INSIDE: PERFORMANCE DRIVING GUIDE MACLE PERFORMANCE PERFOR

THE WORLD'S BEST MOTORSPORT WEEKLY

www.autosport.com · FEBRUARY 12 2015

FERRI FASTEST

...but who is <u>really</u> winning the F1 test war?



SENNA BACK IN A McLAREN Ayrton's nephew joins GT squad



RENAULT CLIO DYNAMIQUE MEDIANAV 1.2 16V 75

🐡 Touchscreen navigation 💝 16" alloy wheels 💝 4-year warranty†

SEDUCTIVE OFFERS FROM £159 PER MONTH

WITH £1,500 DEPOSIT CONTRIBUTION' AND 3 YEARS' SERVICE PACKAGE £199" UNTIL 31 MARCH

48 monthly payments of	£159	Dealer deposit contribution	£1,500	Optional final payment	£5,008	Duration (months)	49
Customer deposit	£1,290	Total amount of credit	£10,705	Option to purchase fee	£149	Fixed interest rate p.a.	6.12%
Cash price	£13,495	Finance facility fee	£99	Total amount payable	£15,678	6.9% APR representative	



The official fuel consumption figures in mpg (I/100km) for the car shown are: urban 40.4 (7); extra-urban 60.1 (4.7); combined 51.4 (5.5). The official CO₂ emissions are 127g/km. EU Directive and Regulation 692/2008 test environment figures. Fuel consumption and CO₂ may vary according to driving styles, road conditions and other factors.

Finance provided by RCI Financial Services Limited, PO Box 149, Watford WD17 1FJ. Subject to status. Guarantees and indemnities may be required. You must be at least 18 and a UK resident (excluding the Isle of Man and Channel Islands). Terms and conditions apply. Our dealership introduces customers to a limited number of financial providers including RCI Financial Services Ltd. Offer based on 6,000 miles per annum, excess mileage 8p per mile inc VAT. Offers cannot be used with other schemes or finance offers and are available on featured new vehicle when ordered and registered between 3 February 2015 and 31 March 2015. Participating dealers only. *Deposit contribution shown is available to new Renault Finance customers when taking Renault Finance on Renault Clio (excluding Clio Expression). Clio shown has optional Flame Red Renault i.d. metallic paint, available at £595. †Four-year warranty applies to new vehicles when ordered from a UK Renault-approved dealer. Warranty up to 4 years/100,000 miles (whichever comes first). For full warranty terms and conditions visit www.renault.co.uk/warranty **Service package available at £199 when the vehicle is ordered and registered by 31 March 2015. Visit renault.co.uk/servicepackage

POLE POSITION

Jerez offers only a hint of what's to come in F1

THERE IS NO DEFINITIVE SET OF ANSWERS TO THE

question of what last week's Jerez Formula 1 test told us. And even if there was, the car upgrades that will appear between now and the season-opening Australian Grand Prix on March 15 would render any such conclusions irrelevant. But there are indicators.

In terms of headline laptime, Ferrari set the pace. Does that mean Ferrari is fastest? No. But it suggests that the Scuderia has at least taken a step forward. And given that Kimi Raikkonen was only 0.143s quicker than team-mate Sebastian Vettel's fastest time (set on the significantly slower medium-compound Pirellis), it's fair to say we haven't even seen the ultimate performance from Ferrari yet.

But you can say exactly the same about Mercedes and Williams, which all spent time on heavier fuel loads at Jerez. Then there's Red Bull, which had a troubled time with a detuned Renault engine that should be able to run properly at the next test.

The next Barcelona test, which starts on February 19, will tell us a little more. The final test at the same venue, a week later, more still. But it won't be until we're four or five races into the season that we have an accurate picture of where everyone stands.





EUD STRAW EDITURedd.straw@haymarket.com

□ @eddstrawF1

COVER STORY

FIND US ON





Main cover image: XPB Images

PIT & PANNACH

- 6 THIS WEEK IN F1
- 9 JONATHAN NOBLE: F1 NEWSHOUND
- 10 THIS WEEK IN MOTORSPORT

F1 TESTING SPECIAL



- 16 IS FERRARI'S PERFORMANCE REAL?
- **18 TRACKSIDE VIEW**
- **20 HONDA'S WAKE-UP CALL**
- **22 THE CHALLENGE FACING RENAULT**
- **24 TESTING TECH**
- **26 WHAT NOW FOR WILLIAMS?**
- **29 JEREZ TESTING DATA**
- **30 ALEX LYNN: WILLIAMS TESTER**

AUTOSPORT PERFORMANCE

35 OUR EXPERTS GIVE YOU THE EDGE

FEATURES & REPORTS



- **52 BRUNO SENNA TO McLAREN GT**
- **56 TOYOTA'S WORLD RALLY COMEBACK**
- **62 THE OTHER BATHURST**
- 68 TRS; BRAZILIAN F3; ERC
- 72 TOM BLOMQVIST IN THE DTM
- 74 MIDDLEBRIDGE'S F1 FAILURE

CLUB AUTOSPORT

- **89 RACING STEPS RETURNS TO UK SERIES**
- 90 BTCC TEST FOR MINI STAR
- 94 ADAM CARROLL'S BRITISH GT TITLE BID

SUBSCRIPTION OFFER

92 GET AUTOSPORT DELIVERED TO YOU

THE BACK STRAIGHT

- 98 THIS WEEK
- 100 FROM THE SOFA
- **102 INTRODUCING: CHASE ELLIOTT**





This week in F1



F1'S 1000BHP REVAMP MOVES FORWARD

Formula 1 continues to work towards introducing 1000bhp engines in 2017, with car and tyre changes under consideration for as early as next year.

F1's Strategy Group met in Paris last week to discuss proposals to overhaul the look and speed of cars over the next two years. On the engine front, it was agreed that 1000bhp should be achieved through lifting the fuel-flow limit and fuel allowance, rather than ditching the current V6 hybrids.

Engine manufacturers have now been asked to produce more-detailed proposals over the next few weeks to evaluate whether this is realistic.

In parallel, teams have also been evaluating ways to improve the technical format. Extra downforce, better-looking designs and wider tyres could be introduced as early as next year.

One source said: "The powertrain changes won't come in for 2017 – but what might come in for 2016 are the wider rear tyres and the amendments to bodywork to suit that."

The technical directors of teams are now likely to discuss the proposals – and the cost implications – when they convene for scheduled working group meetings with the FIA later this month.

It is hoped that discussions will produce enough progress to allow 2016 rule changes to be approved by the F1 Commission on February 18.

Modifications to the rules for 2016 can be pushed through on a simple majority basis before March 1. After that date, unanimous support is needed to make changes.

I like the idea of 1000bhp engines, I like the idea of spectacular cars. But I also like the idea of having a lot more cars and that's what should be our prime concern.



Pat Symonds, Williams chief technical officer

More delays for new Force India

Force India's new car is unlikely to run until the final Barcelona test later this month.

The Silverstone-based team missed the first pre-season test at Jerez and planned to launch the VJMO8 at the next test at Barcelona on February 19.

But deputy team principal Bob Fernley revealed further production delays mean the car will not now appear until the final pre-season test on February 26.

"That means we will use the 2014 car at the next test," Fernley said. "The mileage on the VJMO7 will still allow us to run with the 2015 Pirelli compounds."



Caterham F1 hopes ended

The company's administrator has put the assets of the Caterham Formula 1 team up for sale, ending hopes of a return to the grid in 2015

Auction firm Wyles Hardy & Co will sell Caterham's 2014 chassis and show cars, plus the team's factory, race and simulator equipment in a series of auctions to be held during March and April.



For all the breaking news, visit **WAUTOSPORT.com**



Grosjean: Lotus structure strong

Romain Grosjean believes that Lotus can improve this year following its restructure after a turbulent 18 months.

"There is a lot more stability this winter than there was from 2013 to 2014," he said. "We need some time for things to move on and get everything stable.

"Things are going in the right direction now, which is nice."



Honda set for engine upgrade

Honda will introduce upgrades to its engine for the next test at Barcelona, to solve the reliability problems that plagued its first pre-season outing with McLaren at Jerez last week.

Honda motorsport chief Yasuhiso Arai has no doubts its Barcelona-spec engine will run better than the Jerez motor, which suffered sensor problems, oil-level issues and a fuel-pump failure.

"The new engine will be a step up," Arai told AUTOSPORT. "There are several testing parts still, and we will make final confirmation on those just before [the first race in] Melbourne."

Total number of laps that Honda ran at Jerez during the four-day test last week

BIG NUMBER

of laps that Honda ran at Jerez during the four-day test last week. It is confident that far more mileage will be racked up at the upcoming Barcelona test

RENAULT PROMISES BARCELONA FIXES

Reanult says that remedies for the reliability worries it experienced at Jerez will allow it to show off its true potential during the next pre-season test at Barcelona.

Renault had to restrict how hard teams could push its engines in the first test, because of fears over a minor part causing failures. A redesign of the metallic component in the ERS water pump will be ready for the next test at Barcelona, which will allow Red Bull and Toro Rosso a better idea of how much progress Renault has made with its engine.



Dennis: Alonso "more mature"

McLaren boss Ron Dennis believes that a combination of him mellowing and Fernando Alonso's greater maturity will allow their renewed partnership to thrive in 2015.

"The whole thing [rancour during the 2007 season] took on a momentum, and whatever was happening within the team, it was at a time when the environment was very controversial for

the sport as a whole and great emphasis was placed on things that happened," said Dennis. "We were perhaps the reciprocant of a climate that F1 had at the time; actually what took place was relatively trivial, but heavily amplified – and everyone got pretty bruised."

"Everyone has moved on and certainly I am mellower. I think Fernando is more mature."





It's a fundamental part of the F1 season. It makes me feel very disappointed that it has not been fixed yet into the calendar.



Nico Rosberg on the uncertainty about the future of the German Grand Prix

Haas lands ex-Red Bull man

Former Red Bull and Jaguar chief designer Rob Taylor is to head up the team working on Haas's new Formula 1 car, AUTOSPORT has learned.

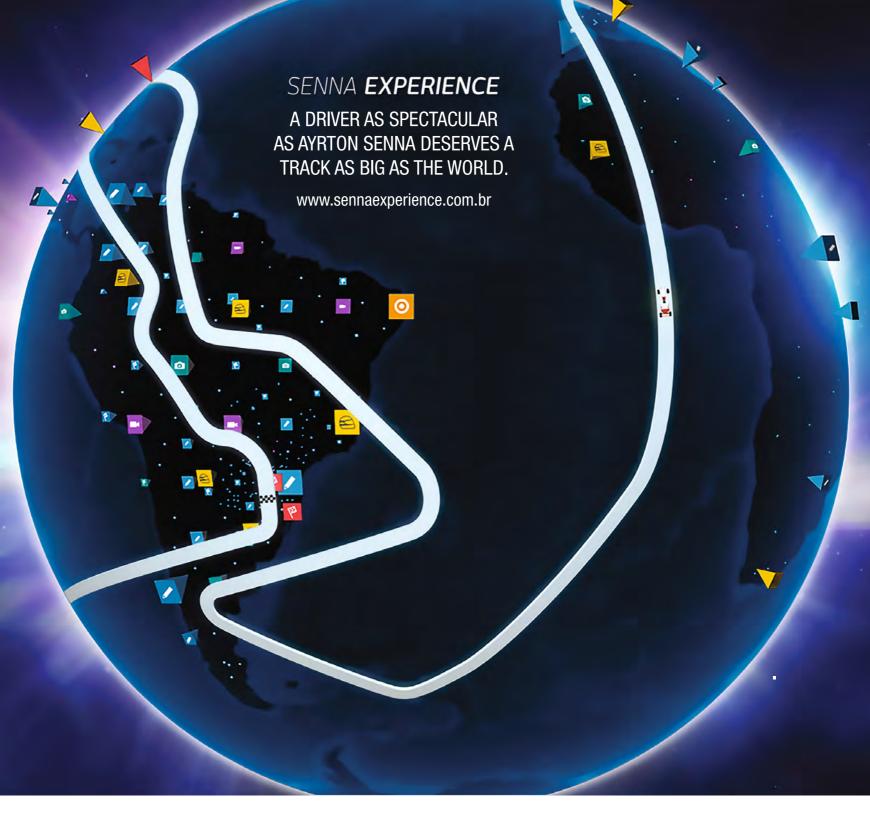
Although Italian constructor Dallara is overseeing the construction of the 2016 F1 challenger, Haas has appointed Taylor as its chief designer to oversee the project for the team, which is scheduled to join the grand prix grid with Ferrari propulsion at the start of the 2016 season.



Minardi's warning on Marussia veto

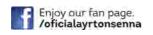
Gian Carlo Minardi, former owner of the eponymously named grand prix team, has hit out at F1's larger teams for refusing Marussia dispensation to race with a 2014 car this season.

The Italian described it as "an absurd and unsportsmanlike behaviour" and warned that F1 needs its backmarkers.



SENNA EXPERIENCE is a special place where you can share your memories, pictures, videos and homages to your idol. You will also be able to check out special official content and discover other tributes from fans from all over the world. Login now and join us and help us build this great tribute.









Jonathan Noble F1's newshound

Purists crave a return to an edgier F1, in which technology is not king. But how can we step back when the science is so good these days?

ack to the Future has been a recurring theme this year. And it's not just because we're closing in rapidly on the October 21 2015 date to which Michael J Fox as Marty McFly and Christopher Lloyd as Doc Brown travel in the film's sequel.

We've had that McLaren-Honda teaser trailer and nostalgia-fest thanks to the renewal of the iconic Anglo-Japanese relationship that thrilled us so much in the 1980s and '90s. And now there's a growing momentum behind a push to make F1 cars as glorious as they were in the past. We already have sparks back, and now the Strategy Group has approved plans to get more challenging cars — with more power, more downforce and wider tyres — by 2017.

While the intentions of these efforts are laudable — F1 needs to respond to falling audience numbers — it's equally important to understand that times have changed. Trying to wind back the clock because things were perceived as being better in the past is not necessarily a guarantee that you'll improve them in years to come.

The push for 1000bhp engines makes sense because it's an iconic number that is easily marketable. And more power can never be a bad thing. But the issue of how to make cars more challenging, faster and more exciting is much more complicated. It's also difficult to achieve because of one of F1's great qualities: that everyone who works there is so, so good at making extraordinary cars.

parameters, optimised torque-delivery curves and the ability to change differential settings for each corner were the stuff of fantasy. And simulators? Forget it — not on the computers they had then.

F1 was attractive back then because it was, in essence, so basic compared to now. The scope to get it wrong was immense, and that's what put more of an onus on the drivers and exaggerated their role in the whole package.

Take a peek at onboard footage now and it's a world away. Semi-automatic gear changes are made on paddles behind the smooth flow of steering wheels, whose fluctuations and efforts are softened by state-of-theart power steering and tonnes of downforce.

Computer simulations before each race weekend have already delivered near-perfect set-ups, and drivers know where they should brake and how fast they should take each corner. So much now goes in to ensuring that no stone is left unturned that success has become sanitised to a certain extent.

F1 teams hate variability and too much randomness. Just remember how drivers were so critical of Pirelli's high-degrading tyres in the past because they failed to deliver the perfectly controlled and predictable platform on which they could ply their trade.

Teams are chasing an impossible dream if they think that more power, more downforce and wider tyres will magically rekindle the great things we saw 20 years ago. How many times over the years have we heard that,

"Every rule change to make F1 cars harder to

drive will result in a push-back from engineers"

Spend any time looking back at old onboard video footage and it's impossible not to be mesmerised by the superhuman efforts required from drivers such as Ayrton Senna, Alain Prost, Nigel Mansell and Nelson Piquet to complete just one lap at speed.

They battled to control the power, the cars were skittish under braking, they fought to stop the back end stepping out in corners, and the steering wheel was a blur of motion as they held on with all their might to prevent their cars flying off track.

Part of the magic of that time comes from the fact that technology and the understanding of car dynamics were nowhere near as advanced as they are now. Power steering hadn't been developed for racing cars, suspension concepts were far more basic so a car was hardly ever fully optimised for every corner. Brakes were much less efficient too. Drivers had to take their hands off the wheel to change gear, and revs had to be carefully balanced.

Highly detailed telemetry data of hundreds of

in F1, you cannot unlearn what you've learned? The knowledge of what is required to produce a fast car can't be eradicated from the designers' and engineers' brains.

The new-found hunger to make a change to F1 cars should not overtake the reality that teams are now so good at spending tens of millions of dollars trying to dial out the characteristics of cars that make them challenging and difficult to drive.

Every rule change to make F1 cars harder to handle will result in a push-back from engineers to negate this. That's why proper research is needed in deciding exactly what F1 has to become in five years' time. We need proper analysis of what fans really want.

Just saying that the cars must be more challenging or more difficult is not enough. We need to define exactly what we want the end result to be, and only then can we work out how to get there.

We cannot pursue a romanticism based on the past. We've got to work back *from* the future, not to it.

This week in motorsport



Britons Nick Tandy and Harry Tincknell have landed LMP1 factory seats for the 2015 season with Porsche and Nissan respectively.

Porsche factory GT driver Tandy has been confirmed to drive the German manufacturer's third 919 Hybrid (above) at the Le Mans 24 Hours and the Spa World Endurance

Championship round.
Tincknell (right,
with new team-mates
Olivier Pla and Tsugio
Matsuda) has been
signed for a full WEC
campaign aboard one of
Nissan's GT-R LM
NISMOs after
impressing in his

first season of sportscars with the Jota LMP2 team in 2014.

Porsche newcomer Earl Bamber will be team-mate to Tandy and Formula 1 ace Nico Hulkenberg, while Pla has been confirmed as a full-season driver with Nissan. Matsuda, last season's Super GT champion, will race for the Japanese marque at Le Mans.

BIRD TO G-DRIVE

Formula E frontrunner Sam Bird (pictured left) has secured his first full sportscar drive with the OAK-run G-Drive squad in the WEC. He will share its lead LMP2 Ligier-Nissan JSP2 with Roman Rusinov and Julien Canal. Recent LMP2 convert Pipo Derani joins the team to drive its second entry with Gustavo Yacaman and Ricardo Gonzalez.



NEW TOYOTA AND AUDI TEST

Toyota and Audi have expressed satisfaction with the respective test programmes of their latest WEC challengers. Toyota came through successful tests at Paul Ricard and Motorland Aragon with its revised TSO4O HYBRID in January, while Audi

ran the latest car to carry R18 e-tron quattro nomenclature for the first time at the Spanish track last week. With Toyota's regular drivers on promotional duty, the team ran Kamui Kobayashi, Jean-Eric Vergne and Mathias Beche.



Safety upgrades for Le Mans

A raft of safety upgrades on schedule to be in place at Le Mans in time for this year's 24 Hours include additional runoff at the entry to the Porsche Curves.

The gravel trap at the right hander at the entry to the Porsche Curves will be

increased in depth by 30 metres. This is part of a long-term plan to increase the run-off throughout the famous section.

The grass verges that line the track from Mulsanne Corner to the Porsche Curves are being asphalted.

Kovalainen in Japanese move

Formula 1 race winner Heikki Kovalainen will make his full-time racing return this season in Japan's Super GT series with a SARD Lexus RC F.

The 33-year-old, who had a three-day test at Suzuka, will join former GP2 racer Kohei Hirate in the car, and hopes that this will be the start of a long tie-up with Lexus parent company Toyota.

"It's something I had in my mind for a while, where I want to be and who I want to be with after my F1 career," Kovalainen told AUTOSPORT.

"The number one criteria was to get involved with a car manufacturer and Toyota was always very interesting."



This is the best lineup we could wish for. Our drivers have racked up 334 DTM races and 31 victories

BMW's Jens Marquardt on the marque's 2015 DTM roster: Marco Wittmann/Maxime Martin (RMG); Augusto Farfus/Tom Blomqvist (RBM); Bruno Spengler/Timo Glock (MTEK); Martin Tomczyk/Antonio Felix da Costa (Schnitzer)

For all the breaking news, visit **WAUTOSPORT.COM**

BRITS JOIN RED BULL

GP3 Series runner-up Dean Stoneman was expected to be announced as a Red Bull Junior this week with a move into the Formula Renault 3.5 Series with DAMS.

Both Stoneman and fellow Briton Callum Ilott – the 16-year-old European KF2 karting champion - were added to the Red Bull Junior website before AUTOSPORT went to press, although no official announcement had been made.

Stoneman (right) will slide straight into the seat occupied by new Toro Rosso Formula 1 recruit Carlos Sainz Jr on his way to last year's FR3.5 title, and will partner Formula Renault Eurocup champion and McLaren junior Nyck de Vries.

Ilott is expected to contest the Formula 3 European Championship – his first season in car racing – with Carlin after a comprehensive test programme with the team. He is currently racing in the Toyota Racing Series in New Zealand.



BTCC in Macau link

British Touring Cars could feature at November's Macau Grand Prix if talks between the Guia circuit and TOCA bosses reach fruition.

Event organisers have sounded out BTCC chief Alan Gow about replacing the WTCC round. The races would not count for points.

In a further boost for the BTCC's global recognition, a CBS television deal was confirmed last week that will deliver its biggest-ever highlights package in North America.







Corsica revives its WRC date

The World Rally Championship returns to Corsica this year for the first time since 2008 after the French governing body of motorsport clinched a deal with the island authorities last week.

France's WRC round was forced to find a new home after the Alsace region, which had hosted the event since 2010, ran out of cash and was unable to fund the event this season. The Tour of Corsica's return to the WRC calendar means the European Rally Championship has drafted the Rally International of Valais back onto its schedule to replace Corsica, which was earmarked as the final ERC round.

The Tour of Corsica will run in Rally of France's original date, October 1-4.

In brief

ABBRING IN SWEDEN

Kevin Abbring's debut with the Hyundai World Rally Championship team has come earlier than expected - the Dutchman and British co-driver Sebastian Marshall will contest this week's Rally Sweden after Dani Sordo was injured in a mountain bike crash last week.

ABBOTT KEEPS FAITH

Hunter Abbott will continue to race a **Rob Austin Racing Audi in the British** Touring Car Championship in 2015. Meanwhile, returning BTCC squad Team HARD has confirmed that Kieran Gallagher will drive its sole Toyota Avensis in 2015.

HARYANTO AT CAMPOS

Indonesian Rio Harvanto has switched to Campos Racing for his fourth season in the GP2 Series. An occasional podium finisher, Haryanto ioins Arthur Pic at the team.

LATIFI WITH ARDEN

Formula 3 racer Nicholas Latifi has joined Arden International for his first full season in Formula Renault 3.5. The Canadian took a podium finish in a handful of late-season FR3.5 runs last season. Meanwhile. Matthieu Vaxiviere remains at the Charouz-run Lotus team for a second season, where he will be joined by Meindert van Buuren.

CHAVES FOR INDYCAR

Indy Lights champion Gabby Chaves has secured an IndyCar graduation. The Colombian will race with Hondapowered Bryan Herta Autosport.

BAR1 BARRED FROM P2

The BAR1 Motorsports car driven by Brits Johnny Mowlem and Martin Plowman has lost its second place in the PC class in the Daytona 24 Hours. The car was excluded because of insufficient driving time racked up by its silver/bronze-rated drivers.

24 IN RACETO24 FOR LM24

GP2 driver Conor Daly and British Formula Ford graduate Sam Brabham are two of the 24 drivers chosen by Team SARD Morand to hid for a Le Mans 24 Hours LMP2 seat in the Raceto24 reality show.

The hopefuls – who are chasing a drive in one of the team's Morgan-Judd/BMW LMPs for Le Mans and subsequent rounds

of the World Endurance Championship – will be whittled down over the course of 12 shows, which will be shown on the internet before moving onto television in the latter stages.

Others chosen include Christopher Haase, Dino Zamparelli, Martin Cao, Esteban Guerrieri. Mitch Gilbert and Melville McKee.

MANOR STILL WORKING ON F1 RETURN

The former Marussia team is still fighting to survive, despite a major blow when its attempt to run the 2014

Car was rejected. By JONATHAN NOBLE

ARRUSHIEL STATES OF THE STATES OF THE

bid by Marussia's former chiefs to resurrect the team as Manor F1 suffered a major blow last week when a proposal to be allowed to run a 2014 car this year was rejected by the sport's Strategy Group.

Although Marussia has been in administration since it collapsed after last year's Russian Grand Prix, team bosses Graeme Lowdon and John Booth have been working behind the scenes to return it to competition. Those efforts had advanced far enough last week for it to be agreed that the team could be taken out of administration on February 19. But just 24 hours after that breakthrough, rivals rejected a change to the rules that would have allowed the renamed Manor team to start the season with a modified 2014 car.

So is this the end of the road for Manor, or can its dream of an F1 return be kept alive?



RESURRECTING THE TEAM

Marussia always had more chance of making it back on to the grid than the defunct Caterham squad because its points-scoring result in Monaco last year meant qualification for up to £30 million-per-year prize money if it returned.

Getting a potential rescue package in place has taken time, though. It was clear from last December that. with not enough time to prepare a new car, dispensation would be needed to temporarily run its old challenger if the finances could be sorted. This would then allow it breathing space to get its proper 2015 contender out on track as soon as possible.

But despite tentative approval from teams last year that such a oneoff dispensation could be possible

"This is a good news story for the sport and we just want to go racing"

GRAEME LOWDON

under the right circumstances, a vote to approve the concept was rejected by F1's top teams when it came to making an official ruling on it.

FORCE INDIA KILLS OFF VOTE

Last week's Strategy Group meeting in Paris agreed to vote on whether or not to give Manor dispensation to run a 2014-spec car. Under the terms of F1 governance, any change to the 2015 rules needs unanimous support at this stage.

Force India was the first team asked to make a call, and its rejection of the bid meant the matter was killed off immediately. In the wake of a furious backlash







from fans, Force India deputy team principal Bob Fernley explained that the lack of a detailed plan from Manor about its viability was the main reason for the application not being approved, although obviously there were also financial benefits for the other teams in not having Manor around should Manor's bid to return fail, the prize money that was due to it will be shared among the remaining teams.

2014 prize money

"Is there an element of financial incentive for making this decision?" Fernley told AUTOSPORT. "Of course there is - I'd be lying if I didn't sav that.

"But we have to focus on the survival of the independent teams that remain. It is helpful for Force India, but the bottom line is if the proposal had been put in place correctly in the first place, the decision could have been different.

"We haven't voted because it benefits us by £4 million. That

wasn't the vote. The vote was, 'Will you allow Marussia to run a 2014 car?' But where was the documentation to support that?"

WHAT NOW FOR MANOR?

Although the lack of approval from the Strategy Group is a short-term blow for Manor, the team is adamant that its efforts to return have not been derailed.

The backlash that the Strategy Group's decision prompted has served to spur it on and Fernley has admitted that Force India would reconsider its stance if a proper proposal was put in front of it.

To get that in place, Manor may need to reveal the identity of its backers and provide more information about its plans. It has been widely reported the former Sainsbury's chief executive Justin King is among the backers.

There is an F1 Commission meeting on February 18, which is realistically the last chance Manor would have of getting rival teams to approve the rule change before the start of the season.

Meanwhile, it is pushing on with efforts to prepare both a modified 2014 car and its '15 challenger. AUTOSPORT understands it has also paid its entry fee for this year's world championship.

Even if Manor does not make the start of the season, it will theoretically still be eligible for prize money if it returns to action in time for round four of the championship: the Bahrain Grand Prix on April 19. That is because teams can miss three races each year without financial consequences.

Lowdon said last week: "We are doing everything possible to adhere to the process set out for us to return to the grid. This is a fantastic good news story for the whole sport and we just want to go racing."

Sadly, though, as the Strategy Group showed, its fate does not rest solely in its own hands.

TIMELINE

COLLAPSE AND COMEBACK



OCT 12 2014

Marussia starts its final grand prix of 2014 with a one-car entry for Max Chilton at the Russian GP, a week after Jules Bianchi's horrific accident in the Japanese GP.

OCT 27 2014 Marussia

goes into administration on eve of US Grand Prix

NOV 7 2014

Efforts to save team appear to have failed as factory is shut and 200 staff are made redundant. Marussia chiefs still work on rescue plan.

DFC 17 2014

Marussia requests that Strategy Group approves idea of allowing it to run a modified 2014 car for part of the season if it can raise money to continue.

