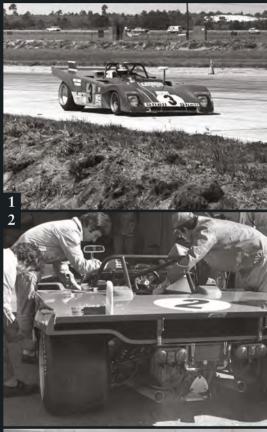


JOHN IVORY

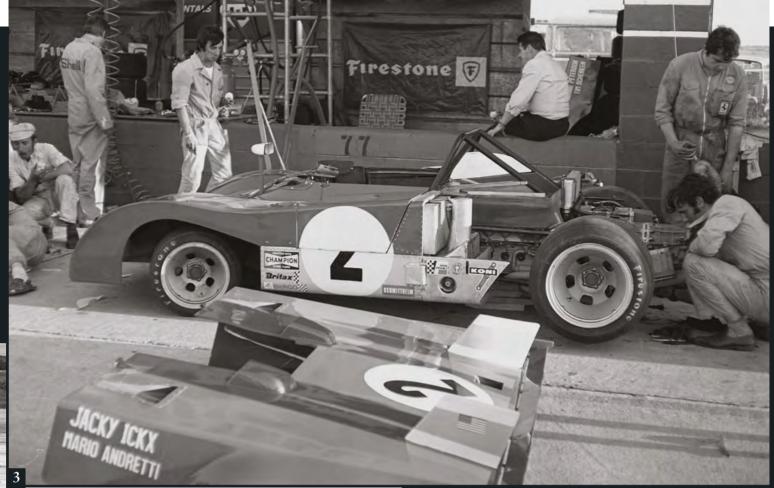
John made good use of the Voigtlander camera a relative gave him ("I could never have afforded it," he says) during practice for the 1969 British GP. $\{1\}$ Lotus brought 4WD 63s but it was Rindt's 49B which almost won. "I'm amused by the standard garage jack!" $\{2\}$ Denny Hulme works on his McLaren on the ramps $\{3\}$ Stewart tried 4WD Matra but raced MS80 $\{4\}$ Both Ferraris expired. "The state of the paddock wouldn't please Bernie!"





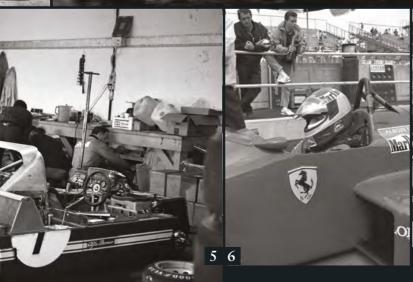






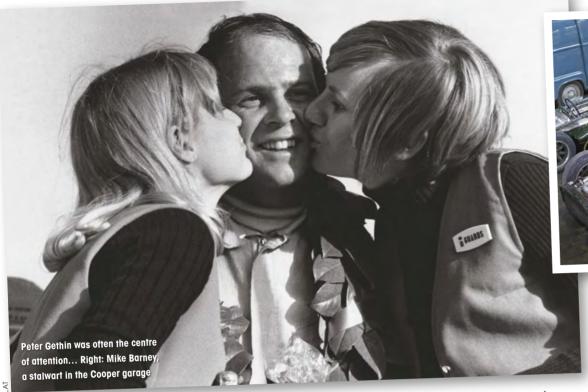
WILLIAM TUTTLE

Florida man Mr Tuttle used Leica cameras to take these photographs, including an M3 model at Sebring in 1972. "It was a great camera as you can see so much detail. I was 21 when I took those shots." $\{1\}$ Ronnie Peterson in the 312PB shared with Tim Schenken at the '72 Sebring 12 Hours. The pair came second to Mario Andretti/Jacky lckx in dominant Ferrari 1-2. $\{2\}$ Winning car of Andretti/Ickx is fettled in the preceding World Championship round, the Daytona 6 Hours. $\{3\}$ An ice-cream break during work on the Andretti/Ickx 312PB at Sebring. Mechanic Ermanno Cuoghi crouches in front of the car. $\{4\}$ Clay Regazzoni was fourth with Brian Redman at Daytona. $\{5\}$ Carlo Chiti and a young fan watch work in the Alfa Romeo garage at Daytona. Vic Elford and Helmut Marko took their 33TT3 to third. $\{6\}$ Michele Alboreto in pensive mood in Ferrari F187 at 1988 Canadian GP. $\{7\}$ Poleman Ayrton Senna won the Montréal race in McLaren MP4/4. Here, he winds himself up for qualifying.