JAN 5 2015

Marussia informed that Strategy Group would likely support move to allow it to race a 2014 car modified to comply with all the regulations except new rules regarding nose, crash structures and intensified

JAN 19 2015

An online auction of Marussia's remaining assets is called off at last minute because of encouraging progress in finding investor.

FEB 4 2015

crash tests.

Marussia's administrator FRP Advisory states that team will enter a Company Voluntary Agreement on February 19 to bring it out of administration.



FEB 5 2015

Force India's Bob Fernley is first to reject Manor plan to use 2014 car.

FFB 6 2015

Manor F1 issues statement saying push is still on to return to grid.

F1 JEREZ TEST SPECIAL

ercedes had no need to set fast times last week at Jerez. Throughout the four-day test, every public utterance, be it by driver or technical personnel, stressed that the focus was on mileage and nothing else. But even taking that claim at face value, the test was a phenomenal success for Mercedes.

Not only did Nico Rosberg complete 157 laps straight out of the box on the opening day, surely the most significant distance set by any new grand prix car on its first serious day of running, but over the four days of running the silver machine racked up 35 per cent more mileage than Sauber, the second most prolific team. So what if the headline laptime was 1.141s slower than the quickest of the test posted by Ferrari's Kimi Raikkonen on day four? That didn't matter.

"I haven't been looking, I've just been focusing on doing my own thing," said world champion Lewis Hamilton at the end of the test when asked about Ferrari's speed. "I'm sure they're on different fuel loads to others and they look like they're doing short runs, which we are not."

Nonetheless, team-mate Nico Rosberg described the pace of the Ferrari as "an eye-opener". Even if the Scuderia may not be able to match the Mercedes for raw pace when both are in qualifying trim, the gap has clearly been closed.

So what did the times tell us? Well, Raikkonen's fastest time was set on a four-lap run on Wednesday afternoon using soft-compound Pirellis. He is also understood to have been on a lower fuel level than he was during his running in the first half of that day. The quickest Mercedes time was set by Rosberg on day three, using the slower mediums, on lap three of a 12-lap run. No doubt, a Mercedes could have topped the test should the team have wanted to do so.

But since Sebastian Vettel's fastest time, just over a tenth slower than Raikkonen's, was also on the medium tyre, there are clear indications that we haven't seen the best of either car yet. Mercedes is surely ahead, but the interesting question is: by how much?



P16 IS FERRARI'S TESTING PACE FOR REAL?





Is Ferrari's pace real?

Ferrari topped the times at the opening Jerez test courtesy of Kimi Raikkonen's final-day effort.

BEN ANDERSON asks whether or not the Scuderia has really taken a step forward with the SF15-T

eadline laptimes are largely irrelevant this early in pre-season, so the fact Ferrari power (either in the back of the works cars or the customer Sauber team) set the pace on all four days at Jerez raises more questions than it answers. Is this yet another false dawn for F1's oldest team, or a sign of genuine progress after a disastrous 2014?

McLaren-Honda struggled to get out of the garage (and was way off the pace when it did), Renault's 'stupid part' hobbled the camouflaged Red Bull RB11, and Mercedes was more interested in making the Wo6 run race distances than set quick laptimes, so it was difficult to escape the feeling that Ferrari was on top almost by default.

But for all the talk of how overnight miracles don't happen in F1 there was a genuine feeling inside the paddock that Ferrari has made significant steps over the winter.

Nico Rosberg is a perceptive kind of guy, and

he was certainly impressed with what he saw — declaring Ferrari an "eye-opener" with its performance at Jerez. This is interesting when you consider teams usually play down how much attention they pay their rivals during testing.

Most of the blame for the Scuderia's poor 2014 campaign was laid at the door of its engine department, so that has undoubtedly been the main focus for Ferrari's engineering team over the winter. Last year the Ferrari engine was weak in terms of its energy recovery, and also delivered its power in a fairly uncompromising way. It was fairly common to see Kimi Raikkonen and Fernando Alonso drifting out of slow corners on opposite lock as they tried to tame the beast.

The SF15-T already looks much more malleable in this regard. The team confirmed traction and throttle response has improved, and the Scuderia was certainly delighted to complete four days of testing without any major technical problems, having taken more risks designing its first F1 car under the technical direction of James Allison.

Telemetry and radio faults, plus a couple of sensor failures, were the only things that delayed Ferrari's programme at Jerez.

The drivers were certainly happy with their lot. Raikkonen, who was trounced by McLaren-bound Alonso last year and complained regularly about the front-end feeling of the F14-T, claimed its successor was a "completely different story".

"I think the whole package is better overall: the engine, the car itself; I think everything has improved," the 2007 world champion explains. "Obviously we still have a lot of work to do, but this is a good starting point."

After setting the 1m20.984s laptime (on medium tyres) that opened Rosberg's eyes on day two, new boy Sebastian Vettel returned to the Ferrari garage to a round of applause from his team. The four-time world champion played down the significance of his chart-topping performance, but he clearly felt the SF15-T gave him cause for optimism that was so lacking during his final season at Red Bull.







"I think the whole package is better: the engine, the car itself. Everything has improved" Kimi Raikkonen

"We have to remember where we are coming from," he says. "There is a lot of change going on and it's still very early to tell [where we are]. Even without running here Mercedes are still favourites. In that regard it's difficult.

But speaking of our team we are quite happy. I think we definitely have a good platform to start working from."

So far, so cautious. Which brings us to the apparent 'glory runs' that brought Sauber up into unfamiliar territory on the timing screens. Felipe Nasr topped day three overall in the C34, but he ran the soft Pirelli tyre in doing so (Ferrari and Mercedes used the medium), and he reckoned the Mercedes runners were "hiding" their true pace. Team-mate Marcus Ericsson lapped half a second slower on the final day on the same compound of tyre, which again flattered the C₃₄ relative to Mercedes.

But Sauber has not been shy about laying the blame for much of its struggle last season at Ferrari's door, and sources inside the team say



they are genuinely surprised by how much better this year's Ferrari engine is compared with 2014's lame duck.

This was only the first test and the cars and engines will change drastically as developments are introduced before the opening race in Australia. As the competitive picture becomes clearer, Ferrari and Sauber may well slip back.

Lewis Hamilton and Nico Rosberg completed more laps than anyone else each day they drove at Jerez, and Ferrari realistically expects Mercedes' overall chassis and engine package to be quicker than its own. That said, updates are scheduled for the next test in Barcelona, and after a largely trouble-free first test of the SF15-T, sources inside the team say there is "less concern about the place" than there was during 2014.

Ferrari's improvement is certainly real. But given none of the three teams that beat it last year - Williams, Red Bull and Mercedes - showed their true pace, it would be optimistic to believe that it was as fast as the timesheets suggested.

How do you feel this test went for Sauber? We've had a really good test. It's been very positive that every day we've done a lot of laps and we've had no real issues with the car. And it was interesting for me driving on day one and day four to see the progress we've already started to make.



What are the differences to last year's car, which you drove in Abu Dhabi?

It's difficult to say. I'm coming from a Caterham and for sure this is quite a big step up. But also compared to the car I tested in Abu Dhabi, we have improved. It's a better car this year. It's more stable in general, and under braking and through the corners it gives the driver more confidence. Also I think Ferrari have made a good step on the power unit compared to the one I drove in Abu Dhabi.

What's better about the engine?

It's different to go to a cold Jerez from a hot Abu Dhabi, which is the only place I drove this engine last year. All I can say is it feels good. Throttle pick-up and everything feels like it should do, and that's really positive.

How close to flat-out was Sauber here?

We have quite a bit of margin, to be honest, so that's also positive. We've been focusing on our programme and we've tried a lot of different tyres. All in all we are very happy with these four days and we have something to build on for the rest of the pre-season.

TRACKSIDE VICENTIAL SERVICES OF THE PROPERTY O

Want to know how the class of 2015 has looked on track

so far? EDD STRAW was at

Jerez and is your guide

udging car performance during pre-season testing, particularly so early on, is fraught with danger. The cars that ran at Jerez were a long way from the specification they will compete in come the first race of the season in Melbourne in a month's time. Then there are the variables of fuel

load, programme, conditions and tyre choice. It is with those many caveats in mind that this analysis of the eight new machines is presented.

But despite the limitations, there are certain trends and characteristics that can be seen from watching the cars on track. There you can see some early signs of the balance and limitations of the machinery.



The most glowing tribute you can pay to the Mercedes W06 is that it looked similar to its predecessor on track. Both drivers mentioned that it felt very similar from the cockpit, and trackside observations bore this out.

Watching at the chicane on day four, what stood out was that Lewis Hamilton was able to drive the car more aggressively than anyone in the other seven cars. Committed under braking, Hamilton showed the W06 turned in superbly, but what really caught the eye was the way he could feed in the power very positively.

As the mileage suggests, the Mercedes is a well-sorted car from the off and very much a natural step from 2014. Its performance will become clear next week at Barcelona.



Hindered by having to run with a detuned engine specification, which gave the car a feeble buzz rather than the satisfyingly throaty noises made by the Mercedes and Ferrari power units, the Red Bull nonetheless looked promising. It seemed possible to match the commitment of the Mercedes on the entry to corners, although the drivers had to be more hesitant on the throttle. Let's see how it looks at Barcelona when Renault's power unit should be on song.



Both drivers were delighted with their first two days behind the wheel of the FW37. And there were signs on track that they had good reason. As with its predecessor, the turn-in was excellent, and the car looked very consistent under braking. There were some question marks over power delivery, but the drivers weren't too concerned about

that when asked, given that there will be changes in the way that the engine will be run come Barcelona.

But were there signs that the Williams had made enough of a step to challenge Mercedes? Not at this stage, for while the car looked nimble it wasn't transformed. But no attempt has yet been made to set an impressive laptime.



Ferrari

Forget the timesheets, what is really encouraging for Ferrari is that its new car looks the part on track. Whereas last year's car always looked like it required tremendous force of will to get it to do anything - witness Fernando Alonso working the car hard on corner entry and Kimi Raikkonen having to bring his rallying skills to the party to get the car to respond - this actually looked like a car that the driver could work with.

The timing screens suggest Ferrari is the market leader. It isn't, but what we can be fairly confident is that, based on the specifications run at Jerez, the team has taken a step forward. That probably won't be enough to become a Mercedesbeater overnight, but it looked far more convincing.

McLaren

There's little point in attempting to conclude anything from watching the McLaren, beyond the fact that the chassis was not taken to anything approaching its limit of performance. The Honda engine, when on-throttle, is pleasant to the ear. Off-throttle, less so.





The Lotus was the least convincing car on turn-in at Jerez. The vagueness of the front end, at least on the occasions when it passed under AUTOSPORT's nose on track, suggested cause for concern.

But this could very easily be down to the switch to Mercedes engines. demanding the team adapt its brake-by-wire system. This could have a negative effect on the braking and turn-in phase at this stage.



In the slow corners, the rear of the Toro Rosso looked like it was on castors. That could well be more to do with the power unit than with the availability of mechanical grip and downforce of what looks to be a neat and tidy car. It could also be a consequence of tyre age, although the car looked much better on turn-in.

Like sister team Red Bull. Toro Rosso was lumbered with a detuned power unit. But considering the limitations, there is reason to be positive given the laptimes set.



The Swiss machine already looks better than its predecessor. The turn-in is positive, although there were signs of the rear end giving up at times. Potentially, this could be a symptom of a deficit of rear grip and downforce. But while the car did look lairy on occasions, it seems the team has been able to build on the progress made in the closing stages of last year.

Honda's Jerez Wake-up call

McLaren managed only 79 laps during four days of testing in Spain – its first with Honda power.

JONATHAN NOBLE explains what went wrong and wonders if the team's confidence is misguided

ou'd be forgiven for saying that Honda's return to Formula 1 action with McLaren hasn't quite gone to plan so far. In Abu Dhabi last November, a hybrid development car managed a total of five laps over two days as it was hit with a spate of recurring electrical issues. At Jerez last week, there was fresh frustration as Fernando Alonso and Jenson Button managed six laps each on the first two days to prompt talk of a crisis. Although 67 laps were added over the second half of the test, the laptimes were still well adrift. Button's best effort from the test was almost seven seconds slower than Kimi Raikkonen's timesheet-topper for Ferrari.

But while the headline figures of mileage, laptime and missed opportunities should have been enough to set alarm bells ringing in Woking and Milton Keynes (where Honda's UK operations are now based), inside the team the feeling remained as assured as it had been since the start of the test. Yes, there were frustrations that more had not been done at Jerez, but there remained a steadfast belief that the shaky start to 2015 was not the precursor to a year of trouble.

"Already we found out what happened this week and we can fix it for Barcelona [the next test]," said Honda motorsport chief Yasuhisa Arai. "Our team, McLaren-Honda, has very high confidence about the new package."

Is such confidence justified, or is it delusional given the circumstances? Looking at the laptimes

from the test, you could argue that there's a certain denial about the scale of improvements that Honda needs to make over the next few weeks. After all, if the Jerez performance had been replicated on a grand prix weekend then, under the 107 per cent rule, McLaren would not have qualified.

But if you look in detail at what happened at Jerez, you quickly realise that its troubles were not down to a bad design, but to 'finger trouble'. The sensor issues on the first day that prevented running were related to a plug being fitted the wrong way around. A water leak on day two was caused by a part supplied by a third party. An oil-level issue on day four boiled down to a bit of operational inexperience.

"It's just us all working together as a team for







the first time," pointed out engineering director Matt Morris. "There are things that you take for granted when you've been with an engine supplier for many years [McLaren's previous relationship with Mercedes lasted 20 years]. "You sort of drop the ball a little bit sometimes, getting oil levels wrong and all these sorts of things. We've had a few issues like that. We've had some minor electrical issues, again which have resulted in a lot of downtime but have been relatively easy to fix. So it's good in a way that they're easy to fix, but frustrating in the other way that they hold the car up for so long."

It's not a bad design; just a design that's in its infancy. The path to success still remains an arduous one though. McLaren and Honda are chasing manufacturers that have a whole year's

The new car spent much of the time being pushed back into the garage

"It's good in a way that the issues have been easy to fix but frustrating in an other that they hold the car up for so long" matt morris

more experience with the current-spec power units, so doing what Renault did last year - from testing woes to podium finisher immediately - will be much harder.

One theme that came up time and again from speaking to McLaren and Honda personnel at Jerez was that of this project being a sleeping giant. Everything is in place for the success to be delivered; it just needs time to wake up. There has been massive investment in the development of Honda's huge new £260 million Sakura R&D facility, and the determination to get the preparation right has perhaps meant that actual development work in the initial design stages has not been as fast as may have been anticipated.

McLaren boss Ron Dennis also spoke of a new culture pervading itself at Honda – the days of its road-car engineers being parachuted in for a tour of F1 duty to sharpen them up before being recalled are gone.

"The philosophy of Honda has always been to train young engineers and maintain the spirit that Mr Honda had that racing is good for breeding young engineers," Dennis said. "That isn't the philosophy of this programme.

"The philosophy is based on every time that Honda has come in and out of F1, they've seen a negative impact of coming out of F1. So their philosophy is, 'We are in F1 forever, and because we now learn that F1 is good for our brand, that means people will be stable in the programme. So we're going to move and concentrate some of our best technical people and really focus on F1 in a way we've never focused on it before."

It's that very focus that is now needed over the next few weeks as Honda reacts to the wake-up call of Jerez. The next two Barcelona tests must go better: there is no other option.



ENCOURAGING SIGNS FOR THE MP4-30

McLaren has already labelled its new MP4-30 a 'size-zero' Formula 1 car, such is the aggressively tight packaging around the rear.

And although the limited running - and limited speed - at Jerez offered little in the way of evidence of its competitiveness, the team was optimistic about some early signs.

There was no evidence of any burning or overheating issues caused by the extreme bodywork solutions, and on-track data was correlating exactly with the earlier windtunnel and CFD simulations.

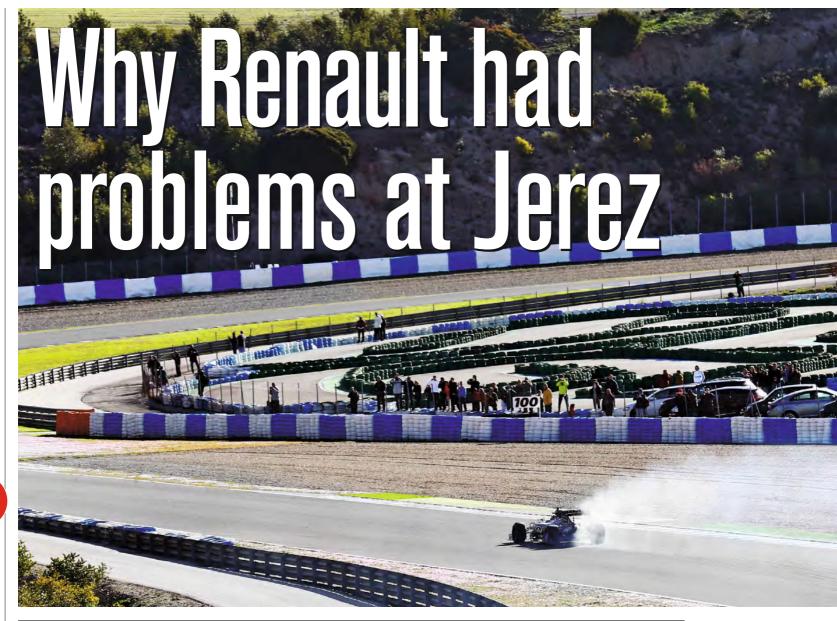
"I think we've done a good job," said engineering director Matt Morris.

"The engine is running at the temperature we expect from that cooling package - that's been a big tick in the box really. It proves that all of the hard work we've done on the tight packaging has paid off and we don't have any issues. So that's a good positive to take away."

Fernando Alonso and Jenson Button both reported that the car appeared fairly stable, which bodes well for the overall concept. Of course, until the car is up to full speed, there won't be a definitive answer, but there's certainly no alarm yet.

"We've got great simulation tools these days and we know where we are in terms of our performance," added Morris.

"If we look at that and add on where we should be, I'm not worried really."



Red Bull's camouflage livery was a popular oddity of the first pre-season test, but it couldn't disguise engine supplier Renault's troubles. JONATHAN NOBLE examines whether the French manufacturer can really close the gap to Mercedes

t was Daniel Ricciardo's comedic hesitation when offered the opportunity to praise the progress of Renault that offered us the first clue that all may not have been quite as positive as hoped at last week's Jerez test.

After the Red Bull-Renault crisis of 12 months ago, the new package delivered no repeat of its predecessor's early nightmare in testing. Indeed, early talk surrounding the RB11 had been overwhelmingly positive thanks to its stunning camouflage livery.

But, after his first day of running with it, Ricciardo's response about the new V6 turbo was intriguing to say the least.

"Err. Yeah," he said, when asked whether the it was an improvement. "To be honest yes... we've, err... Yes. I won't go into too much detail."

As the Jerez test continued, it was clear that all was not perfect, despite the positive talk in recent weeks about major progress. Red Bull and Toro Rosso both encountered reliability troubles, and there was no sign of the kind performance step that rival Ferrari appears to have made.

The reason became clear later on in the week, when Renault chiefs confessed to reliability concerns having emerged at its Viry-Chatillon base in the days before the Jerez test. With no time to change the design of parts to make them stronger, the only choice was to wind back performance a little and limit stint lengths to minimise the risk of trouble.



Renault F1 managing director Cyril Abiteboul made clear that the situation was especially frustrating because the main part at fault was such an insignificant one.

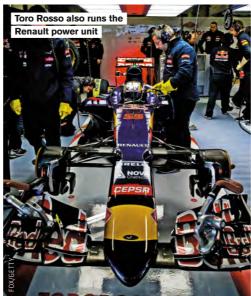
"We were coming here with some risk associated to the engine that we knew," said Abiteboul. "And so far, some of that risk has materialised. There is one particular issue on something that is even cheaper than your [voice recorder] there! It's crazy that such a cheap part is causing so many issues for a car as expensive as a Renault/Red Bull package.

"It's something that's not critical to performance but can be critical to reliability, so we know what we have to do."

The impact of this troublesome part — linked to a metallic shaft that's related to the ERS water pump — was that long runs had to be limited, so that regular observations could be made to ensure things didn't become critical and lead to an engine failure. "It's something that was working very well last year," said Abiteboul, "But we decided to change and improve it a bit further







"It's crazy that such a cheap part is causing issues for a car as expensive as a Renault/ Red Bull" CYRIL ABITEBOUL

with the overall packaging of the engine to also support Red Bull in their attempt also to have very good packaging. That's why we didn't really care for that part.

"Usually you have very specific simulations, designs tests, and validation protocol. But honestly we did not do it for this part because it's such a stupid part..."

Stupid part or not, it affected the Jerez test. But it's simple to implement a fix for the next test in Barcelona. And it's only when the fix is in place that we'll get a proper indication of whether or not Renault has closed the gap to Mercedes.

Red Bull technical talisman Adrian Newey had talked on the opening day of Renault having a 10

per cent power deficit, a gap he thinks is impossible to breach in the space of a winter. Abiteboul was sceptical that the gap was as much as 80bhp, but agreed that it's too early to consider being a match for Mercedes yet. It will take two years to catch up.

"First and foremost we want to get reliability out of the way because the time and money you spend on fixing reliability is time and money you're not spending on performance," he said. "So this is really the top priority. We know that we have intrinsically in our new engine a good step from the end of last season.

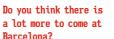
"And we think that this is the type of step that can definitely put us closer to Mercedes, the best-in-class power unit. Honestly, I don't know what they will have done, but I'm pretty sure that we will be closer.

"How much closer? How far behind? I don't really know. I like to think that we are taking an approach of dividing in half the gap we had. It's a bit of a theoretical approach, but there's a bit of data and evidence to suggest it's quite possible. I like to think that in the law of diminishing returns, it has been harder for them [Mercedes] to find performance compared to us. We'll see."

All eyes are now on Barcelona to see if Renault has genuinely made amends for its shaky start to the V6 turbo era, or if Ricciardo is going to have to keep it tight-lipped again. M

How do you assess Red

Bull's Jerez test? It has been very productive overall for us. Every lap counts, every lap is important. At Barcelona we know where we want to be, where we need to be. and we will keep progressing.



Absolutely. For me, every lap is something new. We are a new team; we are getting used to each other as well, and finding the right approach for each other as well. Things are coming together and this is a very important stage for us.

Renault had some restrictions in place on its running here. Do you expect progress at the next test?

The problems are always problems, and you just have to sort them out. It's not something I can fix personally. Everyone is supporting each other. I personally trust in Renault, I trust in Red Bull Racing and we will hopefully make good use of it.

On the strength of your first experience, what do you make of the Renault engine this year?

It's too early to make any conclusions. In these days there will be a lot of analysis going on and we will see. We'll always try to make improvements of course – it's not easy to cut the deficit to zero in one clap of the hands. So we just have to keep working hard. Only hard work, step by step, and patience will bring us what we desire.

With eight new cars to study, CRAIG SCARBOROUGH

picks out five of the most interesting technical

developments on show during the test

The crop of noses on display at Jerez were surprisingly different to each other considering the even more restrictive dimensions governing the frontal crash structure. These new regulations demand not only the 9000mm² cross section 50mm behind the tip of the nose from last year, but a further cross-sectional demand of 20,000mm² located a further 100mm behind. This was added to prevent teams from having long, slender nose extensions of the type seen last year.

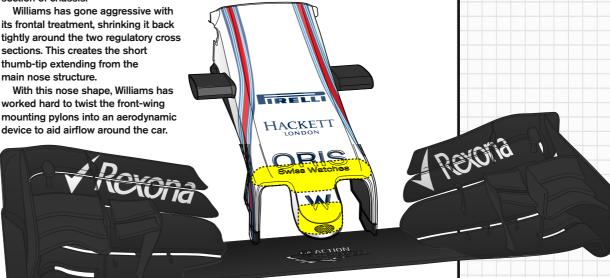
Furthermore, the nose itself is subject to a more severe crash test, where the front 150mm must meet a deceleration target, forcing the teams to make the nose tip more substantial.

Most teams have opted for a short nose. While this makes it more difficult to pass the crash test, it does remove the aero effect of the nose tip from over

the front wing and theoretically allows more air to pass under the raised section of chassis.

Williams has gone aggressive with its frontal treatment, shrinking it back tightly around the two regulatory cross sections. This creates the short thumb-tip extending from the main nose structure.

With this nose shape, Williams has worked hard to twist the front-wing mounting pylons into an aerodynamic



BLOWN AXLES

The aerodynamic efficiency of any single-seater will be handicapped by its open wheels. These add substantially to the car's drag and their turbulent wake can be sucked between the rear wheels, ruining the diffuser performance.

One method to offset this is to use the front wing to create a powerful airflow around the front tyre. This outwash prevents the tyre's wake tucking back in around the car's rear end. Last year, the front wing was narrowed and teams lost some of this outwash effect, so this year the aerodynamicists have reintroduced an old idea, to blow airflow through the hollow front axle in order to create an outwash effect.

Larger front-brake-duct scoops capture air and pass it directly through the axle and out via the open end within the wheelnut. This airflow has no purpose to cool the axle or the brakes: its function is purely aerodynamic. As this air is forced out of the axle it pushes the tyre's wake outboard. In effect these are similar to the 'frisbee' wheel fairings we saw back in 2008-09.

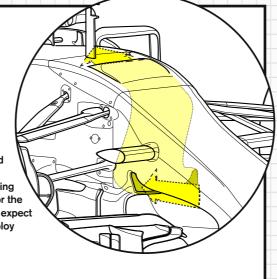
One problem with this set-up is there's no pointed end to the axle, making pitstops slower since the wheelgun has to be positioned more accurately. We can expect some different wheelgun/socket designs from McLaren, Red Bull and Ferrari, who are running this solution.

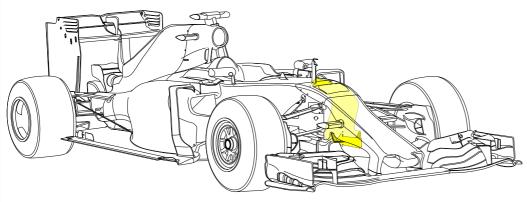
S-DUCT NOSE

With the larger nosecones, airflow over and under the raised section of chassis is even more important this year. Red Bull has retained an idea it took from Sauber, with its ducted nose cone.

A U-shaped inlet duct under the nose captures airflow and routes via an S-shape cut to vent the air over the upper part of the chassis. This cleans up the airflow both under and over the nose, while making the nosecone crosssection slimmer too.

Toro Rosso introduced a similar solution last year, and several teams are believed to be changing their nose designs for the start of the season. I expect other teams will employ this set-up this year.





COOLING SOLUTIONS

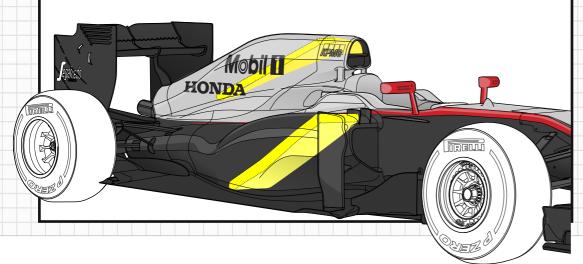
The introduction of the turbocharged hybrid power units last year brought with it an increase in the heat generated by F1 engines. Requiring coolers for the turbo, as well as the energy recovery system, the teams had to compromise aerodynamics, fitting larger coolers necessarily made for bulkier sidepods. This costs aerodynamic efficiency because of the drag created by bigger radiators and sidepods,

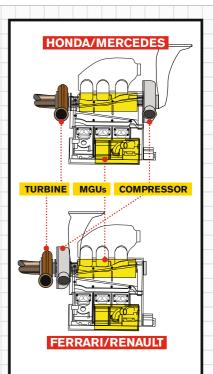
and the obstruction to the airflow also reduces downforce.

So engine manufacturers, along with their lubricant partners, have worked to run the engines hotter to reduce the cooling demand, while the chassis and aero teams have refined the packaging of the sidepods. Some teams have changed the placement of the coolers away from the sidepod and feed them from inlets around the rollhoop.

One team doing something different is McLaren, with its bespoke Honda. Whereas the right sidepod is full of the turbo intercooler and the left sidepod holds the engine's oil and water coolers, its ERS is cooled by a radiator mounted over the engine and fed by the rollhoop inlet.

Thanks to 'size-zero' sidepods and rear-end packaging, potential losses are offset by improved diffuser performance.





ENGINE Packaging

Last year, each of the three manufacturers chose to package their new power units in different ways, with Mercedes uniquely splitting its turbo between the front and rear of the engine, then placing the MGU-H on the same shaft linking the two parts of the turbo. This allowed Mercedes to run a far larger compressor, yielding more power, while keeping the heat of the exhausts away from the compressor and minimising the pipework to and from the intercooler.

Both Ferrari and Renault mounted their turbos more conventionally behind the engine, with Ferrari splitting the turbo with the MGU-H. These layouts are simpler to engineer, without the long shaft linking the turbo housings. But it comes at the cost of a smaller compressor size.

There was much speculation over the winter that the other manufacturers would follow Mercedes. But only Honda has opted for the split turbo path.

Despite this, both Ferrari and Renault have repackaged their turbo installation. Ferrari has dropped its old design for a more closely coupled turbo set-up, with the MGU-H mounted in the 'v' of the engine just as Renault had done, albeit with a much larger compressor to regain the power missing from its 2014 unit.



illiams was arguably the lowest-profile team running at Jerez. As Ferrari and Sauber hogged the top of the timesheets and Mercedes racked up the miles, with the Renault teams managing problems and McLaren-Honda struggling to get the car on track for long, Williams simply did its own thing, failing to catch the attention — positive or negative.

The fastest laptime registered by the Williams-Mercedes FW37 was 1.435s off the pace set by Kimi Raikkonen's Ferrari. And that laptime was set on soft-compound Pirellis, so you might assume that concern should be the order of the



day rather than the quiet confidence exuded by chief technical officer Pat Symonds and drivers Felipe Massa and Valtteri Bottas. So what do they know that we don't?

"I hope so," said Symonds when asked whether he believes Williams can go one step further than it did in 2014 and win a grand prix. "But competitiveness is a relative thing. We have certainly taken steps that I hope will move us forward, but I don't yet know what our competitors have done.

"I hope that at least we start where we finished, as our development rate last year was one of the things I was particularly proud of. We did add a lot of performance to the car relative to our competitors and we are applying all the same philosophies to doing that. So, yes, we want to get in there and be fighting."

The positives were clear. Both Bottas and Massa were delighted with their initial taste of driving the car. While the 2014 car wasn't the mightiest in terms of downforce, it was competitive, although its strong front end on turn-in wasn't always accompanied by a rear that matched it. Massa reckoned that the car had improved in this area.

"In some points, we have improved," said the Brazilian at Jerez. "I feel the car is more stable than last year, a bit easier to drive. That's positive. The engine, we are still not running what we are supposed to, so this is not the main point. [The rear end] is where I feel better than how we finished the season and that's the most important

"The car is more stable than last year, a bit easier to drive. I feel better than how we finished 2014. That is important" FELIPE MASSA

thing I felt, not just me but also Valtteri. The first point is to have an easier car and a better car."

With Symonds insisting that this year's car has been designed around similar drag targets to last year's slippery FW36, that's encouraging. The Williams was equal-fastest in the speed trap, tied with the works Mercedes and, while that's less than we've come to expect, considering Williams focused on running on what are believed to be higher fuel loads it shouldn't be a surprise. While the team privately doesn't believe the FW37 is as fast as the Mercedes, taking into account its programme and fuel load, the suspicion is it's no slower than the Ferrari, and perhaps ahead.

While the car is very much an evolution of its





PAT SYMONDS ON THE FW37

An awful lot of work had to go into the nose. The regulations first appear quite innocuous but actually there's a lot of work there. It's the balance of getting a good aerodynamic solution and one that gets through a crash test as well.

Our feeling was that aerodynamically we were running quite a short nose, but of course for an easy passage through the crash testing, a long nose makes life a lot easier so there was a fair bit of balancing there. I'm very pleased with the solution we've got: it was a good one, it wasn't easy to get

through the crash test but I think we have one of the shorter noses out there, which shows the quality of the design.

On top of that we have tried to tidy up the rear end of the car with rear suspension, gearbox layout etc. Then add all of the little bits and pieces that you put on the list of things to do a bit better the following year.

It's not a revolutionary car by any means. We have done the major changes we had to at the front and we have done a fair tidy-up of the rear.

predecessor, there are some key areas where improvements have been made. Changes to the front and rear suspension (described as a change in philosophy) aim to improve mechanical grip. That, harnessed to the change in rear-tyre construction aimed at increasing the size of the contact patch, on top of the rear downforce gains, should all tackle weaknesses of last year's car.

The nose design has also drawn admiring glances thanks to its short length. It all adds up to a package that several key figures in rival teams suspect has the potential to win races.

Most promisingly for Williams, the team is also far better-equipped than it was at this time last year. Changes made under the auspices of Symonds, as well as performance chief Rob Smedley, who did not join the team until the third race of the season, have made Williams a far more effective outfit than it was 12 months ago. Too many points were squandered early last year, but as the campaign progressed the team became far more effective at achieving the results the car performance promised.

"It is a different team, much more prepared, much more experienced," said Massa. "It's in much better shape compared to how we started last year. We had a good car, the development was great but I think the team is a lot more prepared."

Thanks to finishing third in the constructors' championship, Williams also has an increase in

budget, as well as the addition of some extra staff. Symonds admitted that "Williams hasn't grown massively, but we have taken on a few new people during the course of the year" and, while the team is still not of the same size as F1's powerhouses, there's enough to continue to achieve results.

One area where the team is still awaiting progress is on the fuel and lubricants side. Last year a deal was struck with Brazilian company Petrobras and work is ongoing on producing its fuel. In the meantime Williams continues to use the Petronas products developed for Mercedes.

"We are supposed to be using Petrobras fuel when it's ready to be used," said Symonds. "That's not quite yet, but we are still developing." "W







EUROPEAN FORMULA 1 AND LE MANS TRAVEL PACKAGES

No Overnight Travel - Client Focused Friendly Travel

Multiple on Route Pickup Points - Le Mans 24hr Specialists

Luxury VIP Mini Coach - Competitively Priced Holiday Packages

Grand Prix Breakaways is a family run business with comprehensive knowledge and personal experience of the European Grand Prix circuits. Our VIP Executive coaches are equipped with "Captain Style" reclining leather seats situated around tables and fitted with: seat belts for your safety, air-conditioning for your comfort and media entertainment for your enjoyment whilst travelling.

www.grandprixbreakaways.co.uk

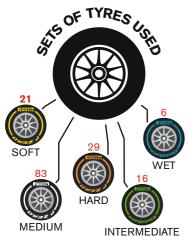
enquiries@grandprixbreakaways.co.uk +44 (0) 114 287 5201



TESTING DATA

JEREZ February 1-4 2015





DRIVERS

RED FLAGS

30,621

WORDS IN AUTOSPORT.COM'S LIVE COVERAGE

WAUTOSPORT.COM

FEWEST LAPS COMPLETED 38

2311

TOTAL LAPS COVERED



MILES COVERED (CAR)



POS	DRIVER	CAR	SUNDAY	MONDAY	TUESDAY	WEDNESDAY
1	Kimi Raikkonen	Ferrari SF15-T	-	-	1m21.750s (s)	1m20.841s (s)
2	Sebastian Vettel	Ferrari SF15-T	1m22.620s (m)	1m20.984s (m)	-	-
3	Felipe Nasr	Sauber-Ferrari C34	-	1m21.867s (s)	1m21.545s (s)	-
4	Nico Rosberg	Mercedes F1 W06	1m23.106s (m)	-	1m21.982s (m)	-
5	Marcus Ericsson	Sauber-Ferrari C34	1m22.777s (s)	-	-	1m22.019s (s)
6	Lewis Hamilton	Mercedes F1 W06	-	1m22.490s (wh)	-	1m22.172s (m)
7	Felipe Massa	Williams-Mercedes FW37	-	-	1m22.276s (s)	1m23.116s (m)
8	Valtteri Bottas	Williams-Mercedes FW37	1m23.906s (wh)	1m22.319s (s)	-	-
9	Max Verstappen	Toro Rosso-Renault STR10	-	1m24.167s (m)	-	1m22.553s (s)
10	Pastor Maldonado	Lotus-Mercedes E23	-	1m25.802s (m)	1m22.713s (s)	-
11	Carlos Sainz Jr	Toro Rosso-Renault STR10	1m25.327s (wh)	-	1m23.187s (s)	-
12	Daniel Ricciardo	Red Bull-Renault RB11	1m23.338s (m)	-	1m23.901s (m)	-
13	Romain Grosjean	Lotus-Mercedes E23	-	-	-	1m23.802s (m)
14	Daniil Kvyat	Red Bull-Renault RB11	-	no time	-	1m23.975s (m)
15	Jenson Button	McLaren-Honda MP4-30	-	1m54.655s (wh)	-	1m27.660s (m)
16	Fernando Alonso	McLaren-Honda MP4-30	1m40.738s (wh)	-	1m35.553s (i)	-

SPEED TRAP FIGURES

POS	TEAM	SPEED	
1	Williams	191.1mph	
=	Mercedes	191.1mph	
3	Lotus	190.6mph	
4	Toro Rosso	188.5mph	
5	Sauber	188.5mph	
6	Ferrari	186.9mph	
7	Red Bull	182.8mph	
8	McLaren	172.5mph	

REMAINING PRE-SEASON TESTS

February 19-22 Barcelona

7DAYS TO GO

Feb 26-March 1
Barcelona
14
DAYS TO GO

Since winning the GP3 title, Alex Lynn has split from Red Bull, negotiated his own top GP2 deal and landed a Williams F1 role.

He tells MATT BEER why he's taking control of his grand prix dream

o you're still working with Red Bull this year..." Alex Lynn shakes his head. "No connection at all?" "No."

That question hadn't exactly been planned as a curveball. Or even a question. After all, Lynn had just won the GP3 title (by a commanding margin) as a Red Bull junior and now been announced as a DAMS GP2 driver alongside 2014 Red Bull stablemate Pierre Gasly.

This was at AUTOSPORT International back in January. Lynn

had hinted it was worth holding back a few weeks after our conversation before writing this feature, as there was something else — something big — on the horizon. Now he was doing an impeccably professional job of navigating the tightrope of what he could and couldn't say about 2015: "There are some other things going along. I want to get myself in the position where if I perform, I get the opportunity."

Earlier that week, Lynn had received a rather rewarding phone call from Claire Williams. It hadn't exactly been out of the blue, but it did come six anxious weeks after he'd completed an evaluation



▶ test in the Williams simulator, and during that time he'd reached a "completely amicable" agreement to sever his ties with Red Bull.

All Red Bull young guns live with the prospect of being ditched if they fail to fulfil expectations. But in pouncing on Max Verstappen and accelerating him into Formula 1 last summer, Red Bull showed a new flavour of ruthlessness. 'You can be doing all we've asked of you,' the move said, 'but that still might not be enough if we see something exceptional elsewhere'. No wonder Lynn and Carlos Sainz Jr — then leading and eventually champions of GP3 and Formula Renault 3.5 respectively — were unsettled.

Sainz getting a second chance closed another door for Lynn. Red Bull wasn't kicking him out, but the best it could offer was a sideways move. Riding momentum from his 2013 Macau Grand Prix victory and that GP3 title, Lynn didn't think he could afford to dawdle.

"The Red Bull opportunity was still open, but Helmut Marko made it quite obvious to me that in the next two years I hadn't really got the chance to get in a Formula 1 car. At which point I said, 'OK, that's the decision that's been taken, do you mind if I go and look elsewhere?"

What was then a bold gamble now looks like a masterstroke. Lynn begins 2015 racing for the squad that ran three of the past four GP2 champions, and as a development driver for a legendary F1 team with a reputation for promoting talent and where race-seat vacancies in the near future aren't unthinkable, given factory rivals' interest in Valtteri Bottas, and Felipe Massa now being in his 13th season on the grid. But when he said farewell to Red Bull, neither of those deals existed. December was not a relaxing month.

The 21-year-old had set his heart on DAMS for GP2, but tested with ART and Carlin because "at that time DAMS were already full. But then I think the deal fell through with Esteban Ocon. I got first



dibs on it. They called just before Christmas and said, 'Do you want to take it?' and I said, 'Yes, I'd jump through hoops to get in that car."

Lynn was touring the NEC stages with Britain's most recent F1 debutant Will Stevens. While at similar points in their careers, their attitudes to the next step were very different. For Stevens, just getting on the grid — even in the surreal scenario of a Finbarr O'Connell-run phoenix-like Caterham team — was worth it to prove to the paddock he could hold his own in a grand prix. That wasn't a prospect Lynn fancied when it was put to him back in November: "Not dissing anyone, but I'm looking at a sustainable career and I'm looking to become a world champion one day. I want to try to get myself in the door somewhere I'm really in the frame. I'm looking for someone

that believes that I could lead a team one day."

Holding out for Williams makes Lynn well-placed to be the next Brit to make an impact in F1. While GP2 champion Jolyon Palmer has a Lotus reserve deal, memories of Davide Valsecchi watching from the bench as Heikki Kovalainen failed to score in the absent Kimi Raikkonen's car are too fresh. Still, it was Lotus that gave Lynn a chance to make his F1 test debut last November. He calls it "a random one-off" that had no prospect of leading anywhere, though the team's engineering chief Alan Permane was impressed, and Lynn admits actually getting on track in an F1 car was psychologically valuable for him at an uncertain time.

"It was so out of the blue, I was a little bit nervous. I was like, 'Jesus, I haven't really

"It's been very full-on. Williams really pushed me hard and immersed me in the team"

TWO-MIND MANAGEMENT

Alex Lynn's deals with Williams and DAMS for 2015 are a source of great satisfaction for his management team: ex-Williams F1 and current Toyota World Endurance star Alexander Wurz; and former club racer, Amber Lounge/Grand Prix Ball entrepreneur and *The Apprentice* contestant Myles Mordaunt.

Together they formed the Integrale management company in 2013 specifically to look after Lynn, who at the time was racing in European Formula 3. Mordaunt's task is to take care of all the commercial aspects surrounding Lynn's career, with Wurz focusing more on the driving (he was instrumental in improving Lynn's F3 starts through tyre-warming advice) and in-the-paddock affairs.

"I'd known Shaun Lynn [Alex's historic-racing father] for 12 years," says Mordaunt. "I initially worked in sponsorship acquisition, so I know my way around the paddock. I've got a weird set of skills that lend themselves towards

driver management! Alex [Wurz] is the mental side from the driver's perspective. He has outstanding credibility and is a door-opener in the paddock. He's very well-respected and liked.

"The days of one person looking after management are long gone. Look at Lewis Hamilton: he went from his dad doing everything to the other extreme – XIX Entertainment were brilliant on one side, but missing out on some of the basic stuff."

Mordaunt, who says the commercial partnerships to replace Red Bull's budget for Lynn are already in place, adds: "I pushed and pushed for DAMS, and the second there was the opportunity with Esteban [Ocon not joining] we signed it.

"Williams would have been his dream position even a year ago. They're real people. He's got more love out of Williams in a week than in a whole year at Red Bull. It's a cliche, but it's like he's part of the family."

Marcus Simmons



OMPSON/GI

Tactical game snared Lynn GP3 title...



prepared for this.' But actually I think it did a good job for my career. Until you actually drive a Formula 1 car, there's always that little bit of doubt in not only your mind, but in other people's too, about whether you can do it. I proved it to Lotus and I proved it to myself."

Williams doesn't tend to do'random' or 'one-off' when a young driver comes onto its radar. A GP3 title and a Williams development position was the springboard for Bottas's F1 career, and the Finn's trajectory is the benchmark for Lynn. But Bottas is just the latest man launched onto the grid from a Williams test role — Damon Hill, David Coulthard, Juan Pablo Montoya (via a US diversion), Nico Rosberg, Kazuki Nakajima and Nico Hulkenberg all got their starts in the same way.

A man who describes his character as "fairly all or nothing — either we're going to do this properly and in the right way, or I'm not really that interested" is a good match for Williams. Like his predecessors, Lynn will get an in-depth taste of every aspect of the Williams factory and the team's processes. The list of Williams junior rejects is shorter than Red Bull's and has more asterisks of mitigation on it, but Lynn wants to make sure he's under the same heading as Rosberg, Hulkenberg and Bottas, not Jean-Christophe Boullion and Bruno Junqueira.

"The whole assessment process was very serious. From that moment, you wake up. Ever since I got the role, it's been very full-on. They've been great with me, really pushing me hard and immersing me in the team.

"There's such a broad way you can develop talent, and I think Williams have really nailed it with how they do it. They've proved it with Nico and Valtteri. I hope I don't balls it up."

He's not expecting any Friday practice running — the only certainty of time in the car is the post-Spanish Grand Prix test. Otherwise it's intensive simulator and factory work.

That's "fair enough", reckons Lynn, who wants to be "100 per cent on it" for GP2 and not hopping back into his DAMS Dallara with a head full of F1 Williams on a Friday, especially given that he reckons 2015 will be "a golden year" for GP2 as he takes on McLaren-backed 2014 rookie sensation Stoffel Vandoorne, Gasly and Ferrari's coming man Raffaele Marciello.

It's a tough field to face — Vandoorne has rewritten expectations for a GP2 newcomer and Gasly was dominant in post-season testing. The men Lynn will be measuring himself against all

MEETING AN F1 LEGEND

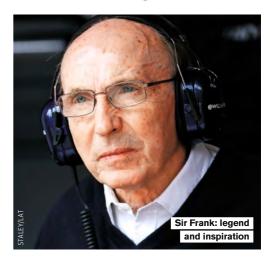
It will be 18 years this season since Williams last won a Formula 1 title, and 12 since it last looked realistically capable of doing so. Does that mean the legendary status it has in the hearts of F1 fans of a certain generation is waning for those who can't remember its glory days first-hand – such as its 21-year-old new development driver?

Not at all, says Alex Lynn, especially so once you've had the privilege of meeting Sir Frank Williams himself

"That was when I realised how much this team means to him, how much winning races means to him. Sometimes it takes other people to motivate you, and I'll always remember walking out of his office thinking, 'I really want to do this' – not just for myself, but for the whole team. There's something really cool and romantic about racing and Williams itself. It's had such an amazing history and I think it's going to have an amazing future."

Lynn's own formative Williams memories revolve around its two British world champions, but he wants to create his own Williams legend.

"My dad brought me up watching F1, so



it's the whole Damon Hill and Nigel Mansell thing. There's a great determination in me to make that happen again. What an amazing story it would be. I want to win world championships, and ideally I'd like to win them with Williams and have Great British dominance back. That's what I remember of Williams – Damon and Nigel – and that's where it's at for me."



have either a year of GP2 or a season in the more comparable FR3.5 car. He went into GP3 thinking tactically, with a benchmark points-per-weekend goal in mind that he (rightly) reckoned would seal a title, but GP2 is "a different game. These boys are all potential grand prix superstars and you've got to hit it hard and you've got to win and you've got to be *fast*."

Many racing drivers talk of wanting to be F1 world champion, but most express it in platitudes, as if titles fall into your arms if you stand under the right tree. There's nothing lightweight about Lynn's approach, although he's engaging and articulate enough to give you a window into his internal intensity, which will serve him well with media and fans should he reach F1. The GP2 and F1 success he aspires to isn't taken for granted.

He knows the possibilities open to him; he believes he's capable of earning them, but he doesn't underestimate what that requires of him.

"I know if I don't perform in GP2, I won't be racing a Formula 1 car for anyone — that's obvious. I'm a big believer in extraordinary people getting extraordinary results. If you want to mark yourself out as being an extraordinary person, you've got to produce something special.

"That's what I intend to try to do: win the GP2 championship this year or come very close to it. If it doesn't work out, then I haven't done enough.

"Ideally I'd like to win GP2 and then progress. Whether things pan out that way... But I believe that I will get the chance − if I perform − to race for the Williams team." ₩



AST gives you exactly what you need...

AST Competition dampers have been tried and tested to give the winning formula for your race car. We offer a huge range of dampers to cover all your needs, wether racing in club championships, GT cars or WTTC.

Each damper uses only the highest grade meterials, and are meticulously built to the highest standards.

They are available in 2 specifications:

The 3 way adjustable units, with separate high speed and low speed compression circuits and rebound all separate, this is possible by using external canisters which in turn allow for a higher nitrogen gas pressure and increased oil capacity.

The single adjustable units use the same high quality internals, and are primarily

designed for championships that have banned the use of external canisters. Both sets come complete with springs and AST aluminium top mounts.

AST Competition dampers feature:

- 45mm inverted damper in Macpherson applications.
- Available in single, 2-way and 3-way adjustable units.
- Non seize height adjustable collars for accurate corner weight set up
- Precise valving ensures maximum grip levels and reduced tyre wear
- Low friction bearings and seals increase damper sensitivity.
- High temperature fluid and high pressure nitrogen filled units eliminate cavitation and fade.
- Built from high quality KTL coated steel and aircraft aluminium for maximum durability

Fully serviceable



TEL. +44 (0) 1242 236168 SALES@ASTSUSPENSION.CO.UK



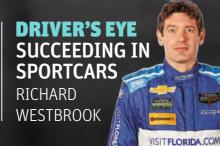
PERFORMANCE

OUR EXPERTS GIVE YOU THE EACH COLE

THE AUTOSPORT PERFORMANCE PANEL



TECHNIQUE TRANSITION TO GTS ROB WILSON





Introducing Walero. Designed, tested and relied on by racing drivers. walero.uk

CONTENTS

THE AUTOSPORT PERFORMANCE PANEL ROB WILSON ■ RICHARD WESTBROOK ■ ANDREW JORDAN ■ FF CORSE ■ WALERO ■ RYAN INSURANCE



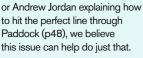
FORMULA 1 IS THE DREAM, SO SAY

many who start out in racing. Though it's unobtainable to all but the very best - the lucky few - there's a career out there for those with talent and the right attitude.

One area of the sport that is certainly booming now is endurance racing, be that in GT or sports-prototype form. But that's not to say single-seaters do not have a part to play on a wider scale. Developing the right driving technique in, say, Formula 3, could go a long way to helping with that Audi Le Mans 24 Hours dream you might harbour.

Keeping on the GT theme, growing Ferrari customer squad FF Corse is ramping up its commitment to developing aspiring endurance racers - and our own Ben Anderson (page 40) - while GT racing was also the inspiration for the incredibly clever invention by the folks at Walero (p44).

As ever, AUTOSPORT Performance is about letting the experts tell you how to improve. So whether that's Rob Wilson explaining how driving aids can limit a driver's potential (p38), Richard Westbrook on how to carve out a career in GT racing (p43)



SCOTT MITCHELL **PERFORMANCE EDITOR**

scott.mitchell@haymarket.com





IN THE ISSUE

DRIVING TECHNIQUE The art of experience

World-renowned driver coach and ex-racer Rob Wilson on how single-seater experience is invaluable, even for aspiring enduro aces

COACHING BENEFITS **GT** driver development

Ferrari squad FF Corse has beaten the factory-affiliated team two years on the trot in British GT. Now it's looking to help aspiring GT drivers learn their craft



DRIVER'S EYE VIEW Richard Westbrook

The British racer and factory Corvette ace explains why his career proves that no matter how tough it gets, the right attitude will give you chances and how adaptability is key to making them count

LATEST GEAR Walero tech

Keeping cool in the cockpit has been a rudimentary science - until now. We look under the skin of the NASA-driven Keep Your Cool gear from Walero



GET COVERED

Insurance quide

Ex-F1 racer Karun Chandhok says the right insurance will ease your worries and avoid nasty surprises. Insurance expert Ryan Mone explains how you do it



TRACK GUIDE **Brands Hatch**

British Touring Car ace Andrew Jordan is your guide to the Brands Hatch Indy circuit, where he took back-to-back poles in 2013 and '14



CONTACTS The best place to start...

...is to choose a series to compete in and where to do it. Here are the contact details for the key championship organisers and circuits in the UK and Ireland



World-renowned driver coach ROB WILSON explains how a single-seater education can play a vital role in establishing a GT career

etting to Formula 1 is certainly as tough as it's ever been.
People say there's just no chance, but it's always been tough. There have always been only been 20 or 25 seats there and the world racing population has always been much the same. So the percentages are about what they were.

There is a very good career out there in GT racing. It's a viable option, either in itself or as a stepping stone to something bigger in sportscar racing. So yes, it is a good idea. But it's always good to have had some single-seater experience. Most GT teams look through the single-seater ranks first. Of course there are drivers who have purely driven sportscars or GTs throughout their career, and there will be some very good ones who have managed to make a living out of it. But from the start, if you can do it in a single-seater, most people take that very seriously, and then hope you will adapt.

The reason for this is the pure-bred nature of single-seaters – not only does it teach you in the most cut-throat categories imaginable, drivers are noticed more because the successes are not camouflaged by the chassis, co-drivers or length of races. Team managers will tend to scan the single-seater results with an eagle eye for talent, and perhaps a budget, and they will examine GT results for potential budgets. So therefore it's best to learn your craft in single-seaters.

It's a good idea to spend as much time as possible in single-seaters. If you switched earlier, would you be as marketable? Would you be as well known? The benefit of hindsight is connected to what you don't achieve, so some drivers think they should have just switched to sportscar racing earlier. After one year, you would advise a driver to continue in single-seaters. You will still learn your craft; you will become more noticeable and known to more people; it will simply be the right environment.





The separation of your sensations from the surface in a GT car will be something to get used to. The massive reliance on electronics will be as well. But you can still make the difference

When you do switch, you will find there are natural sportscars and there are electronically aided sportscars. Traction control, stability control, ABS, fly-by-wire throttle – these are actually all irritants that are the product of the road cars the manufacturers produce. When you have a racing version it's almost expected by drivers they will have all of these aids.

If you have been a pure-bred single-seater driver with none of these aids, once you get a good sportscar with them, it will irritate you for a while. You will know that a lesser standard of drivers can also be competitive with you. That's the first shock you'll receive. Someone who wouldn't be a threat in single-seaters will suddenly be going at almost the same speed or faster than you in a GT. There will be a roof on it, big doors – the environment is very different. Plus you're separated from the track surface by these electronic aids, so finding the limit is a little more difficult. Your brain is no longer connected to the surface in the same way and the feel you want to receive will be camouflaged.

You'll need to desensitise to a number of things. Once you're lapping fast you'll feel you can brake later, carry more corner speed – like you're not going that fast. GT cars are slower around corners and you have to brake earlier because they are heavier. Once you settle into that, it's OK, it becomes your world,

but initially you'll be thinking you're going a bit slow.

The separation of your sensations from the surface will be something to get used to. The massive reliance on electronics will be as well. But you can still make the difference. The driver will eventually get on top of all this stuff. You can run a little less traction control, or be more sensitive with the throttle, or hold the braking a bit, or just be a slightly faster racing driver. It becomes rewarding within itself.

At the back of your mind you might be thinking, 'lf this was five years ago in a single-seater this guy in the mirror wouldn't have been anywhere near me', but that's GT racing. You've got to know when to give and take, and you need to make decisions that benefit the bigger picture. A race can be won by not necessarily the fastest cars and drivers, and that can be offensive to single-seater purists (Stirling Moss was never a big fan of long-distance racing), but that's the game you're in.

When you get into sportscar racing, you'll find a whole world where everyone in it, be they sponsors, gentleman drivers or racing drivers, no matter what level, are always on their way to Le Mans. So this great ambition creates a path that is open to you. And if you can get on well with these people and look after them, then you could be in for a very long and enjoyable career around the world.



MAKING THE LEAP HOW TRANSFERABLE ARE A DRIVER'S SKILLS?

BRAKING

TECHNIQUE It's not at all different in terms of the way you drive you're still looking for a relationship with the track surface and the rate you transfer weight. It's a little harder with electronic 'assistance' and there's more weight to manage, but you're still looking for the same thing. I see the best drivers as being diverse. You could win in single-seaters and you could win in GTs with a similar technique.

and the ABS will prevent you locking up, but it will be juddering under your foot and that'll be viewed as the limit. In fact it's better if you can stay slightly away from the locking and unlocking of the wheel when you're feeling the pedal.

There will be times when you can slam on the brakes Your sensitivity on the brake pedal will develop in singleseaters, and some sportscars are non-ABS, so that will help.