Doug Nye



FAREWELL TO A GOOD GUY

With the death of Peter Gethin, racing has lost a popular character. But while he's remembered for a famous victory, that may not be his greatest race

wo young garage hands well, one mechanic and one younger 'trainee salesman', a.k.a 'floor sweeper' - could hardly contain their enthusiasm. They were sitting in one of Silverstone's Woodcote grandstands, spellbound by the 1959 Daily Express Trophy meeting. The winners that day were Stirling Moss in an Aston Martin DB4, Ivor Bueb in a Jaguar 3.4, Roy Salvadori in John Coombs' Maseratiengined Cooper Monaco, and Jack Brabham scoring his first Formula 1 victory in the 2½-litre Cooper-Climax.

The youthful floor-sweeper had family connections with an RAC luminary. He'd managed to wangle a couple of passes, and had

asked the mechanic he was working with - at Dees of Croydon - if he also fancied "a day at Silverstone"...

By the end of that programme the two starry-eyed lads were completely hooked. The mechanic pointed across at the Silverstone pit row and declared "That's what I want to do. I want to be over there. Those are the cars I want to work on!".

And the young floor sweeper with a little more wherewithal behind him - went one step further. He turned to his mechanic mate and announced "That's what I want to do. I want to be a racing driver!".

That would-be racing mechanic was Mike Barney - whose tall, taciturn presence would add such strength in coming decades to the Cooper and McLaren Formula 1 teams. And the young floor-sweeper's name was Peter Gethin, who would

become one of the most versatile and widely successful of professional racing drivers, most notably in single-seaters up to and including his famous victory for BRM in the 1971 Italian GP.

Mike told me this story at poor Peter's funeral in Arundel last December. Mike had been detailed by Bruce McLaren to help on Peter's Church Farm Racing Formula 5000 McLaren M10A, and had always rated him highly as a



racing driver. He leaned on Bruce and business partner Teddy Mayer to give Peter a Formula 1 or Can-Am chance, and in June 1970 Peter was poised for a Formula 1 test at Goodwood when Bruce's prototype M8A Can-Am car spun into a marshal's post, killing Bruce instantly.

Peter was then made McLaren's number two works driver alongside Denny Hulme. His F1 results with McLaren never matched those he had achieved for the marque in Formula A/5000, but Mike Barney recalls another effect his old friend had on the team: "He always seemed to have the most fabulous-looking birds in tow. We were deep into one all-nighter at the Colnbrook works when he turned up with a real dazzler on his arm. The lads just didn't know where to look, and absolutely could not concentrate. She was just stunning, while Peter was just Pete, chattering on completely unconcerned, seeming oblivious to our staring eyes. I finally snapped out of it and had to ask Teddy to come down from his office and throw out both Peter and his bird, otherwise no way would we finish the car in time! Typical Pete."

In fact my friend Alan Henry reminds me that Monza '71 was not perhaps Peter Gethin's finest drive - which should instead be recalled as his epic win in the 1972 Pau GP when he drove his works Formula 2 Chevron B20 to lead Patrick Depailler's Coombs-entered March 722 across the finish line by just 0.9sec after 70 nerve-tingling laps. That's another reason why the congregation at Arundel sealed his funeral service with a thunderous round of applause for him. Peter Gethin was nobody's softie, but he was a really good guy.



History – a given, not a gift

In my lengthy experience, self-delusion is quite common amonast historic and classic car owners Many delude themselves that they are proper racing drivers - as opposed to what Jenks and The Bod used to dismiss as mere 'racing motorists'.

An increasinaly serious delusion I've found in recent years is that of proper-car owners becoming dissatisfied with the capabilities of their proper car's proper chassis, and then selling it off "without the history" so they can rebuild their car around a fresh, and more competitive, chassis. This is supposedly to avoid the financial hit of admitting to lost originality, or more specifically of having produced a 'split identity' giving someone else the chance to claim what is regarded as their car's unique identity.

Some perfectly pleasant, perfectly proper chaps have succumbed to this numb-nut concept over the past 20-30 years, and to me it's perhaps the most damaging form of self-delusion within this specialised world. The inescapable truth is that the previously established history of any artefact simply is not within human gift. It cannot be extracted, nor held back, at the whim of any transitory owner.

For example, if you have been racing an unchallengeably ex-Jim Clark Grindley-Trubshaw, and you decide you might be able to trim an extra second or two around Brands Hatch 'if only' vou replaced its probably twisted or creaking chassis frame with an ultra-stiff brand-new one, would the resulting replacement assembly still be 'the ex-Jim Clark' machine? If there's no surviving part within that assembly that the great man once touched then the answer plainly has to be a resounding 'no'.

So would it instead be the ex-Jim Clark Grindley-Trubshaw "now rebuilt around a 2012 replacement chassis"? Self-evidently the answer here has to be a resounding 'Yes'. I fail to see how any denial of either case can be sustained.