TYRES I think a driver who has just lived in sportscars and not single-seaters will feel tyres just as well. The single-seater driver will find there is a disconnect between feeling the tyres coming in and dropping off because of an additional degree of separation from them. I don't think there'd be a difference in this skill between drivers from different backgrounds.

TECHNOLOGY A lot of single-seater

drivers take a while to grow into the technology on GT cars, while GT drivers will be comfortable relying on ABS or traction control. These are things you would have to get used to, as they help gentlemen drivers more than professionals.

When Ronnie Peterson did long-distance races he would say to the team-mate, "You set the car up the way you want it". He was very unselfish. He needed his team-mate to be happy and then he would deal with the car however it was. He was confident enough he could do that. This helped the team's overall performance.

TEAMWORK

Modern GT cars have a lot of aids

HOW TO TAME A FERRAR]

Ferrari specialist FF Corse's new-driver programme is designed to bring aspiring GT drivers up to speed. BEN ANDERSON got a taste at Silverstone

here's something extra special about driving a Ferrari. Anyone fortunate enough to have done so will know exactly what I mean. The prancing horse has a je ne sais quoi that is unique in motorsport and impossible to fully explain. This undoubtedly played a part in Sebastian Vettel giving up the team that carried him to four consecutive Formula 1 world titles in order to drive for the Scuderia.

But not everyone is fortunate enough to be Sebastian Vettel. For most people (though still a select few), the most likely way into the driving seat of a Ferrari is through its range of GT cars. GT racing is booming around the world, with a broad array of increasingly competitive championships that have attracted massive manufacturer interest. That has given birth to a number of 'young-driver' programmes, as these marques seek to harness the best talent out there too heavy, poor or disillusioned to pursue impossible F1 dreams.

But the bedrock of GT racing remains the wealthy gentleman amateur driver - usually someone who has had a lifelong passion for motor racing but only in later years has found the time and good fortune to pursue long-held ambitions.

If you happen to be one of those gentlemen (or women), how do you go about fulfilling that ambition? Where and how on earth do you get started? That's where something like the FF Corse Academy can help. Anthony Cheshire's squad runs tailor-made programmes for such aspiring racers, helping guide them from novice trackday

driver Peter Gethin's Goodwood driving experiences (which Cheshire used to help run). From those beginnings he formed a Ferrari members' driving club, which eventually grew into a full factory-supported



programme. After Ferrari reined in some of its operations following the financial crisis of 2008, Cheshire decided to go it alone. FF Corse now operates a fleet of close to 40 Ferraris, running customers at track days and also competing in

GT Cup, Britcar, British GT and the single-make European Ferrari Challenge.

Motorsport can be a daunting world to the uninitiated, even those with the brains and intuition to succeed in other fields. The sport has also been slow on the uptake when it comes to coaching drivers, but it is catching up. Professionals of a certain generation went to the Jim Russell Racing School; many drivers of the current generation have simply muddled through. When you are new to any sport, there's nothing

This is as true for the keen, up-and-coming youngster as it is for the middle-aged wealthy gentleman. FF Corse recognises this.

Cheshire employs an army of coaches, including GP2 race winner Adam Carroll, former FIA GT and Le Mans racer Rob Barff, British racing stalwart Nigel



Greensall, British GT regular Aaron Scott, former Australian F3 race winner Charlie Hollings, and ex-British GT4 champion Jamie Stanley. Each brings their own individual experience and style of teaching to the table, and FF Corse attempts to match new drivers with the most suitable personality (or you can bring in your own coach from outside).

I am neither a wealthy amateur, nor a complete novice, but I don't have much experience of GT racing (save for one-off outings in the Porsche Carrera Cup GB and the Lamborghini Super Trofeo). As Jenson Button would say, you never stop learning in motorsport, so even an experienced driver can benefit. I spent a cold, wet day driving around the Silverstone National Circuit in a 458 Challenge car with Jamie









Stanley, and made huge progress across just four short sessions (around 10 laps each).

When I drive an unfamiliar car for the first time I tend to find myself too aggressive with my driving inputs, but too conservative with my estimations of the potential corner speeds the car can handle. During my first run (1m09.9s versus Stanley's 1m07.0s reference) I braked perfectly late enough, but held on to the brakes too long, killed too much speed and began my turns too early. This meant I got back on the throttle too soon, and with too much steering lock still applied (because the car was turning in the wrong place). Thus it took longer to get back to full throttle than it should, so I exited each corner too slowly.

With Stanley's tuition (communicating via radio link as we drive), I practised carrying greater momentum into each corner by releasing the brake pressure more swiftly and allowing the front of the car to slide. This helped the car turn more quickly at the point of rotation in a corner, which permitted me to exit the turns faster by virtue of having the car pointed straighter sooner, and with a greater degree of throttle applied at an earlier point.

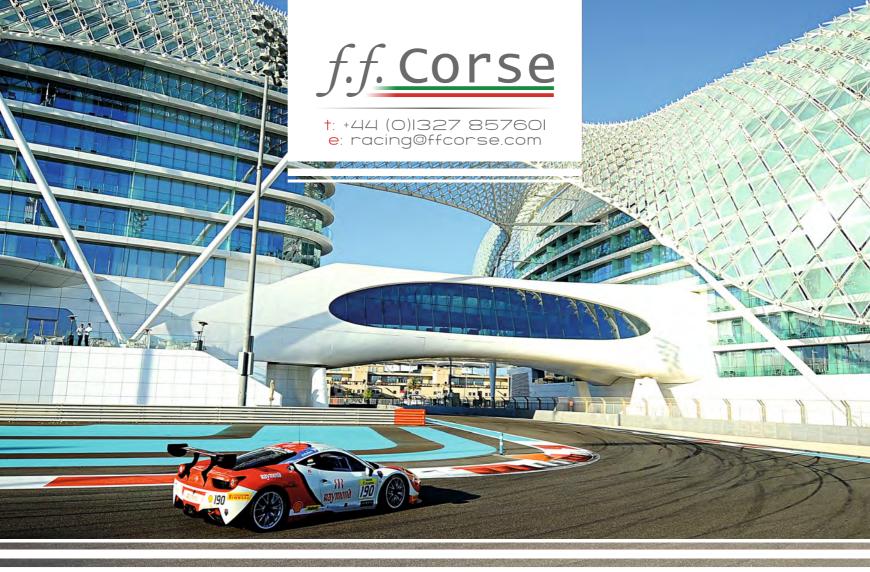
Making proper use of understeer to manipulate the car around the circuit I improved by 4.5s across my four sessions. The only corner at which we felt I still had significant room for improvement was Brooklands.

COMPARISON OF SESSIONSOPENING RUN VS QUICKEST TIME DATA ANALYSIS SPARKS BIG GAINS Silverstone Braking, turning and man to make big gains. technique was not perfect throttle application are Anderson learned to get but the difference allowed intertwined, so it's no off the brakes earlier (see him to rotate the car more surprise that coaching in dark blue line compared quickly and get on the these areas allowed our with the light blue). The throttle more smoothly.

This may be accounted for by the fact that this is the only left-hander on the circuit, and thus I was driving a third less in this direction across each lap. More important than the laptime was the feeling that I learned the correct way to drive the car in those conditions. I did not feel hurried, or frustrated, or lost. I was not flapping around on my own, trying to work out the best way to operate unfamiliar machinery without

any help. Thus, the laptime came tumbling on its own, a natural consequence of better technique.

This is how it should be. If you're an amateur driver new to GT racing, or thinking of taking it up, I cannot recommend this process highly enough. There is something special about driving a Ferrari, but the only thing more special than merely driving one is being able to drive it properly.





FERRARI GT MANAGEMENT SERVICES

Ferrari 458 Challenge Hire
Ferrari 458 GT3 Hire
Ferrari Challenge Europe
UK and European GT Championships
Full Season & Individual race/test support
Track day support for customer race and road Ferrari cars
Race training academy and driver coaching available







RICHARD WESTBROOK

The endurance ace talks about his rise through the GT ranks and why attitude and adaptability are key to a career in sportscar racing

fter success in karting and moving into the Formula Opel Euroseries. I had a turbulent time in German and Austrian Formula 3. I ran out of money and before I knew it I'd spent six years out of a car.

My experience should give anyone hope. It was painful being on the sidelines, and there are drivers who will be going through the same now. You think the whole world is against you and think you don't deserve it. But 10,000 drivers can't get onto a Formula 1 grid, so chances are you are going to fall by the wayside.

When that happens you've got to believe in yourself and pick the right opportunity. I never gave myself a target, I just thought I needed to be racing again. I'd done some work in London, done quite well and set up a business with my brother. I had enough money to buy a one-bedroom flat in Stockwell and I sold that for a drive in the [Porsche] Supercup. A friend found the rest of the money in sponsorship.

You're just not going to pick up a factory drive.

The most important thing - and this is where most people struggle - is attitude. This is something I definitely had to learn. Nobody is going to want to hire you if you're bad to work with. There are good drivers who have tried to cross over from single-seaters, been blindingly quick, but difficult to work with. It can then be hard to carve out a career.

My Carrera Cup experience was great, but the hardest thing I've ever encountered was being tagged as someone who was good at driving Porsches and that's it. That's why it was important for me to do something different. When prototype teams are finalising their line-ups they overlook good GT drivers because they are 'only good at driving GT cars'. It's completely incorrect, and it was so good for Porsche to take on Marc Lieb and assess people like Nick Tandy and Frederic Makowiecki for the LMP1 programme. It's easy to tag drivers as just one or the other, but if you're adaptable and quick you're going to be good in both. WESTBROOK

- 2015 Third in Daytona 24 Hours
- 2014 3rd in United SportsCar Championship
- 2013 7th in Grand-Am
- 2012 10th in Grand-Am
- 2011 FIA GT1 World with Nissan
- 2010 FIA GT1 World with Ford
- 2009 FIA GT2 champion with Prospeed
- 2008 3rd in FIA GT with Prospeed
- 2007 Porsche Supercup cha
 - 2nd in Porsche Carrera Cup Germany
- 2006 Porsche Supercup champ
- 2005 2nd in Porsche Carrera Cup GB 9th in Porsche Supercup

2004 Porsche Carrera Cup GB

2003 2nd in Porsche Carrera

Cun GB 2002 15th in Porsche Supercup

1996 10th in Austrian Formula 3

1995 3rd in Formula Onel Lotus Furnseries

1994 4th in Formula Opel Lotus

Furnseries 1993 Formula Vauxhall Lotus

Winter Series champion

After that I came back to the Carrera Cup GB, and looking back on it, it was the best thing I ever did. I was able to win something heavily backed by a manufacturer and that manufacturer took me into sportscar racing. My situation was absolutely perfect, and other manufacturers are doing similar things now - Audi has launched its own series with the TT Cup and Aston Martin has various links to GT3 and GT4 classes. It's really important that you do something where a manufacturer gets behind you; they are the best people to work for if you want a long career.

I don't know if that's because drivers haven't wanted to risk the Carrera Cup in recent years, but it will be great if it can get back to that this year with the new rookie class. The Carrera Cup did so much for my career and I'll be eternally grateful because that really was a springboard for me. I think there are so many teams that run Porsches all around the world, proving yourself in that or the Supercup means you're going to find yourself very good work.

If any driver asked me now for advice I'd urge them to do what I did, because it's important to come into GT racing with a proven record and some hype about you. It doesn't matter if you've won GP2 or just finished in Formula Renault, you have to prove yourself all over again. For a young driver who has fallen off the ladder, thinking their reputation is going to get them a good drive in Blancpain or America is nonsense.

Adaptability is definitely one of the greatest assets that a sportscar driver can have. Up to 2010 I drove Porsches exclusively and it was a unique driving style. From there I went to a Ford GT, then a Nissan GT-R, and it was a completely different set-up. Now I jump between the Corvette C7.R and the Daytona Prototype.

You've got to be very open minded, you can't have a set way of driving. It's not just being gung-ho for half an hour or 45 minutes, there are very different situations you need to deal with. That's why it's so important to drive different cars. You need to be able to adapt to a different way of working; you cannot go into any given situation and say, 'That's my style, that's my comfort zone, that's the way I operate'. It might work for A but it sure as hell will not work for B.



UNDER THE SKIN OF WALERO'S GAMECHANGER

No sweat: NASA technology can combat dehydration and keep you cool in the cockpit by proactively absorbing body heat

here were many products launched, unveiled and fawned over at the AUTOSPORT International Show in January, but can you remember the name of the temperature-controlling, flame-retardant underwear that has been heavily influenced by NASA?

Ask that question again in 12 months' time and the answer may well be different. After a year and a half in the making, mid-January marked the official launch of the new product Walero hopes will become an essential part of every driver's kit.

Anybody who has driven in anger knows what it's like in a cockpit environment, confined or open, with multiple layers and minimal airflow. Dehydration and discomfort swiftly follow.

"The usual methods of cooling the body can't work with much effectiveness within the environment of a car," explains Walero founder Fiona James, a GT driver and British Women Racing Drivers' Club Gold Star pursuer. "The body's most effective method of cooling is evaporation, but this is largely compromised due to the protective clothing you have to wear, like a racesuit and helmet, and the enclosed environment and limited airflow within the car.

"A good proportion of your body is also covered by a race seat, which is definitely not breathable! I'd experienced first-hand the extreme temperatures inside a race car and wasn't happy with any of the options available..."

That, in short, is the inspiration for Walero. It spent around 18 months in development before the launch in January 2015. The use of patented Outlast technology was key to this, with the implementation of special materials developed for NASA to protect astronauts from temperature fluctuations while in their



spacesuits. Work also started with a company called Fantex, which has a new type of environmentally friendly antimicrobial product, which works as an anti-fungal, anti-bacterial and anti-viral agent, keeping the underwear fresh.

But it's the Outlast element that makes the Walero underwear unique. Outlast reckons its 'Thermocules' technology is "comparable to ice in a drink"; it absorbs the heat as the skin warms up to cool the user, maintaining body temperature in more extreme conditions. When the skin begins to cool again - who hasn't experienced that uncomfortable chill when you get out of the car and the sweat patches beneath the suit clash with the cold? - the material releases that heat. Not that you'll be sweating in Walero gear such is the advanced nature of the material, it works proactively, and the absorption of heat in the first place removes the body's need to sweat.

Your temperature is regulated all the time, which aids comfort and boosts concentration - it's climate control for the average racing driver. This sort of benefit is often underrated. Keeping cool (literally) is a key part of closed-cockpit endurance racing, but the benefits are felt in equal measure with singleseater racing in sunnier climes such as Bahrain, Malaysia, India and Abu Dhabi.

"Fluid loss is a huge thing for a driver," attests 13-time Formula 1 race winner David Coulthard. "Regular body temperature is, what, 37 degrees? In Malaysia it would go up to 39 or 40 degrees that would be medically unsafe. And absolutely there would be a performance drop-off.

"As you get dehydrated, your ability to make decisions isn't as good. The fitter you are, the more able you are to maintain a good level of decisionmaking and deal with the stress."

To add some science to that, the temperature window in which the average person feels comfortable is relatively narrow: when the body core temperature



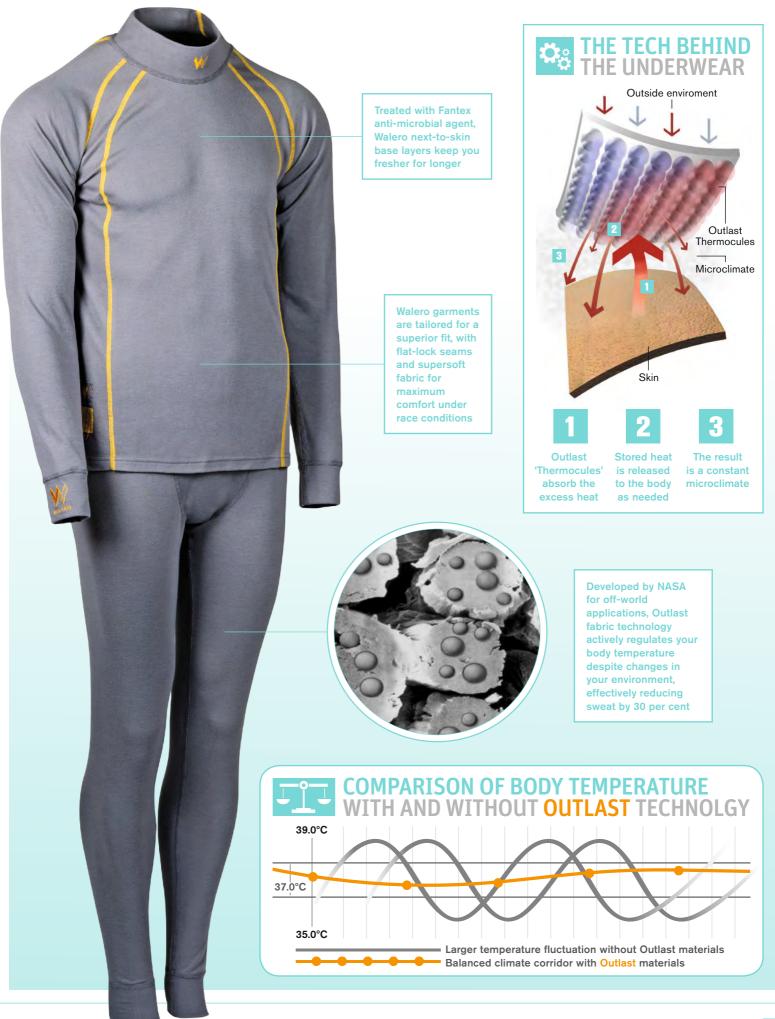
of 37 degrees fluctuates only two degrees upwards or downwards we are subject to fever or hypothermia. Muscle fatigue, lapses of concentration and even loss of consciousness can occur at 39 degrees.

This is where that temperature regulation is key. The Outlast technology in the Walero underwear reduces temperature swings and influences the comfort zone efficiently; you sweat less (up to 33 per cent, so quality control tests indicate) and are less chilled. You feel not too hot, not too cold.

It's a far cry from Coulthard's memories of the early Malaysian rounds.

"We didn't have to wear the full Nomex - some drivers had T-shirts and short balaclavas, so you knew if you had a fire you would be in trouble," he recalls. "The suit would be undone as well. It really wasn't that sophisticated."

The same cannot be said for Walero's temperaturecontrolled racewear. In fact, it has the potential to make a time like Coulthard's a distant memory.





WHY INSURANCE CAN MAKE A DIFFERENCE

Motorsport insurance expert RYAN MONE looks after a number of high-profile motorsport names. He explains why it's a must-have

think it comes as a shock to some people just how much it can cost to repair their race cars, and they only discover the true costs after their first sizeable accident. Big crashes can provide a major dent to the racing budget and in the worst circumstances can mean an end to the season if there is no insurance cover in place.

Some people entering motor racing don't even realise that it's possible to cover your car, since it's such a high-risk insurance. It certainly is possible, and we can insure all makes and models of cars competing at all circuits worldwide.

Obtaining a quotation is simpler than ever with our new online quotation system at www.ryanmi.com, which allows you to log in and view all quotations, invoices and policies, as well as making a new quote request within a few clicks. It's just how you would arrange cover for your road car.

Our coverage is tailored to the requests of the client in terms of the amount of cover, excess

and conditions required. The quotation provided will depend on the circuit, car, championship and driver details.

It's common for us to be contacted after the first race meeting of the year to request cover after an accident that was uninsured, since the driver hoped to make it through the season without insurance and accident-free. Unfortunately it's not only the insured driver who needs to stay accident-free, because all drivers take to the track at their own risk. If another driver on the grid causes an accident, all individuals are liable to repair the damages to their own cars, regardless of blame.

We offer cover both on an event-by-event basis, or a full season. The vast majority of our clients insure for a full season since this provides a discounted premium. By taking cover for a full season the budget is fixed and you can be assured of being able to complete the year. If you wish to purchase insurance on a race-by-race basis, we can insure as many individual events as required and this may be necessary if you don't know how many

DID YOU KNOW COVERAGE GOES BEYOND THE TRACK

Ryan Motorsport Insurance also provides storage and transit insurance with a sum insured of up to £1,000,000 for cars, bikes, trailers and other vehicles along with spares, tools and equipment. Cover would be in place while at the usual storage location and when in transit to and from events, repairers, exhibitions, etc, as well as while at the events. The location of cover can be for UK/Europe or for worldwide transport of vehicles.



KARUN CHANDHOK ex-Formula 1 driver

Race-car insurance is hugely important for teams and drivers. I sometimes wonder why companies do it, but I guess they play the odds. If you had to worry about paying the full damage bill from accidents it would certainly cost you a bit of lap time, especially if you're tight on budget anyway.

When you're young and wild in the lower formulas climbing the ladder to the top, you tend to have accidents due to lack of experience or just youthful exuberance. If you haven't got the right insurance partner, it could really be detrimental to your programme because the damage bills can be very high.





Sum insured - £5000 Premium - £1350 Excess - £1000

Premium - £7500 Excess - £3<u>000</u>

A Porsche 911 Type-997 in the GT Cup

Z()-1



RUSSELL EACOTT boss of Formula 3 stalwart T-Sport

It's just risk management - a lot of the big shunts are not because of a mistake from the driver, but because they get caught up in someone else's accident. When you're upside down in the Armco you can do £20-30,000 worth of damage. We've insured for three consecutive years at the Macau Grand Prix and spent £30,000 doing that, and never made a claim, but the thing is you never know...

When you have a big hit you can immediately obtain the spares. The bill arrives from Formula Merchants [Dallara's UK distributor]. You know if it's a £20,000 hit and it's a £5000 excess then you'll get your £15,000 back.





events you plan to do over the course of the season. That's fine, but it's worth remembering that if you go down that route and have an accident, the next time a quotation is requested from insurers, the excess and/or premium may be subject to increases, depending on the previous claim.

RACING AND TRACK DAYS

The most common policy we provide is for on-track cover for racing and track days. The track-day business is transacted via our website www.insuremytrackday.com where an online quote can be requested, received and purchased within five minutes and your policy documents printed off. All cars and tracks in Europe can be quoted for, including the popular Spa and Nurburgring circuits. The track-day cover is substantially cheaper than racing as they are non-competitive and non-timed events. The track-day policy again covers accident damage to your car regardless of whether the accident is caused by you or another driver. All accident damage

to the car is payable including parts, labour and VAT. There are optional extras available to include recovery and even circuit repairs if you are liable to pay for barrier damage at European circuits.

WHAT IS PERSONAL INSURANCE?

It's not a pleasant subject to talk about, but motorsport is dangerous. We can

help arrange personal cover in the event of death, permanent disability and temporary disability, plus medical and repatriation

if injured abroad. In the event of such an accident, all your bills while being treated and then transportation back home are covered - for example a full row of seats on a plane may be required. Medical expenses abroad, and in particular the USA, can be prohibitively expensive, with minor injuries resulting in claims in multiples of

£10,000. People should always check their lifeinsurance policy before going out on track to make sure that at a minimum the mortgage loan amount is covered. In most cases

> normal life insurance will not cover motorsport unless specifically requested from insurers at the outset of the policy. We can provide personal-accident insurance for individual events or the full season.

CONTRACT BONUS INSURANCE

This works where individual drivers or teams have been promised a bonus by a sponsor in the event of a favourable performance, such as winning a race meeting or finishing in the

> top three of a championship. Our insurers provide an insurance policy to cover the sponsor in the event that they have to pay out the bonus to you, and charge an insurance premium that would be much lower than the bonus amount pledged by the sponsor. This is a win-win scenario for both you and the sponsor, since the

TOP TIPS MAKING A CLAIM

Take photos of the car. Companies don't want to just see a pile of damaged parts, they need to see pictures of the car while in its damaged state and preferably while at the circuit. We always advise to take as many pictures as possible, of all sides of the car, regardless of where the damage is located.

Report the claim to your insurer within 48 hours. We are contactable by phone and have an online claim form that can be filled in when you next get internet access. It lets you provide information on the extent of the damage and a rough estimate of the costs.

team or driver happens to achieve their bonus, the sponsor can pay it with even more of a smile on their face in the knowledge that the insurance company have covered that cost. We have found that this product can actually help obtain additional sponsorship, since you're backing your own ability to achieve your goals by negotiating a smaller upfront outlay from the sponsor but with a bigger return at the end of the season when you hopefully achieve your goals. If that is the case, the sponsor would have clearly had some very good exposure during the year by backing a frontrunning driver.

Premium - £10,000 Excess - £5000

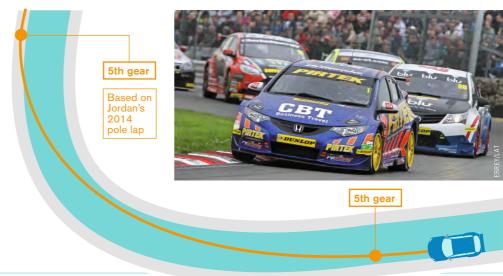


Brands Hatch's Indy layout is short, but incredibly challenging – as 2013 British Touring Car champion ANDREW JORDAN explains



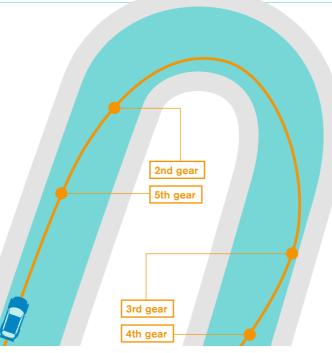
PADDOCK HILL BEND

In my opinion this is the most demanding corner on the circuit. You arrive at high speed, sixth gear in the touring car, and have to deal with some big bumps in the road just before you brake. That's just after the 100m board, which feels pretty late, but the biggest challenge is actually to then get off them as early as possible to carry good entry speed into the apex. I normally go down to fourth to help get the car slowed down and then grab fifth at the apex to calm the car down and enable good throttle application. The compression at the bottom of the hill is huge, you can feel the whole car load up, so it's very important to have the car settled by then. The new rules on track limits haven't really changed anything in terms of approach, you just can't run quite as wide on the exit.



Druids is a pretty long corner. It has a heavy braking zone, arriving in fifth gear and downshifting all the way to second. I start turning in pretty early and try not to brake too late, which allows me to release it early and trail all the way into the apex to keep the weight on the nose of the car to help with getting the car turned mid-corner. This trailing also helps carry good speed into the corner. It's important to make sure you wait long enough for initial throttle pick-up to then get full throttle as early as possible. You don't want

to be stabbing at it.



GRAHAM HILL BEND This corner always 4th gear

induces oversteer in a front-wheel-drive touring car, so that's something I work very hard with the engineers on to try to get good rear stability without affecting the rest of the lap. It's a short braking duration with not too much brake pressure as that can pitch the car too



much, which then can induce corner-entry oversteer even more. You need to go through with higher minimum speed than when you could run off before the track-limits rule changed, because then you could use the run-off as an escape route. Now the corner itself needs to be quicker.



3rd gear

4th gear



I love Surtees and find it a big challenge. Like the rest of the lap it's a fast entry, fifth gear for us, and it's important to use a huge amount of kerb. On my pole lap last year you will see on the onboard I actually used too much, and this then launched me a car's width off-line as I came to the kerb on the right side. I will remember that for 2015 qualifying... It's a small left-foot brake but it's very important not to slow the car too much. That can mean a small blend on the throttle but I almost try to do this all in slow motion to keep the car as flat as possible. To me that's important with quick corners - the driver should do what they can with their inputs, not upset the car and then moan to the engineer that it has snapoversteer on entry. I always look at my inputs first to see if I'm inducing a problem. After the small blend it's back to full throttle and then give the wheel quite a flick of right steering lock to get the car set for the approach to Clearways.

5th gear

CLEARWAYS/ CLARK CURVI

3rd gear

Nailing Surtees means you arrive at Clearways in fifth gear, where it's down to third for us. The apex is further round the corner than you think, and also uphill, so it's important to remember that with braking. I try to brake late as a result, but then really try to release the brake early to carry good entry speed. At the same time I trail the brake all the way into the apex, which keeps the weight on the front tyres to help turn the car. That can also really help with tyre wear over a race distance. The exit of Clearways blends into Clark Curve. It isn't challenging as a corner, but it's important to keep your concentration up by bringing the car back across to the inside as you get back onto the main straight.

5th gear

RACELOGIC

The right lines and references are a great starting point, but driver improvement can yield the biggest performance gains. Combine Andrew Jordan's tips with Racelogic's variety of motorsport equipment to help maximise your on-track development. Ride on-board with Jordan and Racelogic on www.autosport.com, and find out



ValetPRO - What makes our products different?



For us, there is only one thing that matters. You, the customer. At ValetPRO we spend years developing each and every product we sell so our customers are assured of class leading performance, long lasting results, unparalleled ease of application and removal and gentle formulations for all surfaces and sensitive finishes.

We do this by listening to the demands of our customers, understanding exactly where and why competitor products fail and subsequently ensuring that any product that bares the ValetPRO name meets these demands and exceeds expectations.

An example of this is our range of three wheel cleaners; Bilberry, Blue Gel and Dragon's Breath. Those new to the ValetPRO range often ask the question, why the need for three? The answer is simple, that is what our customers demand.

Bilberry for instance is an acid-free dilutable formula that does not require agitation. That means you can use it neat when dealing with heavily solid wheels, or at a ratio of 1:10 for

maintenance cleaning.

Blue Gel Wheel Cleaner is a gentle yet acid-based formula that can be diluted up to 1:5. it differs from the norm because it sticks to the wheel surface without run-off, to slow drying time and enhance cleaning results. Designed for heavily soiled and abused race wheels, baked on brake dust simply vanishes, probably why it's so popular in the motor racing trade

Finally we have Dragon's Breath, our award winning pH neutral, colour-change iron fallout and contaminant removing wheel cleaner. As the name suggest it stinks, but nothing will clean you wheels and remove stubborn baked on brake dust and fallout faster or more effectively. This is the product we recommend to anyone who is unsatisfied with their current wheel cleaner, just be sure you work in a well ventilated area!

www.valetpr.eu

Name the race track?



We have 10, 500ml bottles of ValetPRO's award winning Dragon's Breath Wheel Cleaner to give away to a selection of lucky readers. To be in with a chance of winning, simply head over to ValetPRO's Facebook page and tell us via direct message the answer to the following question.

In which country will you find the pictured race track?

www.valetpro.eu/contact.html

Facebook page at www.facebook.com/pages/ ValetPRO/282288758491198

Please quote "Autosport-Race Track Competition"

Good luck to all. And a big thank you to all our customers.

All the best

Greg Spink MD ValetPRO.

GETTING STARTED

If you're thinking of taking up motor racing, then these club, series organiser and circuit website addresses are a useful place to start



ANGLESEY angleseycircuit.com

BRANDS HATCH brandshatch.co.uk

CADWELL PARK cadwellpark.co.uk

CASTLE COMBE castlecombecircuit.co.uk

CROFT croftcircuit.co.uk

DONINGTON PARK donington-park.co.uk

GOODWOOD goodwood.co.uk

KIRKISTOWN kirkistown.com

KNOCKHILL knockhill.com

LYDDEN lvddenhill.co.uk

MALLORY PARK mallorypark.co.uk

MONDELLO PARK mondello.ie

OULTON PARK oultonpark.co.uk

PEMBREY barc.net/pembrey

ROCKINGHAM rockingham.co.uk

SILVERSTONE silverstone.co.uk

SNETTERTON snetterton.co.uk

THRUXTON thruxtonracing.co.uk



GOVERNING BODIES

National sanctioning authorities

Motor Sports Association msauk.org

Motorsport Ireland motorsportireland.com



UK RACE ORGANISERS

Car clubs and championship promoters

Aston Martin Owners Club Racing amocracing.org

British Automobile Racing Club barc.net

British Racing & Sports Car Club brscc.co.uk

Castle Combe Racing Club castlecombecircuit.co.uk

Classic Sports Car Club classicsportscarclub.co.uk

Darlington and District Motor Club

darlington-motor-club.org.uk

Historic Sports Car Club hscc.org.uk



Masters Historic Racing themastersseries.com

MG Car Club mgcc.co.uk

MotorSport Vision Racing

msvracing.co.uk

South East Motor Sport Enthusiasts Club semsec.org.uk

Scottish Motor

Racing Club scottishmotorracingclub. co.uk

750 Motor Club 750mc.co.uk

500 Motor Racing Club of Ireland kirkistown.com

Vintage Sports-Car Club vscc.co.uk

History repeats itself

SENNA JOHNS MCLAREN

Bruno Senna has signed a deal to become a full-time works McLaren GT

driver. GARY WATKINS found out what it means to the Brazilian



SENNA TO MCLAREN



The words **McLaren** and **Senna** are emotive enough on their own. Put them together and they take on a whole new resonance.

A new chapter in the shared history of those two names, which with the late Ayrton Senna encompassed six seasons of Formula 1, 35 grand prix victories and three world titles, is about to begin. Nephew Bruno Senna has joined McLaren's GT operation as a factory driver and will be racing its new 650S GT3 contender somewhere near you in 2015.

Emulating his uncle by racing for McLaren was always high up on Bruno Senna's list of ambitions. He admits that a Senna racing for the Woking marque once again is "still a big thing", even if it hasn't happened exactly how he might have imagined during a single-seater career that took him to F1 with HRT, Renault and Williams. Yet his deal to join McLaren GT's line-up of factory drivers is more about reinvigorating his sportscar racing career than ticking a box.

Senna, now 31, made an immediate impression during his debut season of GT racing with Aston Martin Racing in the 2013 World Endurance Championship. There were two GTE Pro victories, not to mention a near-miss at the Le Mans 24 Hours, among a series of impressive drives. He arrived with a different mentality to the one that had taken in an LMP1 programme with the French ORECA team in 2009 at a time when he admits that his "mind was on F1".

"I like GT racing, I really do enjoy it," says Senna, who was announced as an Aston driver in February 2013 when many thought he was still in the frame for an F1 drive at Force India. "You can put yourself in a position where you are linked to a manufacturer and can race in super-competitive championships. I was lucky enough to have put myself in that position with Aston Martin and now with McLaren.

"I started winning again in GT racing with Aston, which was something I hadn't had the chance to do for a few years before that in F1. It reminded me what I really want to do, it refreshed my memory as to why I go racing — and that is to win races."

That didn't happen for Senna during what he describes as a "sparse season in terms of racing" in 2014. An attempt to move into the Brazilian Stock Car Championship didn't get beyond one-off races at the end of 2013 and the beginning of '14, which partly explains why he raced only twice more before the start of his Formula E campaign with the Carlin-run Mahindra team in the autumn.

"The plan last year was to link something in stock cars in Brazil with Formula E, but it didn't work out and by the time I came back to Europe, it was a little bit too late," explains Senna. "I had the two races with Aston Martin, which I really

wanted to do because it meant going back to Le Mans in a competitive car. That commitment made it even more difficult to find something else."

The McLaren connection is an obvious one, family links aside. Former manager Chris Goodwin is a director of the McLaren GT organisation and there was a one-off with the VonRyan Racing team at the wheel of a McLaren MP4-12C GT3, the predecessor of the 650S, in the middle of his 2013 WEC campaign at the Spa 24 Hours. But Senna suggests that his deal with McLaren grew "organically" and points out that the starting point was a clutch of 2015 race calendars.

"I wanted to a do a full championship and when I looked at all the dates, the only one I could really do around my Formula E commitments was the Blancpain Endurance Series," he says. "At the same time, Dave [Ryan, VonRyan team boss] was looking to put something together and McLaren was trying to help him. That's how it all started.

"I guess it was made easier because I know a lot of the guys at McLaren, so they invited me to test the new car at a freezing cold Snetterton before Christmas to have a look at me. That kick-started everything."

Senna's interest in the BES came at a time when McLaren needed a new customer team to lead its assault on what was last season, and is likely to remain, the strongest championship for GT3 machinery in the world. The French ART Grand Prix squad, with which McLaren had placed factory drivers Alvaro Parente and Kevin Estre in 2014, was moving on to pastures new: the GT arm of an organisation that has won multiple titles in GP2, GP3 and Formula 3 will be running its DTM programme with Mercedes. McLaren knew it needed a top team to showcase the new 650S and was trying to help VonRyan, whose boss had a 35-year career in F1 with McLaren that culminated in the role of sporting director, put together a strong programme in the series in 2015.

"We weren't actually looking for a fourth factory driver [to join Parente, Estre and Rob Bell]," says McLaren GT managing director Andrew Kirkaldy. "VonRyan Racing has proven a world-class outfit, and has been with McLaren GT from the outset of the GT3 programme. The original plan had been for Dave to run one fully Pro car and one car in the Pro-Am class, but the BES is getting stronger and I think you are going to need two strong cars with three very good pros if you are going to be challenging for the championship. That desire coincided with Bruno's interest in doing something together."

Senna's main programme with McLaren will be in the BES with VonRyan in what Kirkaldy promises will be a "super-strong line-up" encompassing its full roster of factory drivers and a couple more "interesting" professionals. He will now have to miss one race, as a reshuffle of the Formula E calendar with an addition of a race in Moscow has created a clash between the Berlin round and round two of the BES at Silverstone in May. Senna's involvement with McLaren will stretch beyond the BES, however.

"There will be other races in other championships," explains Senna. "They are going to work me hard, and I'm going to have input into the development of the car, which is

"They are going to work me hard, and I'm going to have input into development"

Brico Sema



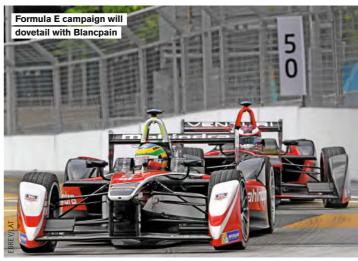
something I am going to enjoy. I didn't do so much racing last year, and I hated it, but this season is going to be the other way around. I should end up doing 18 to 20 races between what I do with McLaren and Mahindra in Formula E. I'm going to be working hard, but I prefer it that way."

Senna doesn't regard racing in the BES as a step down from the GTE Pro class of the WEC.

"I don't think that at all," he says. "The WEC is the world championship by name and FIA definition, and everyone wants to be a world champion. But the sheer number of manufacturers and cars in the BES means it is probably going to end up stronger in terms of the level of competition than the WEC. The WEC only has three manufacturers and it can sometimes be a bit random as to who is competitive and who

SENNA'S Many Drives







isn't on any race weekend. It looks like the fight between the different cars is a bit more consistent in Blancpain."

Senna appears to be content with his lot right now.

"I've got a nice combination of Formula E, which I am sure is going to develop into something big, and driving for a manufacturer in GT racing," says Senna, who claims that thoughts of a return to F1 have disappeared from his mind entirely. "I haven't put any effort into getting back to F1 since I started with Aston. I've done my thing in F1 now."

There are other ambitions. Going to Le Mans in each of the past two years with a strong shot at a class victory has whetted his appetite for the jewel in the crown of sportscar racing.

"I'm really hoping that I'm going to go there with McLaren in the future," he says. New regulations for what may or may not continue to be called GTE should allow McLaren to race an upgraded version of the 650S, even as early as 2016 if the rulemakers stick to their timescale. "I would have a look at doing Le Mans this year, but only if was something really good, maybe a competitive drive in LMP2. Unless that happens, I'm going to stick with what I've got with McLaren and Mahindra, because it's a bit tricky with a Formula E race [the new Moscow event] between the test day and the race."

A Le Mans victory is something Senna wants to achieve one day, but there's another ambition that his new relationship with McLaren could bring to fruition. He has driven two of his uncle's cars at the Goodwood Festival of Speed – a 1993 MP4/8 with Ford power in 2009 and a Honda-engined MP4/4 the following year — and wants to have a proper go in a piece of McLaren F1 history one day.

"I'm still looking forward to driving one of those things on a proper race track, so I can get a real feel for those old cars," he says. "That's definitely on my bucket list." M

McLAREN'S EYE IN LE MANS

McLaren makes no secret of its aspirations to produce a version of the new 650S that would enable it to return to the Le Mans 24 Hours, scene of its historic victory with the BMW-engined F1 GTR in 1995. The new GT3 racer incorporates development that went into a stillborn GTE version of its predecessor, the MP4-12C, and the rulemakers are well on the way to finalising a set of regulations that would allow an updated 650S to take the McLaren name back to the big race for the first time since 1998.

"The ambition to have a car that can race at Le Mans is still there," says McLaren GT managing director Andrew Kirkaldy. "We wanted to and still want to be able to produce a car that can be updated from GT3 to GTE."

McLaren can't set a timeframe for its return, says Kirkaldy, because "we don't have a firm set of regulations yet". The rulemakers - the Automobile Club de l'Ouest at Le Mans and the FIA - are adamant that they will be in place for 2016, however.

The first McLaren GTE car never made it beyond the drawing board. It revealed its intention to build the car in September. 2012, just one month before the ACO and the FIA announced plans to merge the GTE and GT3 categories and set out on what turned out to be a series of fruitless 'convergence talks'.

The new GT3 racer, which finished third on its race debut in the Gulf 12 Hours at the Yas Marina circuit in Abu Dhabi last December, may incorporate elements of that design, but the arrival of a new GT3 racer reflects the 12C's replacement in McLaren's model range with the 650S. "We have to follow our product plan," says Kirkaldy. "There's no point racing a car you don't sell."







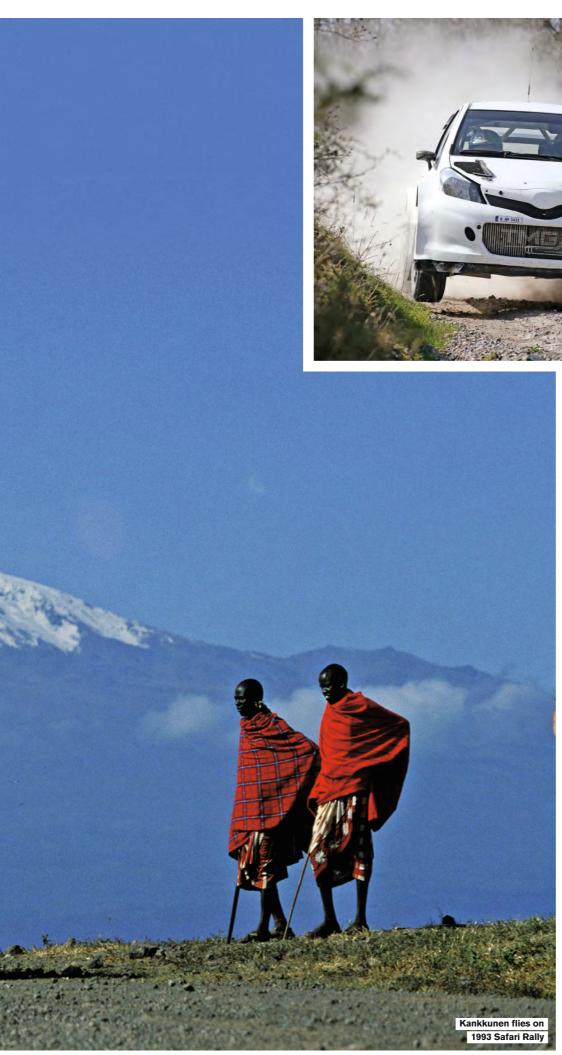
TOYOTA'S HONECOMING

Toyota's World Rally Championship return was confirmed last month, and the great thing is that there is plenty of sporting heart and soul in the world's biggest car corporation. DAVID EVANS asks how the comeback came about, and retraces history



TOYOTA'S WRC RETURN

The Yaris WRC has been put through its paces ahead of return



orth-east of Jyvasklya, near the town of Laukaa, sits a farm. It's a big farm with plenty of land and outbuildings. Late last July, two men sat in one of those buildings and looked at a pig; a 'Whistling Pig'. In that moment, Toyota's return to the World Rally Championship looked good.

One of the two men is Juha Kankkunen, the farm owner.

Sitting opposite the four-time

World Rally champion was Akio Toyoda, president of Toyota Motor Corporation, who was visiting Finland for a nose around rallying's spiritual home and to take delivery of a one-off, four-wheel-drive GT86, developed and built for him by Tommi Makinen, Finland's other four-time title winner.

But for the moment the attention was on a different Toyota, one that cried out for four-wheel drive, one that secured the firm's future in the WRC. The future then, and the future now.

The importance of the Celica Twin Cam Turbo can't be underplayed. Then, it was the late Toyota Team Europe founder Ove Andersson's sprat to catch a Japanese mackerel. Speaking in McKlein's *Rally Cars* book, Andersson recalled: "'The Whistling Pig', as it was affectionately known, really was the car on which the whole company we have today was built on. I used to hate it because it was not four-wheel drive, but when it started to win events it helped us convince Japan that we had a chance in motorsport."

Three successive Safari Rally wins and three from four on the Ivory Coast provided a compelling case in Tokyo. The deal was done and work began on building a bespoke facility in Cologne — the current home of Toyota Motorsport GmbH. Toyota was in and a Group B MR2 was coming.

Thinking back to that moment last summer, of Toyoda looking over his collection including the Twin Cam Turbo, brings a smile from Kankkunen.

"We had a long discussion," he says. "He wanted to see my cars, all of my collection. He is a good man, he's the right man to make the rally team work."

While Toyoda didn't go into the specifics of his short trip to Laukaa, he underlined the importance of what he found in Finland when



"I started to feel strongly that we must return while people still remember" TOYOTA PRESIDENT AKIO TOYODA

▶ he announced Toyota's return to the WRC late last month.

"While I was in Finland," says Toyoda, "many fans asked me when Toyota would return to the WRC. People talked about Toyota's history in the WRC. I was filled with surprise and gratitude that so many people still remembered. I started to feel strongly that we must return while people still remember. We decided to return to the WRC."

Kankkunen leaves you in little doubt that good times are coming back for Toyota and the WRC. "Rallying," he says, voice softening, as though he's not keen on what he's about to say, "has suffered for quite a long time."

No argument there. Brighter, he continues. "Toyota's coming back," he says, "and it's not coming back to play. They are testing the car already. They have the best workshop in the world

and when they come back, I'm sure they come back seriously. Like Volkswagen, they will come back with the car ready to win."

George Donaldson is a man who knows that workshop as well as anybody. He worked at Toyota Team Europe for 16 years. He agrees wholeheartedly with Kankkunen's assessment, but goes further by saying that the firm's heritage demands returning at the same level at which Toyota left: World Rally champion in 1999.

"It would be a crime and people would be turning in their graves — I would turn in mine and I'm not even in it yet — if Toyota came back at anything less than the right level," says Donaldson. "It's clear, Volkswagen is the benchmark for them coming back and they have to have the team in place to deliver."

Few know Toyota in rallying like Donaldson. He

started at the bottom in 1985 and worked his way up the ranks, spending five years as team manager — Andersson's longest server in such a position.

At the height of Toyota's power, Donaldson was spending five months of his year in Kenya, preparing the team for its annual African assault. Those preparations for the Safari Rally were the stuff of legend and a foundation for greatness for the Japanese firm.

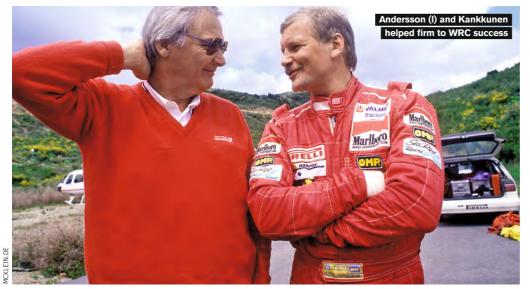
"I loved my time with Toyota," says Donaldson. "And my time in Kenya was incredible, just incredible. We would be doing 25,000 kilometres of testing in those five months; destruction testing, longevity testing — nothing was left to chance. We were charged with delivering a win in Africa every year by Japan and it had to be done."

Much as he enjoyed it, there's nothing rosetinted about his recollections.

"I'm not going to say it was always an easy place to work," says Donaldson. "It wasn't, and Ove wasn't always the easiest guy to work with, but everybody always gave their best. And the legend and the heritage which has been left in world rallying by this team is second to none — and has to be lived up to this time around."

Donaldson remains a familiar face around the Toyota set-up and he says Toyoda's ability to steer the ship could be crucial in the future. "I've spoken with Toyoda-san," says Donaldson. "And I've seen the passion he has for cars and for competing in anything with a Toyota badge, four wheels and a body around it. He simply loves cars and the chance to have him shepherding this project through — not with a direct involvement, but with his oversight — is invaluable."

Donaldson's final year with Toyota was the firm's first season ramping up towards its move into Formula 1. He wasn't part of the disaster that followed, but he is sure that Toyota will have learned from it.



TOYOTA'S LEGACY: THREE OF THE BEST

CELICA TURBO 4WD

If the Celica GT-4 had been cutting edge, the Turbo 4WD took high-tech to a new level, courtesy of famed designer Karl-Heinz Goldstein. The engine was a peach and a powerful one at that, producing more than enough torque to tweak the Xtrac transmission. It's fair to say the handling wasn't all that in the car's youth, and Toyota took the retrograde step of fitting a viscous coupling to finally bring some degree of predictability to the car.

But it worked. And it would go on to become Toyota's most successful rally car ever. Three drivers scored world championship wins with it - Carlos Sainz, Juha Kankkunen and Didier Auriol. And, it's fair to say that for the Frenchman to win in 1994, the car's handling must have been sorted - Auriol never was one to deal particularly well with a car working against him. In 1993 and '94, Toyota did the double, taking the manufacturers' crown as well.





CELICA GT-4

Finally, a car to challenge Lancia's Delta - the ultra-dominant force in the early post-Group B years. And the Celica codenamed ST165 certainly got in the face of the Turinese, but it didn't exactly hit the ground running. Overheating issues plagued the car initially, after it was homologated with blanking plates over the cooling holes in the bumper. And, when the engine was delivering everything it had got, the transmission couldn't be completely relied upon. It wasn't unusual for the car to unexpectedly fire all that power to the rear wheels.

One of the positives for Toyota was that it was pioneering new technology and, once teething troubles passed, the car showed it had pace enough to carry Carlos Sainz to the 1990 drivers' title and sufficient dependability for Bjorn Waldegaard to take the Safari that same year. While the car departed the WRC at the end of '91, it continued to thrill national crowds for years to come - especially in the hands of drivers of the calibre of Austin McHale.

TOYOTA CELICA TCT

Should we include the Corolla WRC? In terms of podiums and consistency, we should. In terms of winning around the world, we should. Granted, the Celica Twin Cam Turbo won more rounds of the WRC than the Corolla - six to four - but it didn't win one outside Africa.

The TCT was the very antithesis of its Group B rivals, the archetypal knife in a gun fight. Power was no problem. Even in the early days in 1983, the KKK blower could be wound up to knock on the door of 400bhp, but turning that into forward motion was where this rear-wheel-drive car struggled. Able to stretch its legs across Africa, nothing could touch the Celica for speed, while it's giraffe-style long-legged suspension meant it could cross pretty much anything.

And, far more than the Corolla WRC, it was the car that cemented Toyota's future in rallying.





"You have to respect a manufacturer's decision to come in and out. But now I'm happy" carlos sainz

"I have no doubt that if there were lessons to be learned, the right people have learned them," he says. "You only have to look at their next foray into the international racing arena – their World Endurance Championship project – to see how successful this company can be. And, let's not forget, the WEC wins have come from a budget minuscule in comparison with what was being spent on F1."

Eight years. That's how long Toyota Racing plodded on in F1, achieving nothing apart from a candid demonstration that massive resource is no guarantee of success.

Walking down the Melbourne pitlane in 2006, camera flashes lit up the early evening Victoria gloom. More than four years after the team's grand prix debut, a podium finish – a third, for Ralf Schumacher - was still worthy of

celebrating with a team picture.

Carlos Sainz could have been part of that team picture. In 1990 with Toyota, he became the first man to win a WRC title with a Japanese manufacturer. Nine years later, the Spaniard was offered a place at the F1 table next to Andersson.

'Ove wanted me to go with him," reveals Sainz. "He wanted me alongside him, working in the management."

Sainz stuck with what he knew best, and carried on winning in rallying. But his loyalty to Andersson and Toyota mean criticism of the move to F1 sits awkwardly.

"You have to respect a manufacturer's decision to come in and go out from motorsport," says Sainz. "It was difficult. But now, I'm happy. I'm double happy: happy for the championship and happy for Toyota; rallying has been my life and

Toyota and Ove are a very big part of that."

Kankkunen adds: "When you look at the time in Formula 1, afterwards it's easy to say they were wrong to go there. But, at the time, they were right. They had won a lot [in WRC] and this was next. And they learned a lot in this time..."

Kankkunen's diplomacy is to be applauded. Then again, such tact wasn't exactly uncalled for in his time with TTE. Let's skip back briefly to Spain's Costa Brava, 20 years ago this autumn. Arriving at the start of the 1995 Catalunya Rally, a top-three finish would be enough for Kankkunen to seal his fifth championship title.

Kankkunen was never altogether at home on asphalt, but the wide sweeping stages inland from Lloret de Mar were the best of his bad lot. It showed. He rocketed into the lead, delighting in the power coming from his Celica GT-Four. Mid-way through the event, Colin McRae's co-driver Derek Ringer observed with trademark dry wit: "I have just one wish for this event next year: could the organisers please refuse the entry of Mr Kankkunen, so the rest of us might have a chance of winning!"

Ringer could have had no idea just how prophetic those words were. Ultimately, Kankkunen crashed out of the lead. But, just over a day later, the turbocharger from Didier Auriol's fourth-placed car lay in pieces before an FIA scrutineer. FIA president Max Mosley later labeled the adjustable air-intake valve as the most complicated and ingenius invention he'd seen.

The thinking was that under power the intake would swallow 25 per cent more air. That figure wasn't thought to have been replicated in terms of power output. But it certainly hadn't made the factory Celicas any slower.

Mosley threw the book at Toyota. Not only would the team and drivers lose all of their points



WHY THE WRC TIDE IS TURNING



If we include Ford – the M-Sport Fiestas have no direct involvement from the Blue Oval – then the World Rally Championship will have four of the world's six best-selling car makers involved when Toyota returns in 2017.

Hyundai and Volkswagen may be heavy hitters, but the number-one car maker of them all is the one that will really add credibility. Understandably, WRC Promoter has been trumpeting this stat or a variant of it regularly and often since Akio Toyoda uttered the words "we're coming back..." last month.

But, what does it really mean to have these auto-industry big guns?

It means that the World Rally Championship is starting to really get the mix right again. It's



getting back on track and WRC Promoter has to take some credit for that

What's vital for high-volume car producers is that their hardware is seen by the maximum number of people. And, if those people can see a run-of-the-mill car such as the Fiesta, Polo, i20, DS3 or Yaris in a sporting, competitive, edgy arena then all the better. What's vital here is the link with the man on the street. The philosophy of winning on Sunday and selling on Monday has never been stronger than it is now – just look at the weight Volkswagen is chucking behind its success ads in newspapers around the world.

Winning rallies such as Monte Carlo or the RAC has always been a massive deal for manufacturers, but where the WRC has fallen down recently is in spreading the word. Television figures have hit rock-bottom in recent years while a lack of investment has hit the championship's ability to connect with the cyberspace generation hard. But that's changing; the telly's on the up and the internet offering's not far behind it.

And that's why the likes of Toyota are coming around to the WRC way of thinking.

Granted, the Yaris doesn't look as purposeful as a Castrol-coloured Celica GT-4, but fear not. It's noisy, gnarly and a whole heap quicker than anything Toyota's ever sent down a stage.

from 1995, but Toyota was banned for '96.

Understandably, Kankkunen was livid at the time. And remains pretty miffed today. "I was upset because the drivers were excluded," he says. "It's the engineers and the mechanics who built the car; our job was to drive it — we have nothing to do, nothing to say, about whether the car is legal or not. How could we check? We trusted the people who were building the car, then we went and did our best."

Surprisingly, Kankkunen rejected offers from Subaru and Ford and stayed loyal to Toyota through 1996. He has no regrets today. "Somebody made a mistake," he says, "it happens — we all make them. But, you know, I had a nice career — three times I was with Toyota and for nine years in total. And I wouldn't change a day of that time, not even *that* day. You learn something every day, especially days like those."

From the moment Walter Boyce took the

Corolla's first big win on the 1973 Press on Regardless Rally, Toyota has been learning. There's more learning to come in the next two years but, when Cologne comes back to class in 2017, it'll be welcomed like never before. The arrival of the world's biggest car maker is as big a shot in the arm as the WRC could have hoped for — and what's even better is that the man driving the deal is as desperate as the rest of us to get behind the wheel to give the Yaris WRC a good go.