So what of that tired and just-discarded ex-Jim Clark chassis? In this historic racing world of selfdelusion it could well have been sold for a sona, on the basis of paperwork declaring that the vendor is selling the assembly "without history" or "the Jim Clark history does not go with this chassis" or perhaps the purchaser signs something stating "I will not claim this chassis' former history" or "I purchase this chassis 'without history'...". I've seen them all - and snorted with derision every time.

This is pretty much what has happened in several cases, all of which is fundamentally self-deluding, intellectually bankrupt bulls**t. If I stole the Rosetta Stone from the British Museum and flogged it on eBay as "black granite, some lettering, without history" would that change the stone's real history? Self-evidently it would not, and could not.

Within the historic racing car world what it all comes down to is a competitive owner's perfectly understandable ambition to protect the commercial value of what he owns and runs. He doesn't want his rebuilt ex-Clark Grindley-Trubshaw to be perceived as the ex-JC G-T "rebuilt around a 2012 chassis". And vet that is what it has become.

Equally the new owner of that discarded old chassis, as long as it retains original material from period, undeniably owns a structure in which the great JC once did some deed, completely regardless of whatever the vendor might have specified as being "part of the deal".

History, once established, is not within human gift. It cannot be changed, nor removed, nor indeed enhanced. Yet the majority of historic racing cars have by now seen many more years as historics than they ever did as international front-runners or prominent club cars in their declining seasons.

Racing a car will progressively consume it. Over time replacement will become necessary if the overall assembly is still to perform competitively. This is well understood and accepted. Many historic cars have now been reassembled around replacement chassis, and in several cases the discarded original chassis has then been recycled to become the basis of yet another car assembly. Many first owners of such rebuilds have bought open-eyed, assuring their supplier they would never dream of "claiming the history" in conflict to the original JC G-T "rebuilt around replacement 2012 chassis". But just because they don't claim it. doesn't mean they don't in reality possess it.

This is becoming such a common situation that I suggest the historic racing world should now recognise such realities, and offer a category for cars embodying such significant original elements as otherwise discarded or 'passed down' chassis frames or monocoaue tubs.

As an example there are two versions of 1961 Maserati Tipo 63 chassis '0002' in existence, one used at Le Mans, and its immediate Cunningham team long-wheelbase replacement, assembled round a fresh frame after Le Mans, which achieved a subsequent US racing history all of its own. There's no auestion which was which: these are two leaitimate cuttings from the same rose bush, yet they share the same identity - as duplicated in period.

The legitimacy of such duplication within the historic racing period, as opposed to contemporary period, is another debate, but in the hypothetical case of JC's G-T as above, we'd have one car auite properly credited with using the chassis he once drove, and a second car which was once based upon that chassis, but which has now been rebuilt around a new one. And you could bet that the new-chassis version might be 4-5sec a lap quicker than the re-housed original, so that alone should enhance its continuing value. Many wouldbe historic racers today seek front-running alory above all, while mere history is something that Mr Ego, the owner, can confer or deny as he thinks fit...

As Jenks used to say "Yeah, but...". Worth thinking about, but without any such self-deluding notions as selling a chassis but 'keeping its history'.

Doug Nye

A racer, a stockbroker and a gentleman

Last year ended in a mournful manner. British motor sport lost two fine men, Peter Gethin's death after a long illness being accompanied by the very sudden demise of Sheridan Thynne - long-time friend and ally of Sir Frank Williams, tremendously effective sponsorship coordinator for Williams Grand Prix Engineering, and very much the man who promoted Nigel Mansell to ultimate World Champion stature.

In his packed memorial service at South Stoke, Sheridan's son Piers, hillclimb Dallara driver and McLaren staff man, did a brilliant job - as would Peter Gethin's son Nick - in delivering a eulogy truly worthy of his late father. Piers's opening words cut right to the heart of Sheridan's being, and have never been more justified as he declared: "It is said that to be born a gentleman is an accident... but to die a gentleman is an achievement".

You see, dear old Sheridan was a toff, an Old Etonian by schooling, related to the Marquis of Bath - well, we all have crosses to bear - and he wore his heritage well. Sheridan was smitten by motor sport from the day that a schoolfriend's father - Lord Selsdon - shared the winning Ferrari 166 in the first post-war Le Mans 24-Hours race with Luigi Chinetti.

At Eton, Sheridan's housemaster was a fellow enthusiast, writing motor racina books as 'Doualas Rutherford'. He then had to endure young Thynne picking him up on the most arcane of detail errors - the pupil marking the master's homework with abundant relish.

Piers Thynne told a lovely story of his father's upbringing and mindset. As a boy, Sheridan was being introduced to field sports when - after shooting upon a high Scottish moor he rejoined his father down by a river where "grandfather had been pike fishing all day, without luck. Suddenly two deafening gunshots rang out. Sheridan had just spotted a pike and, fresh from grouse shooting with his shotgun, had immediately given it both barrels". Plainly the boy wasn't going to mess about. In short - a born racer.