THE OTHER BATHURST

The Mount Panorama circuit is best known for its Bathurst 1000 V8 Supercar race. But the

Bathurst 12 Hour is one of international sportscar racing's growth events. By PHIL BRANAGAN

errari wins Bathurst.

You never saw that advertisement, did you? Of course not; Ferrari does not advertise its racing successes — or anything else, for that matter. And anyhow, how would the Prancing Horse triumph over all those V8 Supercars down under?

The answer is, it didn't. The Ferrari that was doing the winning last year was Maranello Motorsport's 458 Italia GT3, driven by Mika Salo, Craig Lowndes, John Bowe and Peter Edwards. And the race was not the V8 Supercars-only Bathurst

1000; it was the Bathurst 12 Hour. This year, it was Nissan that prevailed in a stunning finish, with another impressive graduate of the marque's GT Academy, Katsumasa Chiyo, climbing from third to first in 30 seconds.

Over recent years the Bathurst 12 Hour has grown to the point where it is becoming one of the sport's must-do races. Many teams around the world now include a trip to Mount Panorama on their international programmes — and more are planning to do the same in 2016.

There has been racing other than the 1000km (originally 500-mile) touring car classic at Bathurst for decades. Before Formula 1 went to Adelaide and then Albert Park, an Australian Grand Prix was held at the track on four occasions, and the popularity of the traditional Easter event (which held races for entrants on two, three and four wheels on the track and similarly entertaining clashes between bikers and police off it) almost rivalled that of the October race. But for many



years anything that did take place on the rolling and winding 'tourist road' paled in comparison with the 161-lap V8 Supercar classic.

But there have been other events, and the history of the 12 Hour goes back to 1991. Promoter Vince Tesoriero saw Group A Touring Car racing in Australia declining and organised a 12 Hour race for Production Cars at Easter. On short notice only 24 cars entered, but the following year the grid was bigger and included factory-backed teams from Mazda and Holden. By 1995, though, the race moved to Eastern Creek in Sydney, where it was run for two years before being discontinued.

In 2002 and '03, Bathurst was back, hosting a 24-hour race that was dominated by works-backed Holden Monaros. But it never quite grabbed mainstream or specialist attention; Peter Brock was among the winning drivers in one of the 24 Hour races, but nobody counted it alongside the nine wins he achieved in the October race.

Rising costs put an end to the 24 Hour but when the Bathurst Motor Festival was revived for 2007 (again, over Easter) a 12 Hour race for Production cars was included. Entries grew and the race proved popular among competitors, who could club together and raise the budget to compete even for the outright win. In four years, cars such as BMW's 335i and Mitsubishi's Lancer Evo won twice each. The race was moderately successful but media interest was pretty modest, unless there was a telegenic crash worth showing on the evening news.

Promoter James O'Brien saw potential in the race but with that potential came some risk. For the 2011 event he opened up the entries for the first time to include GT3 cars. Facing being blown off the track by factory-backed racers that cost up to 10 times as much as their production cars, local teams voted with their feet and stayed away in droves in '11.



▶ In a field barely half the size of that in the 2010 race, two Joest Racing Audis came, saw and conquered the race. The following year, the field was barely any bigger and Audi won again, this time with Phoenix Racing. The racing was entertaining but compared with the Bathurst 1000, which often featured drivers who were household names battling all the way to the final corner, it was not quite great.

But by 2013, the word was spreading and the attraction of racing at one of the world's great tracks was brighter than ever. Mercedes-Benz may have delegated its assault to local team Erebus Motorsport but there was no doubting the factory's intent when its squad of international drivers, led by Bernd Schneider, won. Last year, with a much bigger grid, the race really hit the heights; at one point, mid-race, leader Mika Salo's Ferrari and Shane van Gisbergen's McLaren were banging mirrors at 130mph mid-corner — and live on national television. The 1140-mile race was broadcast live for the last three hours, and the battle for the win went to the very last corner, as Salo's co-driver, V8 Supercar legend Lowndes, just held off the Mercedes of Max Buhk.

A Bathurst veteran had held off a young newcomer — exactly as Bowe had done against Lowndes 20 years previously in the Bathurst 1000. In an almost equally engrossing battle for third, two seconds behind, Will Davison beat V8 Supercar rival van Gisbergen for third.

If anyone had held any doubts that the 12 Hour had grown up, there were none now. The day after the 2014 race, the date for the '15 event was confirmed. Teams, both in Australia and around the world, started to make their plans. Then the

Seven television network, which faced losing its V8 Supercar deal at the end of the '14 season, signed on as host broadcaster. The race, all 12 hours of it, was going to be shown live on free-to-air TV. It was looking like the 12 Hour had broken through at last.

But there was a fly in the ointment. V8
Supercars was planning a Test Day for early 2015
and by mid-'14, rumours swirled that it was going
to be on the same weekend as the 12 Hour — at
Eastern Creek, 120 miles east of Bathurst. Sure
enough, when the V8 calendar was confirmed,
it included a 'SuperTest'. It was on the same
weekend — and all V8 Supercar drivers were
required to attend, all the time. So they were
out of the 12 Hour.

V8 Supercars claimed that the clash was unfortunate, but was due to the scheduling requirements of its new pay-TV partner, which was tipping in huge money to be the host broadcaster. Pretty much everyone else in the sport saw it as a snub to ensure V8 Supercars' drivers did not add any shine to someone else's event. What's the truth? That question is probably best asked later this year, when the V8 Supercar calendar is released and when it will be known whether there will be a similarly inconvenient date clash in 2016...

So, 29 GT3s entered for this year's 12 Hour — 16 from Australian teams, 13 from internationals, including AF Corse (Ferrari's de facto works team), NISMO and Bentley M-Sport. By comparison, last October 26 V8 Supercars raced in the 1000; 25 regular entries and one 'wildcard'.

It's not an easy race to do. Australia is a long way from a lot of teams, and Bathurst is a decent



road trip, even from Sydney. The decision by Bentley to go all that way and race in a country where, according to Australian automotive statistics authority VFACTS, the brand sold 135 cars last year, shows that the event is becoming a magnet for teams.

Said Bentley spokesman Mike Sayer: "After our successful debut season last year, we wanted to tackle the greatest GT3 endurance races in the world — and there's no doubt that the Bathurst 12 Hour fits the description. Bentley's motorsport pedigree is built on endurance racing, and with Bathurst, the Nurburgring 24 Hours and our second entry to the 24 Hours of Spa this year we'll be pushing the Continental GT3 as hard as we can. Bathurst is a track steeped in history,

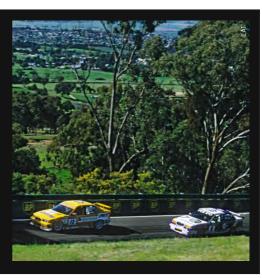
TWO BATHURST 1000S IN TWO WEEKS?

It sounds impossible, but it happened, in October 1997. AVESCO, a consortium made up of V8 teams and sports promoter IMG, had taken over V8 Supercars and its championship was shown on one Australian TV network. Problem was, the Bathurst 1000 was not a part of that championship – and the race was televised (and, in part, owned) by a rival TV network. Deadlock.

The 'solution', such as it was, was that no V8 Supercars would enter the 1997 Bathurst 1000. The Australian Racing Drivers' Club, the race's promoter, invited entries for Super Touring cars, and for two years the cream of the BTCC showed up to take on the local 2-litre entries. The score ended up 1-1; in 1997, the Australian BMW team

won (and would have had a one-two if not for a driving-time-limit infringement). A year later, TWR's Volvo and a Team Dynamics Nissan, each car with one BTCC star and one Richards (Jim and son Steven) fought a day-long battle, in which the Swedish S40 prevailed.

A fortnight after the '97 'official' 1000, and a month after the '98 version, a 'Classic' 1000km race was conducted at the same track. But it couldn't last. V8 Supercars' profile and economic health were on the way up, but Super Tourers in Australia were going in the other direction. In 1999 there was one 1000km race on the Mountain and, shortly after, a deal was struck and peace returned to Australian touring car racing.





globally recognised as one of the toughest circuits in the world, and we love a challenge!"

From a driver's point of view any opportunity to race at Bathurst is usually a good one, but the 12 Hour is different to the 1000. One man who knows how different is Oliver Gavin, who raced in his second 12 Hour in a privateer Audi R8 last weekend and who finished third in his debut Bathurst 1000 last October.

"I love it," he says. "I really enjoyed the race last year. It's a unique circuit and a unique event.

"The fact that there is really only 12 hours of daylight there at this time of year means that you are doing a formation lap in the dark and the sun is just creeping up over the horizon — and it's much the same, the other way, when the race is finishing. It is challenging.

"Add that with the field of cars that we have this year and the competition that's there, and the challenge of 12 hours at Mount Panorama, and the race is growing in stature. You cannot get much track time at Bathurst and I want to go back and do the enduros in a V8 Supercar, so having extra experience is critical."

But if the 12 Hour race has evolved and increased its profile, Gavin thinks that it's still not on the same level as the 1000.

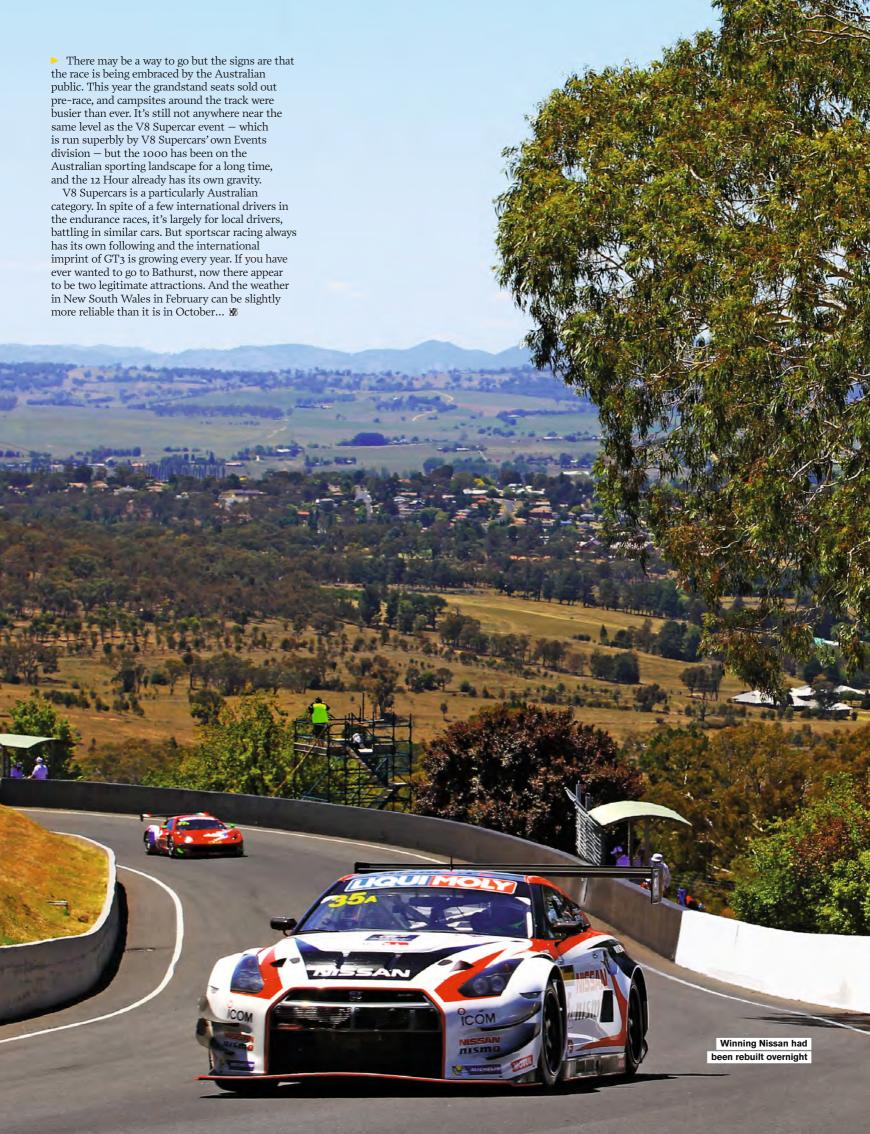
"There is [a different approach]. There is more pressure in the 1000, without a doubt. There is so much expectation at the Bathurst 1000, from everyone, from the media, the team, the team manager and sponsors... it is such a *huge* race and there is so much riding on it. If you have a good weekend it can make or break your year.

"You need to deliver in the Bathurst 1000, and I'm not saying that's not the case in the 12 Hour. But you have a lot riding on the Bathurst 1000."



"With the field we have, and the competition that's there, the race is growing in stature" OLIVER GAVIN





RACE: CHIYO'S REDEMPTION

It's probably fair to say that, at 0430 on Sunday, Katsumasa Chiyo was not the most popular man in Bathurst

That was the time that the RJN mechanics finished the repairs on the Nissan GT-R Nismo that Chiyo crashed late in qualifying. With just over an hour before the start of the race, the hard-working mechanics shrugged, ate some breakfast, and prepared for the second half of their 36-hour 'working day'.

That day ended with Chiyo taking two places, and the lead, within 30 seconds in the Bathurst 12 Hour, on the penultimate lap of the race. The Japanese and co-drivers Wolfgang Reip and Florian Strauss gave Nissan a famous win in what was a difficult race.

With two laps remaining it was Matt Bell holding on to the lead in his Bentley, ahead of poleman Laurens Vanthoor (Phoenix Racing Audi) and Stefan Mucke (Craft Bamboo Aston Martin). But Bell was shoved wide on the final corner and dropped to fourth, on a day that promised much for Bentley. The M-Sport cars became more competitive as the race wore on, though ironically late-race safety cars caused by Bentley men Maxi Buhk and David Brabham bunched the field for a final sprint.

Jack LeBrocq/Dean Canto/Richard Muscat took fifth in their Mercedes, ahead of the Vicious Rumour Racing Ferrari 458 Italia, which started dead last but which was hauled to sixth by Andrea Montermini, Benny Simonsen and Renato Loberto, David Russell/Steve Owen/ Roger Lago were seventh in their Lamborghini Gallardo, making it seven margues in the top seven placings.

The Lamborghinis looked fast but failed the reliability test, while the more fancied Ferraris all struck problems, starting with Maranello Motorsport losing its 458 in a practice crash with Tony D'Alberto at the wheel. Last year's race winners were unable to start, leaving Mika Salo and Ben Collins without a drive.

It was a race marked by carnage, with safety cars appearing 20 times. No one was seriously hurt - the MARC Mazda of Ivo Breukers had the biggest hit after receiving an elbow from Bathurst rookie Felix Baumgartner







1 Katsumasa Chiyo/Florian Strauss/Wolfgang Reip (Nissan GT-R Nismo GT), 269 laps in 12h00m11.0280s; 2 Laurens Vanthoor/Markus Winkelhock/Marco Mapelli (Audi R8 LMS ultra), +2.4529s; 3 Stefan Mucke/Darryl O'Young/Alex MacDowall (Aston Martin Vantage GT3); 4 Steven Kane/Guy Smith/Matt Bell (Bentley Continental GT3); 5 Jack LeBrocq/Richard Muscat/Dean Canto (Mercedes SLS AMG GT3); 6 Andrea Montermini/ Benny Simonsen/Renato Loberto (Ferrari 458 Italia GT3); 7 Roger Lago/Steve Owen/David Russell (Lamborghini Gallardo); 8 Toni Villander/ Matt Griffin/Mok Weng Sun (Ferrari); 9 Stephane Ortelli/Christopher Haase/Felix Baumgartner (Audi); 10 Christopher Mies/Mark Eddy/Marc Cini (Audi). Fastest lap Winkelhock, 2m03.3091s (112.708mph).



QATAR RALLY

Nasser Saleh Al-Attiyah (above) took a record-breaking 12th win on his home event, round one of the 2015 FIA Middle East Rally Championship. The reigning champion won all but two of the 12 stages in a Ford Fiesta RRC to secure a 55th career MERC win. Sheikh Khalid Al-Qassimi lost time with a puncture and driveshaft problems before climbing back to second when Yazeed Al-Rajhi retired with broken suspension.

NZ FORMULA FORD

Taylor Cockerton dominated the Taupo round, winning all three races by big margins of up to 14 seconds. In each race Aaron Marr came second and Caleb Cross third. All three drove Mygales.

ANDROS TROPHY

The series' St Die des Vosges Superfinale was won by Renault Clio pair Marlene Broggi and Jean-Baptiste Dubourg (below). The event doesn't count for points, and each car's regular Elite 2 'Am' driver contested the first heat before the Elite 'Pros' took over. Champion Jean-Philippe Dayraut's co-driver gave him a lowly grid position and he then crashed his Mazda into a snowbank.





TOYOTA RACING SERIES TAUPO (NZ), FEBRUARY 7-8 RD 4/5

MacLeod and Maini on top

SAM MACLEOD WON THE FOURTH

round of the Toyota Racing Series after adopting a new approach.

Raw speed mixed with mishaps had characterised the Edinburgh driver's performance in the earlier rounds, but at Taupo's penultimate meeting he decided to be slightly more conservative.

He followed up his victory in the opening race with finishes of sixth, third and fifth to take the overall round win from championship leader Lance Stroll and Brandon Maisano.

"I've had the speed and a few good results but now I want to get the points," MacLeod said. Overtaking was difficult on this circuit, he added: "When you follow another car, your car gets skittery."

Stroll took a similar approach, wanting to protect his lead as the championship nears its end. "I'm

trying to be consistent, making sure of getting points in every race," said the Canadian, who recorded finishes of third, fourth, second and 11th (with an engine problem).

Maisano won races two and three but a collision at the start of the final sent his car flying high through the air. He escaped unhurt.

Indian Arjun Maini finished first in the opening race but, for the second time in the series, lost his victory for a start infringement.

He came back to win the feature race, the Denny Hulme Memorial Trophy, after intense pressure first from Irishman Charlie Eastwood and then — after Eastwood overshot the chicane — Russian GP2 driver Artem Markelov. "It was really hard — my tyres were really old and I was struggling for grip," Maini said.

Markelov reckoned he needed just

another lap or two to overtake the leader. Eastwood finished third and set the fastest lap.

English racer Callum Ilott won the start of the feature event but then the race was red-flagged because of Maisano's crash.

Bernard Carpinter

RESULTS

Race 11 Sam MacLeod, 15 laps in 23m13.290s; 2 Santino Ferrucci, +0.497s; 3 Lance Stroll; 4 Tom Randle; 5 Sergio Sette Camara; 6 Brandon Maisano. Race 21 Maisano, 15 laps in 22m50.496s; 2 Ferrucci, +2.107s; 3 Randle; 4 Stroll; 5 Stefan Riener; 6 MacLeod. Race 31 Maisano, 15 laps in 22m50.193s; 2 Stroll, +1.283s; 3 MacLeod; 4 Arjun Maini; 5 Damon Leitch; 6 James Munro. Race 41 Maini, 20 laps in 29m29.298s; 2 Artem Markelov, +0.274s; 3 Charlie Eastwood; 4 Munro; 5 MacLeod; 6 D Leitch. Points 1 Stroll, 726; 2 Maini, 641; 3 Maisano, 624; 4 Ferrucci, 592; 5 MacLeod, 503; 6 Randle, 468.

RC RALLY LIEPAJA (LV), FEBRUARY 6-8 RD 2/10

Breen keeps it clean to win

HAVING FAILED TO GET BEYOND STAGE went off on Saturday's closing run,

one in Austria, Craig Breen made it through all 11 in Liepaja, and the Peugeot man did so with an advantage of more than a minute for his first ERC win in almost a year.

Irishman Breen moved in front on stage two when Alexey Lukyanuk, who was fastest by 0.7s on the opening test, crashed out. Round one winner Kajetan Kajetanowicz remained a constant threat until he



went off on Saturday's closing run, after which Breen's biggest challenge came from the Latvian weather.

Warm temperatures before the start left the first leg's stages coated in slush and mud but overnight snow — plus significant snow showers on Sunday morning — made for more demanding conditions. But Breen survived to win ahead of ERC2 victor Siim Plangi's Mitsubishi.

Graham Lister

RESULTS

1 Craig Breen/Scott Martin (Peugeot 208

T16), 1h56m49.1s; 2 Siim Plangi/Marek Sarapuu (Mitsubishi Lancer Evo X), +1m40.7s; 3 Dominykas Butvilas/Kamil Heller (Subaru Impreza WRX STI); 4 Martins Svilis/Ivo Pukis (Mitsubishi); 5 Robert Consani/Maxime Vilmot (Peugeot 207 S2000); 6 Emil Bergkvist/Joakim Sjoberg (Opel Adam R2). Points 1 Kajetan Kajetanowicz, 45; 2= Breen & Consani, 40; 4

Alexey Lukyanuk, 32; 5 Plangi, 28; 6 Butvilas, 23.

BRAZILIAN F3 CURITIBA (BR), FEBRUARY 7-8 RD 1/8

Piquet loses double shot

A BATTERY PROBLEM PREVENTED A

double win for Pedro Piquet as he began his bid for a second successive domestic F₃ title.

Piquet dominated the weekend on pace in his Cesario Formula Dallara and comfortably led home Prop Car-run Rodrigo Baptista in the opening race.

Matheus Iorio got into the lead of the reversed-grid second race before team-mate Piquet overtook him on lap four. But with a few laps left Piquet slowed and stopped, allowing Iorio to win from Artur Fortunato.

An enormous pile-up on the



opening lap removed half of the field (including all seven cars in the Lights class for old Dallara F301s), so Piquet was still classified in sixth place!

RESULTS

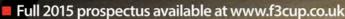
Race 11 Pedro Piquet (Dallara F309), 19

laps in 27m21.193s; 2 Rodrigo Baptista (F309), +6.682s; 3 Matheus Iorio (F309); 4 Guilherme Samaia (F301); 5 Matheus Muniz (F301); 6 Leonardo de Souza (F309). **Race 2 1 Iorio**, 23 laps in 31m34.542s; 2 Artur Fortunato (F309), +6.153s; 3 Baptista; 4 Christian Hahn (F309); 5 Giuliano Raucci (F309); 6 Piquet. **Points 1 Iorio, 24**; 2 Baptista, 21; 3 Piquet, 18; 4 Fortunato, 12; 5 Raucci, 8; 6 Hahn, 7.

F3/CUP

The only F3 Championship in the UK and the most cost effective in Europe!

- For Formula 3 cars from 1981 2011
- Superb calendar including Brands Hatch and Silverstone Grand Prix circuits and a European race in Spa
- Up to three races per weekend
- Minimum licence requirement Race National B
- Season registration fee £280
- Entry fees from £425
- Selected races to be televised on Motors TV
- Arrive and Drive packages available
- Cars available to purchase at www.f3cup.co.uk





competitors to race Formula 3 machines in a championship dedicated to that car. The series has its own website, dedicated Coordinator and Eligibility Scrutineer. And it is the ONLY place in the UK exclusively for F3 cars. The championship is aimed both at career drivers and amateur racers, who can all participate in a friendly and remarkably affordable Formula Three championship."





"Stepping straight from karting into the F3 Cup Championship has been a tough but fantastic experience. Having considered many other championships, racing an F3 car against experienced drivers seemed an obvious route for me. I gained tremendous experience not only in learning a highly technical car, but also gaining insight into professional racing and how championships are run."

WWW.F3CUP.CO.UK

2015 CALENDAR[®]

Oulton Park International

25-26 April Donington Park

16-17 May Brands Hatch

26-28 June Spa Francorchamps

25-26 July Snetterton 300

15-16 Aug Brands Hatch GP

12-13 Sep Silverstone GP

* Provisional









SUBSCRIBE TO AUTOSPORT FOR ONLY £6 EVERY 6 ISSUES

PLUS FREE DIGITAL EDITION & UNLIMITED ACCESS TO AUTOSPORT.COM



SUBSCRIBER BENEFITS...

- ✓ **JUST £6** for your first 6 issues, thereafter pay only £34.99 every 13 issues
- ✓ NEVER miss an issue
- ✓ FREE delivery direct to your door
- ✓ **UNLIMITED** access to news and views from the paddock
- ✓ ACCESS TO subscriber-only offers and discounts

CALL 08448 488 817 AND QUOTE ASPO15 OR VISIT

www.themagazineshop.com/taspo/aspo15

Terms & Conditions: This offer is open to UK residents only. If you require any assistance following the purchase of your subscription, then you can speak to a member of our customer service team on 0795 592 974, calls are charged at local rate. Overseas rates are available on 44 (01 1975 952 974. Please allow 35 days for delivery of your first issue. To activate your Autosport online account visit https://secure.autosport.com/subs/activate.php and enter your activation code (your personal magazine subscriber number withic will be included in your welcome email.letter long with your email address to access your extra Autosport content. Price is £6 for your first 6 issues then continuous Direct Debit payments of £3.49 every 13 issues unless you cancel. Direct Debit Irates are flexed for 12 months after which they may be subject to change - should prices change you will be informed in writing. Details of the Direct Debit guarentee are available on request. Should you wish to cancel the subscription thereafter it will be cancelled on expiry of your current term. Savings are based on the standard UK cover price of £3.60. Offer ends 28th February 2015.





TW STEEL SIPS



£199*Enduro £17.5* Heats £304* Both Cumulative Loyalty Discount of 2.5% for each round entered. Heats Full Season £1566* Enduro Full Season £1780*

February 15th Daytona Milton Keynes - International March 15th Daytona Sandown Park - GP Circuit April 19th Whilton Mill - Extended Circuit May 17th Ellough Park - Full Circuit June 21st Daytona Milton Keynes - Cliff Circuit July 19th Rye House - Full Circuit August 16th Daytona Sandown Park - Alternate Circuit September 20th Clay Pigeon - Full Circuit October 18th Daytona Tamworth - Extended Circuit November 15th Daytona Milton Keynes - International

*all prices include VAT

Tel 033 033 278 70 or visit www.daytonamax.co.uk

Blomqvist's Munich cheer festival

The career of British-born Tom Blomqvist had been a struggle before last year.

But a cracking season in European F3 led to a starring BMW test, and now he's a DTM debutant. He talks to MARCUS SIMMONS



nce the dust cleared on Formula 3
Armageddon in last November's
Macau Grand Prix, once he
clambered free of the Carlin Dallara
in which he was cocooned as first
Esteban Ocon's broken machine
veered him into the barrier as they
dueled side-by-side for the lead,
and then Yu Kanamaru vaulted
him Evel Knievel-style before
landing on the wall next to his
head, the first reaction for Tom
Blomqvist was acute disappointment.

But, for pretty much the first time in his four-year F3 career, the 21-year-old wasn't racing for his very future in the sport.

He'd already secured that over the course of 2014, and all the signs were that Blomqvist would be graduating to the World Series by Renault's headlining Formula Renault 3.5 category along with Sean Gelael, son of the Indonesian KFC magnate who rescued his career when he was dumped by Red Bull at the end of '13.

Before heading to Macau, Blomqvist had been sounded out about a test for BMW's DTM team at Jerez in early December. Of course he hoped to do well, as any competitive young guy would do, but he was up against some serious talent: Alex Lynn, Jack Harvey, Robin Frijns, Richie Stanaway, Sam Bird and Lucas Luhr were all given the same opportunity. Also, he'd tested DTM machinery before (a Mercedes in the 2010 and '11 McLaren AUTOSPORT BRDC Award tests, and an Audi at the end of '12), and not done the job he'd hoped to.

"It was quite a competitive test," he chuckles. "I think we all had an idea that there was a seat available for 2015. I thoroughly enjoyed it and it went pretty well from my side...

"When I tested for the AUTOSPORT Award it was wet and I didn't do many laps, and to be honest I was pretty average in that thing back then. I didn't get on with it very well at all. Jerez was the first time I'd driven a new-spec DTM car and it's a little bit different, and for me it felt like the first proper DTM test.

"It did take a while for me to adapt to the BMW initially, I must admit. The weight of the car and the power steering were the biggest things — the inputs you get through the steering "I always believed in myself, but it was so hard to get anywhere. There were times when I didn't want to race anymore, that I thought, 'It's bullshit, this sport'" **Tom Blomqvist**

wheel are quite a bit different but, once I got my head around it all, it clicked and went quite well."

Well enough for him to hugely impress the bigwigs in Munich, resulting in Blomqvist being given a multi-year (he won't say how many) contract to race in the DTM, starting this season alongside Augusto Farfus at the Belgian-run RBM team. Each of the seven drivers at Jerez was given an identical programme, run over a rolling one-day itinerary. But whereas some ran a morning and afternoon session on the same day, Blomqvist started after lunch one day before coming back after a night's sleep to finish off. "When I jumped back in it in the morning, it was game on," he says. "The track at Jerez is so much better in the morning and it really went well. With everyone on the same programme we were being compared against one another - we did a few qualifying simulations and a few race runs to try and give us a full experience of it all."

Once the offer had come from BMW, the next thing was to tell Gelael's father Ricardo. "Without Ricardo and Sean I wouldn't have raced last year," says Blomqvist. "Ricardo

always said all along that if something came up I had to take it. I think he had the DTM in the back of his mind, and when it became sure he was happy for me."

The Gelaels weren't the first to have come to Blomqvist's salvation, and he acknowledges the continuing support of manager Mark Blundell and the many beyond-the-call-of-duty assists of EuroInternational team boss Antonio Ferrari, whose squad he first raced for in the 2010 Macau GP Formula BMW support race. It's been tough for a driver who, as the son of 1984 World Rally champion Stig Blomqvist, many thought must have the funding to take him through the sport. But Blomqvist Sr, while a great, down-to-earth bloke, is not made of money, and he's no schmoozer either.

"Dad was leaving the sport when the big money started to come in," says Blomqvist, "and he hasn't got the business sense of other guys who have gone on to be successful outside the sport. He grew up driving, and that's all he knows. Apart from the very early days in karting, he's never been in a position to fund my racing.



NEW ZEALAND'S KARTING BRATPACK

It's easy to hate some people; for Europeans enduring a cold, gloomy winter, the January Twitter pics of Tom Blomqvist, Nick Cassidy and Mitch Evans having fun in the spectacular, sunny scenery of New Zealand were a source of regular irritation!

English-born Blomqvist started karting shortly after moving to New Zealand as a kid, and two of his main rivals were Cassidy and Evans. Now one is a DTM driver, one (Cassidy) is Toyota's main hope with top Japanese F3 team TOM'S, while the other (Evans) is a long-time Mark Webber protege and established GP2 ace. Racing as schoolboys on the other side of the world, did they have any idea how good they were?

"Not on an international level." savs Blomqvist. "We thought we were good, but I remember looking at European karting and

going, 'Wow!' Those guys were the next level - I don't think I'd have been able to come to Europe and be competitive.

"Brendon Hartley had just left karting, Earl Bamber was just a little above, and then out of us Nick was the cream of the crop - he was really good. It's unbelievable where we are now.'

They were good buddies, and still are: "I used to go to Mitch's house, and sometimes all of us would be at Nick's. We have a lot of good memories and we have a little group thing still going at the moment. We've had some laughs over the years! I don't know yet whether Mitch has got anything sorted out for 2015, but Nick's made a good decision going to Japan and the job he did in Macau [where he finished on the podium in only his fifth F3 race weekend] was incredible."





Some people dad knew helped me in my first year in Swedish Formula Renault [2009, in which Blomqvist finished third as a 15-year-old]. I was still young and thought it was going to be easy after that, but the budget you need for F3... God, people earn less than that per year.

"But my dad has helped me out – he gave me a lot of his genes so I can't complain too much!"

After winning the Formula Renault UK title with Fortec in 2010, Blomqvist had tough years in German F3 in '11 with Performance Racing (he

broke his back at Lausitz) and in European F3 in '12 and '13 respectively with Ma-Con Motorsport and EuroInternational, both underfunded teams that lacked resources. Blundell had helped him get onto the McLaren junior programme in '12, but that made way for Red Bull in '13 thanks to Antonio Ferrari's recommendations to Helmut Marko and the offer of (some) financial assistance from the drinks giant. When Blomqvist was dropped from Red Bull, the Gelaels' Jagonya Ayam scheme got him a seat with Carlin for '14: he finished second in the championship, behind Esteban Ocon and ahead of Max Verstappen, and outscored everyone from mid-season onwards.

For a young guy who moved from Saffron Walden to New Zealand with his family at the age of seven, the 2011-13 period was a tough time. "Those three years I didn't really get anywhere in doing myself justice," he recalls. "I always believed in myself, but it was so hard to get anywhere. To be honest there were times when I didn't even want to race anymore, that I thought, 'It's bullshit, this sport.' My family is in New Zealand and my dad in Sweden, so apart

from a support crew of friends, I was pretty much on my own, didn't get up to much [away from the track] and it was difficult to see the light at the end of the tunnel. But it's all come good now!"

Indeed, and he's not the only one happy about it. Tom Dillmann owes Blomqvist a few beers, as he has become the driver selected to replace him on the Jagonya Ayam programme alongside Gelael and Antonio Giovinazzi. Blomqvist, meanwhile, still lives with Gelael just outside Bath, although says he's never going to catch up with his housemate's considerable MCing skills ("I'm no rapper mate, although I'd say I'm better than Antonio!"). And, most importantly, he's now a professional driver.

"It's taken quite a while trying to build things back up since I won in Formula Renault," he says. "I owe a lot to Ricardo and Sean and to all the hard work that Mark's done behind the scenes. The way motorsport's been going, there aren't many people out there who are earning money from doing what they love, so I'm very fortunate in that." M







go, Formula 1 has consistently proved to be one of the hardest to enter, let alone succeed in. As 2015 testing cranks up and new stories break, the ghost of Caterham grows fainter while Marussia struggles to be reanimated. It is no secret that F1's current constitution is a wholly unsuitable environment for running a lasting independent and healthy team. With at least three current midfield F1 teams currently facing unsettled and largely uncertain futures, three-car teams have been mooted as a possible solution in the latter part of the current decade.

s modern professional sports

The last time a third chassis came close to entering a grand prix was in 1987. Pretty much all of the necessary ingredients to make a competitive debut appeared to be in place. But it was more complicated than that.

Halfway through that season Middlebridge Racing planned to enter a sole, year-old Benetton-BMW, but it was eventually denied a seat at the F1 table. That was not because of any financial constraints, rather an arduous course of sporting political hurdles that could not be sufficiently cleared.

The deal to run the B186 chassis, which had brought Benetton and Gerhard Berger their first F1 victory in Mexico the previous autumn, was set in motion during the early spring of 1987. The then well-known commercial agent Luciano Secchi had introduced Italian fashion house Trussardi to F1, initially via Bernie Ecclestone.

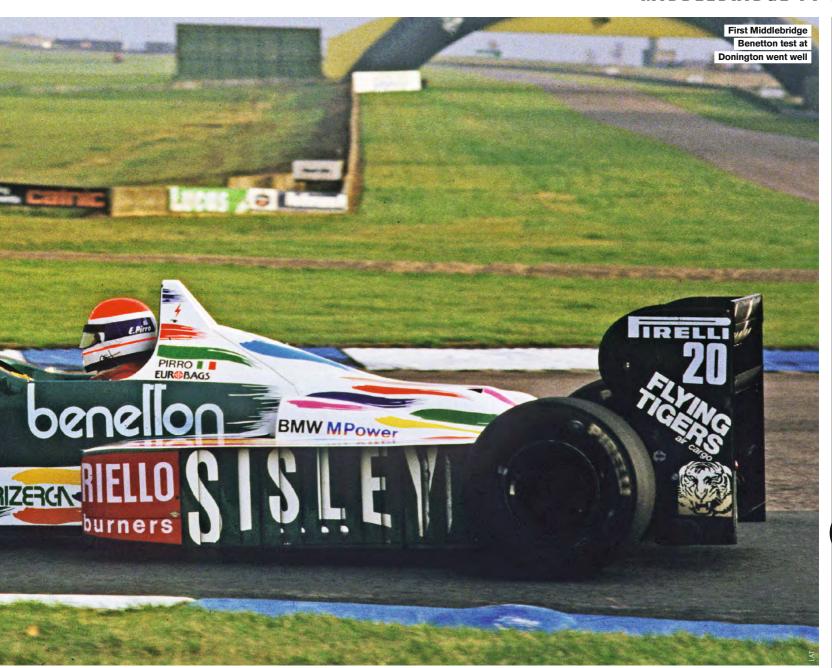
Secchi brokered a deal and Middlebridge team principal John Macdonald approached Benetton boss Peter Collins to acquire two of the B186s. After the deal was done the cars duly appeared in crates at Middlebridge's base in early June.

"The original plan was to just do the Japanese Grand Prix for Mr Nakauchi [Koji Nakauchi, owner of Middlebridge Group]," says Macdonald. "But then the Trussardi deal came out of the blue and I thought we could do it earlier and do the second half of the season.

"We originally intended to race the car with a Hart engine but then we switched to BMW and it all became a lot more complicated because of that particular decision, which led to a whole lot of politics with the other teams, mainly because we had what was potentially a really potent package." Under the expert 'spannering' of former Arrows chief mechanic Dave Luckett, the cars were soon resplendent in a unique half-black and half-white livery. The driver for the planned testing and the first six races was Emanuele Pirro, who had some prior experience with both Benetton and BMW.

Pirro had almost made his F1 debut two years previously when Brabham dispensed with the services of Francois Hesnault mid-season. The Italian impressed the team greatly in testing but Marc Surer was favoured at the last minute,





LEBRIDGE TO McLA

Emanuele Pirro's (almost) entry into the cut-throat world of F1 appeared to be an ungainly careerstalling farrago. At the time it didn't do much for Pirro's state of mind but, as the four-time Le Mans 24 Hours winner explains, it eventually opened more doors than it shut.

"The closer it got to Monza the more anxious I got," he recalls. "We had not run the car at all, not even a shakedown. But actually I wasn't that worried because it was a proven car and had a great engine, so it should have just been a start-up-and-go experience. I was calling John Macdonald every other day and I was quite nervous. I remember he used to say in his funny London accent, 'Be patient... be patient, Bernie is helping us. JUST BE PATIENT!"

But from what looked like a bodyblow to his nascent F1 career, Pirro's luck was actually in. A lucrative - financially as well as in terms of air-miles - deal to become the resident test driver in Japan with Honda was soon to be sealed.

"In 1988 I ended up driving for Middlebridge in Japanese F3000 as well as doing the Honda F1 testing," says Pirro today. "I didn't actually know how the F3000 deal was done but I always got the impression that somewhere along the line John and Koji [Nakauchi] had set things up, and possibly with Bernie's help, to get me the Honda

deal. If that really was the case then I am grateful because I worked with such an unbelievable company in Honda and of course also McLaren with Ayrton Senna and Alain Prost.

"It is difficult to look back with regrets. I tend not to think like this really - it's funny how things work out in F1 and life in general, isn't it?"





"One minute it was, 'We are doing it', the next, 'We're not'. I wasn't in the loop at all" EMANUELE PIRRO

LLERCOASTER RIDE OF MIDDLEB

As histories go, that of the Middlebridge Racing division was particularly fraught. Founded in 1986, the team initially ran Formula Ford 2000 and Formula 3 operations before swiftly climbing the racing ladder.

Middlebridge was a group of companies owned by reclusive Japanese businessman Koji Nakauchi, who initially made his fortune in the Japanese printing industry. But his real passion was British-built classic and sports cars.

Thus the Middlebridge Group purchased, among other things, the manufacturing and tooling rights of niche automotive marque Scimitar from Reliant in late June 1987. One of the first customers of the subsequent Middlebridge Scimitar models was serial owner Princess Anne!

Successes on the race track were modest for Middlebridge, who counted young British racers John Alcorn, Phil Andrews and Mark Blundell in F3 and F3000 among their drivers in the late 1980s and early '90s. Blundell's third place at Silverstone in '89 was their best F3000 result until Damon Hill

enjoyed what was considered to be his breakout year in '90, when he scored three pole positions and a second place at Brands Hatch.

When Nakauchi's business empire, including the Nottingham-based Scimitar car company, started to suffer from their exposure to the Japanese bubble economy, John Macdonald and partner Mick Ralph left and set up their own racing entity and engineering company, Superpower. Unable to stick, Nakauchi twisted and acquired the Brabham Formula 1 team in late 1989. Macdonald was initially involved in Brabham's final full season in 1991 as team manager, along with Dave Price and various others. The visually striking yet worryingly fragile BT59 made little impact, other than on Martin Brundle's and Blundell's frayed nerves.

That same season the F3000 team morphed into Barclay Team EJR, with Hill dovetailing his International F3000 season with Williams F1 testing duties. Fast-forward a year and Hill was making a gutsy F1 debut in a modified version of the Brabham BT60Y, While Hill's future took off.



Middlebridge's erratic racing history died almost as quickly as it had emerged. When the Serious Fraud Office investigated dealings with a finance company called Landhurst Leasing it triggering the collapse of the racing division.

It was an abject end to a fitful racing history which, like its dalliance with Formula 1, promised much yet delivered little.

▶ chiefly because of his deeper and longer relationship with BMW.

"I had a test in 1986 with Benetton at Donington Park," remembers Pirro. "It all went very well and just after this I got a works BMW deal in touring cars as well. Whether or not this helped with the Middlebridge plans I don't know. I was also racing in F3000 (for Onyx) and I also stayed in touch with Bernie quite a bit. Through all of these contacts I was of course aiming to get into Formula 1."

Ecclestone, increasingly focusing on FOCA matters rather than his Brabham team, which he was looking to sell, was well aware of Middlebridge's financial clout via its group of companies owned by Nakauchi. But it would take a further three years and many messy and convoluted episodes for Nakauchi and Middlebridge to acquire Brabham (see panel, left).

Ecclestone and Macdonald were old associates and it is a relationship that endures to this day, since Macdonald is currently employed by Formula One Management.

"Bernie was always a good ally," says Macdonald. "But there was a lot of stuff going on, especially with Arrows. I remember that [Jackie] Oliver even put Trussardi stickers on his car at Silverstone, believing that he had a deal with them. He was soon told to take them off by a load of lawyers. So I suppose he was never going to do us any favours, was he?"

With both cars completed, a test programme for the ex-Berger Benetton B186 was planned to begin in early August — but behind the scenes, all was not well.

The year-old Benetton chassis was deemed to constitute a breach of the original Concorde Agreement since it was a third chassis, but more importantly it was to be run with a different engine to the contemporary 'works' Benetton B187s of Thierry Boutsen and Teo Fabi, who were powered by Ford V8s. Frantic negotiations went on between the Hungarian and Austrian Grands Prix, and for a brief period it looked like the Middlebridge Benetton would make its debut at the Osterreichring in mid-August. A Pirelli tyre deal was provisionally agreed and plans made to rehomologate the entry as a Trussardi-BMW, if that would guarantee the team some track action.





But the most immediate sticking point was that with Middlebridge hoping to join the 26 cars already present, and only 26 sanctioned to start a grand prix, Macdonald and his associates needed the say-so of every team in order to be granted a race start. Since a second iteration of the Concorde Agreement was due at the end of the year, some of the other teams were not in the mood for compromise. But after some



progress was made in Austria, particularly with Tyrrell, Lotus and Ligier, the Middlebridge mechanics received their itineraries for a launch at Trussardi's Milan headquarters on the Wednesday before the Italian GP, and all seemed to be in place for their first grand prix.

The mood of optimism was soon dashed, though. Arrows team manager Oliver refused to give any leeway to the Middlebridge entry regarding a 27th entry for Monza. Then BMW began to have misgivings about the whole circus it was becoming embroiled in; and, as the Middlebridge truck was about to leave the workshop, news came through that BMW ECUs to run the engine would not be released to the team — the dream was over.

What made it all the more galling for Macdonald and his team was that they had also signed a provisional deal with Aguri Suzuki to make his debut at his home race of Suzuka.

"I had the feeling that John was relying on Bernie's help on the run up to Monza," says a still-wistful Pirro. "I wasn't in the loop at all, but felt sorry for John because he and the team had worked very hard.

"It was right at the last minute I got the call that I was not going to drive at Monza; I think it was on the Wednesday afternoon of race week. One minute it was, 'We are doing it', the next, 'We're not doing it'. It is easy to say it now but at Monza I am convinced we would have been in the top 10, even with no testing."

Unlike the car, everything was far from black and white for the Middlebridge F1 programme. Much like F1 in the modern age, the intricacies and politics detracted from the spectacle itself, denying fans and the paying public the chance to see new drivers and teams in action.



WEB DIRECTORY

CAR BROKERAGE

RACING CARS FOR SALE

ALAN CORNOCK FCS BUYING - SELLING - BROKERAGE www.racingcarsforsale.co.uk

TEL: 01480 891212

HELMET GRAPHICS

Mike Fairholme Designs

Sole approved painter of Arai helmets. Silver Birches. Corby Birkholme. Nr Grantham. Lincs NG33 4LE. Tel: 01476 550630. Fax: 01476 550029. email: fairholmedesigns@btconnect.com

www.fairholmedesigns.co.uk

RACE PARTS



EXHAUSTS



MODELS



GEARBOXES

Gearboxman.com

COMPETITION TRANSMISSION SERVICES Gearboxes & Axles for Road, Race, Rally and more

Telephone: 01582 840008 Fax: 01582 840007

MOTOR RACING LEGAL ADVICE

Motor Sport Legal Advice Tudor Alexander, LI.B Solicitor tudor@fletcherday.co.uk 07887 713512

RACE PRODUCTS



PORSCHESHOP

10% off with website voucher code **AUTOTEN**

Or Call: 0121 585 6088

RACE PRODUCTS







www.raceradio.co.uk

RACING

eugene III III ien.co.uk DRIVER DEVELOPMENT Tel: 0775 383 5629

TRAILERS







RACEWEAR





WWW.YBRACING.COM

TRAILERS



BRIAN JAMES TRAILERS

www.brianjames.co.uk

>> Connected to you

WORKSHOP EQUIPMENT



Stainless feet and castors We manufacture high quality leveling feet & castors & supply from stock for next working day

Manufacturers of bespoke split rim alloy wheels

www.imagewheels.co.uk IMAGE WHEELS INTERNATIONAL LTD.



TO ADVERTISE IN THE WEB DIRECTORY PLEASE CALL 020 8267 5992 OR EMAIL: autosport.ads@haymarket.com



National stocking dealers

Across the land our dedicated dealer network provides quality without compromise.

South

Fieldfare Trailer Centre Salisbury 01980 611853.

Trailer Traders West Sussex 07967 317315.

South East

GA Commercials Eastbourne 01323 763617.

GT Towing Hatfield 01707 262526.

Trident Trailers Maidstone 01622 233355.

South West

Tamar Trailer Centre Plymouth 01752 341133.

Toller Trailers Dorchester 01300 320476.

Lane Williams Trailers Weston-Super-Mare 01934 811911.

East Anglia

Anglian Trailer Centre Bury St Edmunds 01284 387000.

FS Trailers Huntingdon 01480 453333.

The Tractor Shop Louth 01507 600051.

Midlands

Barwell Trailer Centre Barwell 07791 322390.

Trailers & Components Ltd Craven Arms 01588 673345.

UK Trailer Centres Malvern 0845 834 0112.

Yorkshire

BDS Trailers Sheffield 0114 244 9736.

North East

Lloyd Ltd Newcastle 0191 267 7555.

North West

Chester Tow Bar Centre Chester 01244 324034.

Wales

UK Trailer Centres Tregaron, Ceredigion 0845 834 0112.

Trailer Traders Ruthin, Clwyd 07967 317315.

Scotland

BCL Vehicles Ltd Galashiels 0845 8945198. Craigsview Trailer Centre Dumfries 01387 253812.

JW Green Trailers Ltd Glasgow 0333 456 0222.

Kay Trailers Kinross 01577 862493.

Morrison Trailers Inverness 01349 862999.

RGC Services Orkney 07727 164306.

Northern Ireland

Gault Trailers Enniskillen 028 663 48000.

Trailertek Lurgan, Co Armagh 07702 400450.

Republic of Ireland

Murphy Transport Cork 00353 (0)21 491 6500.

Leroni Trailers Dublin 00353 46 905 2101.



T +44 (0)1327 308 833

For more information and details on the Brian James Trailers range, please contact our head office.



TRAILERS & TRANSPORTERS

RARE OPPORTUNITY TO BUY EX-MCLAREN RACE TRAILERS



2x Ex-Mclaren Formula 1 race trailers in two different specifications. Both with Vein compressors and multiple high pressure points throughout the trailers, air conditioning, generators, internal lockers, electrical sockets, benches drawers etc, workshop area to the front end of each trailer. Dholandia dual height tail lifts. Belly lockers running the full length of the trailers on each side.

Trailer 1: double decked to carry four Formula cars, with lockers and benches running full length of trailer on both decks

Trailer 2: single deck trailer with lockers on one side only towards the front making the trailer more suited to saloon or GT cars.

The trailers are as to be expected in stunning condition. If required we can supply either trailer as a complete package including tractor unit as we have many Trucks in stock.





Price on application

For More information call Chris 07917 775599 | chris@trucks2go.co.uk or Paula 07736 617841 | Email: paula@trucks2go.co.uk | Website: www.trucks2go.co.uk



TRAILERS & TRANSPORTERS





TRAILERS & TRANSPORTERS





Turatello Trailers Ltd. Aberdeen, AB16 7RA

Tel: +44(0)7432112816 E-mail: info@turatello.co.uk







COVERED CAR TANSPORT TRACK DAYS PERSONAL CARS 1,2,4,6 CAR MOVEMENTS **UK & EUROPE** RACE CARS, CLASSIC CARS, SUPERCARS, PRESTIAGE CARS

RAILERS & TRANSPORTERS



GEVA RACING TEAM TRACTOR & ARCTIC ARCTIC TRAILER: 39.000 EURO & MAN TRACTOR 16.000 EURO

Geva Racing is selling one of it's arctic trailers. Built in 1999 to very high standards, it can carry three single-seaters or with some PROL; FOMBROV * 7 RUMRXUIQU FOUV

omplete with 13,60 x 8 metre Stegmaie DZ QLQJ VZIR VRQH ARRU %XLQVZ LVK IRXUEHQD lockers, dedicated storage room under mair ARRUIRUDZ CICI WILH (RENHIV VXEV/100/1000CG DP SON WARUDUH ORFNHUV DEXLONIQ 6 CDS 2 Q FDFICHWCHGFDWGURRP IRLWIDOVSRIWOJ **VRROFDEIQHW**

) URQVIRI WIDLOHUEXLONDV CHCLEDVING OMQJ space. Kitchen includes: fridge, microwave, VLON FXSERDLG/ DQG FDEIQHW & RLQHUFRXFK KRXVHV WRUDJH FDEIQHW DQG WDQMRUP V IQAR VZ/R EHGV Z LVM DGGLVIRQDQRXUSHUP DQHQW EXQNEHGV EXLONIQ DV Z HOO

7 UDUOHU ¿WANG ZILMK I XOOM] H'KROODQQD VDUODIW 7 DWM MOON/ DOG FRIGHT

· · / WIDE/IRI IXCIV/EXIONO ZLIMI DXIMP DIMF JHOUER VIZER FRP I RUMDEOÐI EXCNEHGY + DV UXQ FLUFD NUMP HAWH 5 HFHQ/WHLYIEH ICFOXGQU QHZ WUHV EUDNHV NURPHANHV DQG ¿QMUV

Contact details: Gert Valkenburg 0031-653171778 geva.racing@wxs.nl









ESSENTIAL FOR MOTORSPORT TEAMS & COMPETITORS

MAKE TRANSPORTING AND STORING EASY WITH A WEATHERWEAVE CONVERTED TRAILER

Weatherweave is the UK's leading specialist in bespoke awnings and trailer conversions. Featuring high specification PVC covers in a wide range of colours with artwork of your choice. Simple to use, durable, longlasting and fire retardant to a British Standard, with an anti fungal lacquered finish. Our customer base spans from the general public, to international race teams and multi-global firms giving us experience second to none.

call us on: + 44 (0) 1268 774 141 or visit: www.weatherweave.co.uk



DRIVES AVAILABLE



Introducing Colt Motorsport the newest team to join the Ginetta GT Supercup and Renault Clio Cup for 2015.

After enthralling 2014 championships, the new season is now upon us and promises to be even more gripping and thrilling than last season.

For our inaugural season we are delighted to offer race seats in the Ginetta GT Supercup & Renault Clio Cup.

Our vision is to grow as a team, develop as a team and achieve great success as a team and for this memorable season we want you to be a part of our team and be a part of the first chapter of our history.



Tel 01204 770070 Email mail@coltmotorsport.com Visit www.coltmotorsport.com



RACE & RALLY CARS

BMW MCLAREN

Race-winning e36 GT Car



For sale is the famous Tango, possibly the most successful e36 race car in the UK.

Tango has a comprehensive spec and boasts a long history of victories with the most recent being in BritCar & GT Cup. Over the 2014 season the car has had significant investment to stay current & competitive with > 430bhp & weighing in at 1140kg. Tango won more races than any other M3 in 2014 GT Cup & showed the way to current GT4 cars such as G50, 55 & Lotus Evora.

Very competitive in the 2014 GT Cup GTA Championship coming 2nd overall, Winning 3 races and 9 podium

Bought from Geoff Steel Racing in Jan 14 & new GSR built 3.4L 432bhp engine fitted Jul 14 with < 10hrs since

Drenth 6-spd flat-shift transmission, 4:1:1 diff and Proflex 3-way suspension matched with AP 6-pot brakes wil keep this car competitive in 2015.



£34,000 (no VAT)

full spec & photos: http://tango.litherland.me

Call Ben Short: + 44 (0) 7735 244850

SPEEDMASTER

MCLAREN MP4-12C GT3

Built in 2012 and run by United Autosports in 2012 and 2013, this car won the last 3 British GT Races in 2012 and finished Second the Macau GT3 Race in 2013. Complete with all 2013/14 Upgrades and spares package comprising spare wheels and bodywork, this car is ideal for series such as GT Open, GT Cup and Dutch Supercar, or is the ultimate track day car.....Price: £147,995 NO VAT



SPEEDMASTER, SPECIALISTS IN HISTORIC AUTOMOBILES

Contact James Hanson on +44 (0)1937 220360 for more info info@speedmastercars.com www.speedmastercars.com

STORAGE



MARKETPLACE

TYRES

MEMORABILIA

PARTS



Fax: 0121 331 1144

email: sales@bmtr.co.uk

see our new website at www.bmtr.co.uk





Formula Ford 2000

and 1600 Cross flow and Pinto Parts 19 Cross flow Cylinder Heads, some ported for Formula Ford 5 Pinto Cylinder Heads also many other parts including Carburettors, valve springs, main bearings and Pistons

£8000 o.n.o or part exchange considered

Call: (01844) 339665

RACE PRODUCTS



SPARES & ACCESSORIES





Levelling Feet & Castors

Tel:+44(0)1327-312664



- All Goods In Stock
- Next Day Delivery
- Bespoke Levelling Feet

Full On-Line Ordering: www.saf1.co.uk

AUCTIONS

WYLES HARDY & Co

Tel +44(0)1442 832234 Fax +44(0)1442 834342 enquiries@caterhamflauctions.com wyleshardy.com

On view Monday 9th & Tuesday 10th March 2015 from 9.00am to 5.00pm Only at Leafield Technical Centre, Leafield, Oxfordshire, OX29 9EF

Admission by catalogue available on site only - £10.00 admits 2

Bidding Closes from 10.00am (GMT) Wednesday 11th March 2015

For further details or to register to bid visit: www.wyleshardy.com/caterhamf1/

BidSpotter.co.uk

Or contact Matt Hardy or Terry Madden on 01442 832234 or via enquiries@caterhamflauctions.com

All Lots Subject to Availability



FOR SALE BY TIMED ON-LINE AUCTION

CATERHAM F1 RACE CHASSIS, GARAGE & PIT LANE EQUIPMENT

ON BEHALF OF THE JOINT ADMINISTRATORS OF CATERHAM SPORTS LIMITED & 1 MRT

Transport

8: Aluminium Type F1 ULD 'FLYAWAY' Travel Shacks With Aircraft Pallets

Race Car Chassis, Show Car and Tub

CATERHAM Formula 1 2014 Race Car Chassis CTO5#2. Car No 10, Driven By Kamui Kobayashi. & Chassis CTO5#4. Car No 46 Driven By Will Stevens & Marcus Ericsson c/w Drivers Harness, Steering Wheel, Nose Cone and Front Wing Assembly. Side Pod and Grills, Front and Rear Suspension and Steering Parts, BREMBO Brake Calli per Housings, Set Of Pirelli Mounted Show Wheels, Rear Wing Assembly. (No Engine or Gearbox)

CATERHAM 2012 Chassis, Rig/Show Car. Chassis CT01#3 (No Engine or Gear Box)

CATERHAM 2014 Formula 1 Race Car Tub No. CT05#3

F1 Race Car Body Parts and Components Inc.