He did National Service as a Lieutenant in the Royal Wiltshire Yeomanry before middle years as a stockbroker. He raced an 850 Mini saloon in his spare time, and shared a flat in Lower Sloane Street, London, with friends Piers Courage, Jonathan Williams and Mark Fielden. The latter died tragically at Silverstone during the 1963 Martini Trophy meeting while sitting in his Lotus 11 on the pit lane when it was struck by an Aston Martin DBR1 spinning out of Woodcote Corner.

Meanwhile, Jonathan Williams had been racina a black Austin A40 similar to the pale blue A40 campaigned by the unrelated FOGWilliams - Francis Owen Garbett 'Frank' Williams - probably the most determined racer this country has ever produced

Come 1981, Sheridan was immensely helpful when I wrote a book on the Williams team. We got on really well, and ever after - until mere days before his fatal heart attack - he would often 'phone for a natter... always involving as much hilarity as (from his side) deep insight and wisdom.

He had remained a firm friend of Frank Williams ever since the days when Frank's home was a rented sofa. Years later. Sheridan was finding his feet as a stockbroker when he accompanied Frank's little Formula 2 team to Albi, and realised the best was only just good enough for Le Patron. He told me "there was another Brabham in practice which we kept confusing with ours, and when Piers Courage came in Frank asked me to stick one of his self-adhesive racing numbers - a figure '1'- longitudinally, wrapround style on the upper lip of the car's nose. Frank was selling these numbers for some fabulous sum at the time: I doubt if any of his customers realised that the boys at Frank's place had a set of patterns and were simply cutting them out of plain white Fablon sheet. I wrapped this number '1' around the nose lip and then Frank - to my astonishment - came round to inspect it. And he didn't just glance at it, oh no, he backed off fully 15ft, squatted down, closed

one eye and stared at the car head on, long and hard. Then he stood up with a look of pained disgust and said 'Oh no, Sherry, it's slightly off-centre. You'll have to try again...'"

Typical Sheridan, he then specified the other aspect of Frankism by recalling that when Jonathan Williams was engaged for a one-off drive in the 1968 Formula 2 Monza Lottery GP in Piers's place (he was driving in Formula 1 that weekend), Sheridan asked why Jonathan thought he had been given the drive. Jonathan dryly explained: "Safe and cheap, Sherry, safe and cheap...". His services had only cost Frank a dinner, yet on race day he delivered a fine race win, just 0.6sec covering the first three cars; Jonathan in Frank's Brabham BT23C, Alan Rees's Winkelmann Racing '23C and Robin Widdows' Chequered Flag team McLaren M4A which finished third.

In 1979, while lunching with Sheridan, Frank Williams mentioned that a Leyland Vehicles man would be accompanying the team to the French GP at Diion as a prospective sponsor. Sheridan asked "who's going to look after him?", and volunteered to help.

So he accompanied Leyland's Steve Herrick to Dijon. He and Herrick discussed the necessity not only of finding funds to co-sponsor the team, but

> also of a support budget to exploit that sponsorship. Frank's primary sponsors, the Saudis, agreed to a Leyland Vehicles cosponsorship deal and into 1980 Sheridan to his delight - was able to forsake the city in favour of a desk in a cramped corner of Williams Grand Prix Engineering's front office at Didcot. He remained WGPE's commercial head for the next 13 years, dealing with British Leyland, ICI, Mobil and Canon amongst many more, while also handling many negotiations with drivers. He was a pioneer of providing circuit hospitality for corporate guests, and became a particular proponent not only of Nigel Mansell, but also of Riccardo Patrese.

But he never forgot those formative years when that small group of motor racingminded friends had dreamed their dreams in the Lower Sloane Street flat. Though each of them - Frank excepted - had some form of private allowance on which to live, "There

was a café in Pimlico Road which did a threecourse supper, plus bread and margarine, for five shillings a head, and we ate there religiously - enjoying a far lower standard of living than our parents

perhaps expected - purely to save money so we could go racing...".

Simply getting one's priorities right, as Sheridan Thynne would have put it...



Sheridan Thynne (upper

left): gentleman, racer, and

one-time flat-mate of Piers Courage (inset in Brabham)

Parting Shot Le Mans 24 Hours, France, June 13-14, 1970 The Porsche 917LH of Vic Elford/Kurt Ahrens and the 917K of Jo Siffert/Brian Redman dominated at a wet Le Mans, until both were struck down by broken engines. Instead the Richard Attwood/Hans Herrmann 917K took Porsche's first outright win at La Sarthe. To buy this photo or other classic motor racing shots, visit www.latphoto.co.uk