CATERHAM F1 2014 Nose Cone and Front Wing Assemblies, Rear Wing End Plates, Tea Trays, Drivers Seats, Engine Covers, Drivers Head Restraints, Wish Bones, Wing Flap's. Etc. PIRELLI Wheel Mounted Show Tyres and Un-Mounted Wheel Rims, Exhaust Manifolds & Tail Pipes. BREMBO & CI Brake Sets, Various Brake Callipers, Long & Short Steering Columns, Sub-Assemblies including FURTS & RURTS, Front and Rear Suspension Parts

Race Support, Pit & Garage **Equipment Inc**

Quentor Six Position Pit Perch, Pit Wall Timing Stand, Pit Wall Generators and Grid Trollies, Pit Stop Gantry Boom, Alloy Framed Garage Gantry with Overhead Services Canopy together With Primary & Secondary Garage Bannering, Front End Cabinets, Set Up Dunnies, Set Up Wheels, Engine & Gearbox Lista's, Novatech Scales. Pneumatic Wheel Nut Guns with Associated Regulators, Flap Adjuster Guns, Tyre Heaters and controllers Etc.

ERS House with Charger & Discharger Units and Mobile Heater/Cooler. Mobile Water & Oil Heaters, Mobile Fuel Bowser and Hydraulic Rigs with Associated Chiller Units, Mobile Brake Bleed Unit. DYNAMIC SUSPENSIONS Portable Dyno, SHIFTEC ZZ 501 Engine Starters with Lance's.

CANOZZI Pneumatic Jacks, Manual Front, Rear & Side Jacks. Carbon Fibre Vehicle Skate Sets, Double Stack Tyre Trollies and Movers. 5-Tier **Engine Trolley Carrier Frames.**

BAUER 250E Bottle Compressor, Various Dive Bottles and Bottle Trollies. Petrol & Electric air

Ancillary Equipment to include Mechanics Tool Boxes, Engine, Gear Box and Hydraulic Kitting Boxes, LCD Displays, Drivers Massage Table etc.

MARKETPLACE

SERVICES

THE COUNTDOWN STARTS NOW

THE 2015 SEASON IS APPROACHING FAST

The 2015 motorsport season IS upon us and the annual merry go round of the "silly season" is arriving in style.

Are you competing in 2015? Are your sponsors arranged? Drive secured?

It's an endless list but we are here to help.

We want to see you in your series, behind the wheel and competing but sometimes you may need a little help to get there.

Whatever your level, VDM offers a range of tailored representative solutions to help start or further your career.

The clock is ticking and it is not slowing down, contact us today and together we can get you on the starting grid in 2015.



RACE PRODUCTS



clearwaterlights.co.uk 01480 498640

Junior CFD Engineer



This is an exciting opportunity to Join McLaren GT as Junior CFD Engineer based at our Headquarters in Woking, Surrey.

The role will focus on improving our CFD understanding and assist in the Aerodynamic development of current and future GT cars. It will cover aspects of track correlation and CFD model refinements by means of state of the art meshing and post processing.

Excellent reporting and communication skills are essential for this role

The candidate must have a strong Aeronautical or Mechanical engineering degree with a sound understanding of the theory and implementation of modern CFD codes, including discretisation, transport modelling and turbulence modelling. Exposure to StarCCM+ or OpenFoam and associated programming languages would be an advantage.

All applicants must have the right to work in the UK on applying.

Please email or post a covering letter, explaining why you would be the best candidate for this role, together with your CV, to:

Human Resources, McLaren GT, Unit 22 Woking Business Park, Albert Drive, Woking GU21 5JY

e-mail: paula.karter@mclarengt.com

Closing date for applications is Friday, 27th February 2015



In its plan to develop the Team for the 2015 season, Scuderia Toro Rosso have the following exciting opportunities

Based in Faenza (Italy):

- · Senior Vertical Dynamics & Suspension Systems Engineer ref. "4-15"
- · Senior Mechanical Design Engineers ref. "8-15"
- · Senior Stress Engineers ref. "9-15"
- · Hydraulic ref. "7-15"

Based in Bicester (UK):

- · WT Electronics Engineer ref. "3-15"
- · Buyer ref. "10-15"

For further information and to keep updated on STR future opportunities, please visit the careers page on our website:

Please ensure you quote the job reference in your application, specifying your current and expected salary and your notice period.

Closing date for Applications: 6th March 2015.

PLEASE NOTE: No Agencies please.

WWW.TOROROSSO.COM

MOTORSPORT JOBS

As the UK's national synchrotron science facility, Diamond Light Source conducts world-class research in virtually all fields of science. Located in a designated Area of Outstanding Natural Beauty, and only 20 minutes from Oxford, we're proud to offer rewarding career opportunities and we currently have the following exciting vacancies.

Mechanical Technicians – two vacancies Ref: DIA0996/TH & DIA1001/CH Electrical Technician Ref: DIA0997/CH

This is an exciting opportunity to be involved in the installation, commissioning and then maintenance of new X-ray beamlines. Join our vibrant research environment, and you will work closely with scientists to design and install state-of-the art components and support their experiments. An articulate team player, qualified to ONC or equivalent, you will have strong technical work experience in a similar environment and good workshop skills.

For further information and to apply, please visit our website:

www.diamond.ac.uk/ Careers/Vacancies.html

Closing date: TBC.



Diamond Light Source Ltd, Diamond House, Harwell Science and Innovation Campus, Didcot, Oxfordshire OX11 0DE



From the moment Red Bull Racing first turned a wheel in Formula One it was always obvious that the ultimate goal of championship victories would only be achieved by a team that invested in Formula One's most crucial assets: people and experience. The team's F1 adventure began in 2005. Today, a number of years into the project and with four consecutive World Championships in the locker, that is still the philosophy propelling the team forwards.

We are currently looking to recruit the following positions:

HR09021501 - ELECTRONIC DESIGN GROUP LEADER

HR09021502 - COMPOSITE DESIGN ENGINEER

As well as being part of our multi championship winning team, we reward our employees with a significant benefits package including Championship Bonus, Life Insurance, Private Medical Cover and a Pension Scheme.

For further information and details of how to apply please visit: www.infiniti-redbullracing.com.

CLOSING DATE FOR APPLICATIONS - SUNDAY 22ND FEBRUARY 2015.







Good design sometimes needs a little help...

...that's why global race teams use Sandwell as a prime supplier of performance engineering solutions.

- Controlled Shot Peening
- Superfinishing
- Low Friction Coatings
- Kephos Coatings

Sandwell works with design and development engineers throughout the world of manufacturing to improve component performance.

- Improve component fatigue life
- Increase component strength
- Improve reliability
- Reduce component weight
- Reduce surface friction
- Apply corrosion resistant coatings

Visit out new website at www.sandwell-uk.com



















CLUB AUTOSPORT

NATIONAL RACING • HISTORICS • RALLYCROSS • HILLCLIMB • TRACK TESTS



RSF to run protege in Britain

Karter Josh Smith to MSA Formula with Racing Steps backing

JUNIOR DRIVER SCHEME THE

Racing Steps Foundation will field a driver in Britain on a full-time basis for the time since 2012 after announcing karter Josh Smith will make his single-seater debut in MSA Formula.

Formula Renault Northern European Cup champion Ben Barnicoat made his car-racing debut in the Formula Renault BARC Autumn Cup in 2013 and contested last year's FR BARC opener, but his main campaign was in Europe.

Smith, who won the IAME X30 international title last season, will contest the inaugural MSA Formula campaign with Fortec Motorsports, which will field Barnicoat and fellow RSF ace Oliver Rowland in the FR Eurocup and FRenault 3.5 respectively.

The 15-year-old is the first RSF

driver since Jack Harvey, the 2012 British F3 champion, to contest a full British campaign, a move designed to re-establish the foundation's link with UK racing, after it cut its ties to karting.

"We've been pretty top-heavy with investment in the last few years in GP2, GP3 and World Series by Renault," said the RSF's Derek Walters. "But now it will be good to see some younger guys coming up from the bottom again.

"Josh had a tough time last year but the important thing in karting is that it's an education, it's not an end in itself. The thing that struck me was his attitude. He reminded me of Ben Barnicoat, he has that same kind of dogged determination and he's very articulate."

Smith has already tested with Fortec at Rockingham and Anglesey and said he was excited to make the transition to cars.

"It's a really exciting challenge for me," said Smith. "The aim is to put that difficult year behind me and focus on doing the best job I can for me and the RSF. I'll be racing with a top team and will hopefully be able to show what I'm really capable of."

Karter Daniel Baybutt will compete with reigning British Formula Ford champion team JTR in MSA Formula this season.

The 17-year-old, who finished fifth in last season's Super One Formula KGP Championship, has been part of the Arden Young Racing Driver Academy.

"Dan really impressed when he tested with us last year," said JTR team boss Nick Tandy. "He applies himself really well, is quick to learn and should get to grips with the new car very quickly."

SCOTT MITCHELL FEATURES EDITOR

scott.mitchell@
haymarket.com

©ScottMitchell89



THE ANNOUNCEMENT THAT

the Racing Steps Foundation would place its latest karting protege in single-seaters has been expected for some time, but it's the initiative's future that holds the most interest for me.

Since it was revealed by our sister publication *Motorsport News* earlier this year that the RSF, which has been helping underfunded British talent since 2008, would cut its ties to karting, the return of a UK single-seater programme was a formality.

RSF co-ordinator Derek Walters said at the time that the move "made sense" for the RSF, citing issues with the way karting was being run and the introduction of the new MSA Formula category (open to 15-year-olds) as reasons for this being the best opportunity to move away from the grassroots formula.

Of course, it's sad that the link it has held since 'Mr Karting' Martin Hines helped amalgamate the RSF into Zip's Young Guns programme when it launched in 2008 has ended, but think of the opportunities now that karting is no longer an RSF edict. While unfair to label it a distraction, it was a drain on resources, and there is definitely more scope for the RSF to inject new blood into single-seaters.

Josh Smith is the first of those, but think of the impact it would have if the RSF reintroduced its end-of-season shootout, without which some fantastic young drivers would never have even made it into single-seaters.

Whatever it chooses to do, there is no doubting the huge boost the RSF has been to British racing. And its commitment is not in doubt either, because they are already talking about seeing new blood in 2016 too...





Mini 7 Racing Club

Mini 7 marks 50 years with BTCC prize test

THE MINI 7 RACING CLUB IS

celebrating its 50th season this year by offering a British Touring Car test to one of its leading drivers.

The club, which runs the Mini Se7en and Miglia series, has joined forces with BTCC tyre supplier Dunlop to fund a test session in a Motorbase-run Ford Focus NGTC.

The recipient of the prize test drive

will be decided in an end-of-season draw, which will feature the names of the top seven drivers in both the Se7en and Miglia championships, as well as the champion of the Se7en S class.

"This is easily the most valuable and exciting end-of-year prize we have offered in the past decade," said Mini 7 Racing Club chairman Colin Peacock.

"We are blown away by the support

from Dunlop and we're sure this can help boost grid numbers in what is a very special year for our championships.

"We wanted to make the prize accessible to as many drivers as possible, so having the top seven in each championship spreads the net wide – and including the Se7en S class champion gives drivers on a budget a shot at it too."

The club has also added an eighth date to its 2015 calendar, with a special '50 Plate' event planned at Snetterton at the end of the season.

The winners of the Se7en and Miglia events at the Norfolk circuit will receive a gold '50' door number for the following season, marking 50 years since the club's inaugural race meeting at Brands Hatch in 1966.

Radical Enduro Championship

Single-seater ace Malvern to continue racing Radicals

EX-FORMULA FORD CHAMPION

Scott Malvern will contest the Radical Enduro Championship this year with Kevin Mills Racing.

Malvern, who won the 2011 Formula Ford crown before clinching the Formula Renault BARC title the following year, raced in the Radical SR3 Challenge last year alongside Nick Jones, winning one race at Donington Park as a solo entrant.

The 25-year-old will partner Jones again in this year's rebadged championship in a new Radical SR3, the duo also set to compete in selected European Masters events in 2015.

"It's going to be a busy season but Nick will benefit from the [European Masters] mileage and seeing as we have the car there anyway it made sense for him to get the most out of it," said Malvern, who will also race the SR3 in the Radical Sprint series.

"I'm looking forward to trying the new car, and I can't wait to have another go at Spa, where I won in Formula Ford."



BRDC Formula 4

Formula Jedi champion Lang makes step up to BRDC F4

FORMULA JEDI CHAMPION JACK

Lang will make the step up to the BRDC Formula 4 series this year.

The 18-year-old will race for his family's Lang Sport operation in his maiden BRDC F4 season.

"I am thrilled to be joining the BRDC F4 Championship for 2015," said Lang, a former top-10 finisher in the Formula Kart Stars series.

"I know it's going to be a steep learning curve but after sealing the Formula Jedi crown last season, I'm



confident we can pick up good results.

"We're only a small team but with the reasonable budget requirements for BRDC F4, I'm sure we'll be competitive.

"I've already tested the car and I absolutely loved it so I can't wait to get the season underway."

Lang secured the Formula Jedi title last season at his second attempt, with three wins and 10 podium finishes to his credit, having finished third in the standings in 2013, his first year of single-seater competition.

&RPSUHKHQVLYH PRWRUVSRUW LQVXUDQFH SURGXFWV WR NHHS \RX RQ WUDFN

- **Ø** 3HWROD0 \$FFLGHOW
- **∅** 6WRUDJH DQG WIDQVIW
- **Ø** 7UDFN GD\
- **Ø** &RPPHUFLD0

30HDVH FRPS0HWH DQ RQQQH TXRWH UHTXHVW IRUP DW 2 WWW.JYQQMi.E6M (PDU 2 LQIR#U\DQPL FRP 7H) 2

Ryan Motorsport Insurance Limited is an appointed representative (557405) of Independent Broking Solutions Limited who are authorised and regulated by the Financial Services Authority, registration number 31200



TF Sport to race in GT Cup

expand into the GT Cup series in 2015. Tom Ferrier's team will field a

GT3-spec Aston Martin Vantage V12 for Paul Bailey and Andy Schulz in the series, having run the car in British GT last year under the HorsePower Racing banner. Their best result was eighth at Spa-Francorchamps.

Bailey and Schulz were crowned GTC class champions in British GT in 2013,



BRITISH GT OUTFIT TF SPORT WILL also taking class honours in a one-off GT Cup outing at Brands Hatch last season.

> "I thoroughly enjoyed my first experience of the GT Cup," said Bailey. "The organisers made me feel welcome and valued, making my choice to return to the series very easy."

> "I want to win the championship, but on a personal level I want to have some fun and really enjoy myself."

TF Sport has also announced a second GT Cup entry for Phil Glew and gentleman racer Andy Houghton, who will contest four rounds behind the wheel of a Ferrari 458 Challenge racer.

Houghton is a long-time pupil of former Renault Clio Cup UK champion Glew, who has focused on his coaching business in recent seasons.

The 31-year-old last raced full-time in British GT in 2012 in a Lotus Evora.

Off-season circuit upgrades for Donington and Oulton

THE DONINGTON PARK AND

Oulton Park circuits are in the process of being overhauled during the off-season, with the aim of improved safety and spectator viewing at both venues.

Donington Park has received £1m worth of investment this winter, with increased run-off on the inside of the Craner Curves, new viewing banks at Schwantz and McLeans corners and an extension of the gravel trap at the Esses among the most notable improvements being implemented.

Meanwhile, Oulton Park has reprofiled the Island Hairpin into a single, constant curve as part of its preparations for the British Touring Car Championship's return to the Island layout of the Cheshire track, and is adding new spectator vantage points overlooking Clay Hill and Druids.



Seat Leon Supercopa

Irish SEAT series launched

THE SEAT LEON SUPERCOPA IS TO

race in Ireland in 2015 in a new Irish Touring Car Championship support series.

The newly formed Leon Supercup Ireland championship, catering for the Mk2 Leon Supercopa model, will join the support bill for five of the ITCC's seven rounds, starting with May's round at the Northern Irish Bishopscourt track.

Following that will be a pair of double-headers at Mondello Park in June and July, an August visit to Kirkistown and a final trip to Mondello in September.

Erstwhile British Touring Car driver Eoin Murray, who has also raced in the European, Italian and Spanish Supercopa

series, commented: "The championship is going to give Irish drivers a low-cost opportunity to race the next best thing to a full-blown touring car.

"The cars offer serious performance, and, best of all, they are great value for money and very reliable.'



HUMBLE PYE

The voice of club racing



The Clubmans Formula: still astonishing at 50

■he Clubmans Formula celebrates its 50th anniversary this year with a breadth of following way beyond anything that could have been expected of a class designed to scoop up the simple front-engined sportscars rendered also-rans by the new-fangled 'pushers' sprung from Lotus, Elva and Merlyn in the early 1960s.

Quaint and quirky, fuelled by the Clubmans Register that champions it to this day, the zippy front-engined sportscar category that hit the tracks with healthy take-up in '65, remains as relevant as ever. Old Clubmans cars are raced as far away as the USA and the Antipodes; indeed I have witnessed them in the Caribbean!

As with most successful promotions, the timing of the Clubmans Formula's announcement was perfect, capturing the imagination of many Lotus 7 owners and those who aspired to them. Colin Chapman's chariots provided the catalyst, but the class spawned Lancastrian Derek Bennett's Chevron marque and defined the perfect stamping ground for Major Arthur Mallock's U2s, proven in wingless Formula Junior and F3 guises.

Mallock's first Clubman was the Mk5, but Arthur's dynasty (sons Richard and Ray) ran with the baton through the '70s and '80s, during which their stunningly fast bolides outnumbered often intriquing opposition and outgunned F3 lap times at some circuits. Bladon. Centaur, Diamond, DRW, Gryphon, Hustler, Phantom and other short-run marques headed by clever engineers, some bound for F1. came and went. U2s saw them off, however, not least with the late Vernon Davies and Will Hoy up.

Attempts to modernise the formula, which eventually traded 1500cc and 1000cc classes for 1600/1700cc full-race and FF1600engined splits, even saw a brief switch to rear-engined chassis, but it was nothing but a blip on the radar. Classic Clubmans now gives the Register a foothold in the HSCC historic scene - where Mark Charteris habitually duffs-up F2 and

"I'd love to see a

Clubmans race at

Goodwood's 2016

Members' Meeting"

F5000 cars with a 185bhp Ford pushrod-powered Mallock when the going suits - while a combination of nippy MG X-powered Cup cars and wild Proto machines populates a BARC-run championship.

Given the remarkable influences its stellar alumni had on racing as a whole, from Chapman and Bennett to Max Mosley, I'd love to see a Clubmans race at Goodwood's 2016 Members' Meeting, exactly half a century after John Bromilow (DRW) won



SUBSCRIBE TO AUTOSPORT AND GET...

A FRE PAIR OF BOLLE SUNGLASSES



FREE GIFTS

✓ FREE PAIR OF BOLLÉ SUNGLASSES

Choose a pair of Bollé Oscar sunglasses in either tortoiseshell or black

✓ FREE SUBSCRIPTION TO THE AUTOSPORT DIGITAL EDITION

and unlimited access to AUTOSPORT.com

SUBSCRIBE NOW!



- Save 25% on the cover price
- Pay just £34.99 every 13 issues by Direct Debit

Visit: www.themagazineshop.com/taspo/m0215p

08448 488 817

Or call and quote M0215P Please have your bank details ready.

Offer ends March 5 2015.

the magazineshop.com

THE BENEFITS OF SUBSCRIBING!

- ✓ Never miss an issue
- Free delivery direct to your door
- Unlimited access to news and views from the paddock
- Access to subscriber-only analysis and comment

TERMS AND CONDITIONS This offer is open to UK residents only. If you require any assistance following the purchase of your subscription, then you can speak to a member of our customer service team on 01795 592 974; calls are charged at local rate. Overseas rates are available on +44 (0) 1795592 974. Please allow 35 days for delivery of your gift and first issue. The gift will be sent under separate cover from the magazine. Should we run out of gifts, you may be offered an alternative gift — there is no cash alternative. To activate your AUTOSPORT online account visit https://secure.autosport.com/subs/activate.php and enter your activate your personal magazine subscriber numbers which will be included in your welcome email/letter) along with your email address to access your extra AUTOSPORT content. Direct Debit rates are valid for one year after which they are subject to change – should prices change we will inform you in writing. We ask that you enter into a Direct Debit agreement with the intention that your subscription will continue for a minimum period of 12 months, even if the frequency of payment is for a shorter period, however, you will still have the right to cancel your Direct Debit accreament. Should you wish to cancel your subscription it will be cancelled on expiry of the current term which will not be refundable, other than in exceptional circumstances. If a gift is included as part of the subscription offer we reserve the right to require the refundable, other than in exceptional circumstances. The spiral to require the refundable, other than in exceptional circumstances. If a gift is included as part of the subscription offer we reserve the right to require the right to require the refundable, of the Direct Debit Guarantee are available on request. Savings are based on the standard UK cover price of £3.50. Offer ends March \$5.2015. Haymarket Media Group Ltd uses a best-practice layered Privacy Policy to provide you with details about nown we would like to use your personal information. To read



MSVR in new FRenault push

THE MONOPOSTO SERIES IS

targeting owners of ex-Formula Renault BARC cars to form a separate grid in its Mono 2000 class

Following the collapse of plans to revive Formula Renault UK and the BARC's decision to replace its FR championship with a planned Formula Libre category, there will be no single series catering for FR cars in 2015.

The MSVR-run Monoposto series has therefore announced the creation of a potential third race for its Mono 2000 class, for which FR cars are eligible, at April's curtain-raising round at Cadwell Park. Its existing two grids are already close to capacity.

Monoposto organiser Steven Connor said: "The club is delighted to have secured the option of a possible third

grid if there is an influx of Formula Renault cars. Should sufficient car owners come to Cadwell, I am sure there will be further opportunities like this later in the season."

MSVR race operations manager David Scott added: "There are a lot of ex-Formula Renault cars out there that are currently unable to race in a standalone series. They'll be very welcome in the Monoposto paddock."



Formula 5000

Ross edges closer to title

FORMULA 5000 TASMAN CUP

Revival Series leader Steve Ross closed on another title by winning all three races at Christchurch's Mike Pero Motorsport Park last weekend. Without Ken Smith, unbeaten at

Hampton Downs last month, the McRae GM1 driver dominated.

Top qualifier Ross was chased in

Mason is back

in Scirocco R

the heats by Sefton Gibb (Lola T332) and Briton Greg Thornton (Surtees TS11), although he had to fight back past them after skating off-track on Sunday morning.

Australian Paul Zazryn (T332) ousted Gibb from second in race two but was passed by Brett Willis (T330), who started at the back.

Ginetta Juniors

Junior scholar joins Douglas

GINETTA JUNIOR SCHOLARSHIP

winner Stuart Middleton will race in the series this year for Douglas Motorsport.

The 15-year-old secured a fullyfunded season in the British Touring Car Championship support category for winning Ginetta's Scholarship prize last October, and is set to make his car racing bow for Wayne Douglas' outfit.

The returning team, which also has race-winning pedigree in the Ginetta GT4 Supercup and BRDC F4 series, last raced in Juniors in 2013, when it took Irish driver Keith Donegan to second in the points.

"Stuart has a good karting pedigree," said Douglas, who is yet to confirm drivers for the other categories. "I'm confident that he can progress well during testing and that we can get him up to speed to the point where he's able to do better than previous scholarship winners.'



Mason's VW Cup return

AARON MASON WILL CONTINUE

in the Volkswagen Racing Cup this season behind the wheel of a Scirocco for his own AWM Motorsport team.

The 2013 champion finished fourth last year, his worst result since 2010, but is hopeful of avoiding a repeat in 2015.

"Last year was dire - I had a fuse board go at Rockingham, a damper snap at Silverstone and a bad setup at Spa, then I injured my ankle right before Brands Hatch," explained Mason. "We will be making sure we optimise the setup and reliability."

CLUB AUTOSPORT



In brief

RS200 to race again

An original Ford RS200 will return to the British Rallycross Championship this season, in the Retro Rallycross Challenge. Terry Maynard has begun a full rebuild of the ex-Trevor Hopkins car after purchasing it from Ken Block. Maynard plans to have work complete in time for his local round at Croft, at the end of the season.

Grundy joins Clio Cup

Tom Grundy will step up to the Renault Clio Cup UK this year, completing JamSport's three-car line-up. The Dubai-based 17-year old, who finished as runner-up in the Fiesta Junior series last year, joins Dan Holland and George Jackson at the Northamptonshire-based team. JamSport team principal Sam Cotton said: "Once he has found his feet, he will definitely be one to watch."

Lee eyes Pickups glory

Freddie Lee, son of former National Hot Rod king Barry, will gun for outright victories in the Pickup championship this season. The youngest winner of the Pro 2 class, Lee twice finished on the podium last term and is confident of becoming a regular frontrunner under the guidance of Matt Roach Racing.

Pull attracted to ADD

Karting star James Pull has joined the ADD Motorsports stable of which World Karting champion Lando Norris is part. Singapore-born Pull, 15, will race against Norris in MSA Formula this season, having joined the crack JTR squad for his maiden singleseater campaign.

Willis nets new trophy

Brett Willis (below, right) received the Stan Redmond Memorial Trophy from Canterbury Car Club chairman Gary Johnstone at last weekend's Tasman Cup Revival Series race. Redmond, Christchurch-based but originally from Northern Ireland, died following a F5000 testing shunt at Teretonga in February 2013. Willis charged to second after qualifying woes.







I'm not insecure about my own ability. I know what I can do in a racing car because I have done it

From the brink of Formula 1 to the battleground of British GT, Adam Carroll's career has taken several turns over the past few years. He tells **EDD STRAW** why he's happy to be back in Britain and gunning for a significant title

ost drivers can be contextualised with a couple of words. It's not so easy in the case of Adam Carroll. Do you call him the final A1GP champion? Multiple GP2 race winner? Sometime Formula Renault 3.5 racer? Ex-DTM racer? Former British Formula 3 frontrunner? IndyCar refugee? BAR/ Honda Formula 1 tester? Or you could cite his history in this magazine, as a former McLaren AUTOSPORT BRDC Award finalist, or the 18th-best driver never to have reached Formula 1 (July 25 2013). However you choose to define him, Carroll is a damned good driver who has an unbelievably varied CV. And now he has reinvented himself as a sportscar racer.

Given that CV, you may wonder what he's doing heading into the 2015 British GT Championship with a credible shot at the title, along with the FF Corse Ferrari team and co-driver Gary Eastwood. You might also ask if the Northern Irishman doesn't consider this a little... well, below him. But not only does that do a hugely competitive championship a disservice, it also does not reflect Carroll's outlook.

The correct way to describe him would be racing professional, which

CARROLL CV

BRITISH F3 Class A only Starts 40 Wins 5

Starts 72 Wins 5

A1GP

Starts 32 Wins 6

FRENAULT 3.5
Starts 2 Podiums 0

INDYCAR

Starts 2 Wins 0

AUTO GP

Starts 6 Wins 1

BRITISH GT

Starts 5 Wins 0

DTM

Starts 5 Wins 0

BLANCPAIN ENDURANCE SERIES

Starts 6 Wins 0

ELMS

Starts 5 Wins 0



was always the goal at the start of his career. Professional in terms not just of his activities behind the wheel, which also includes a campaign in the European Le Mans Series for the Gulf Porsche squad alongside Mike Wainwright and Ben Barker, but through other activities including driver development and management (his stable includes himself), as well as test driving.

Make no mistake, Carroll is content with his place in the world.

He's done what the vast majority never manage to do, and establish himself as someone who makes his living doing this. The only real regret seems to be that it took him a while to accept his path.

"In the real world, what actually is a professional driver?" asks Carroll. "Someone who does what he is meant to do in the car, but can also make a difference with coaching, and who is an asset to a team without having to bring money.



▶ "F1 is 99 per cent not going to happen for a driver, and it has become so difficult and political to get there. People say that if you fight to try and make something happen and work hard enough, you can succeed at anything. Unfortunately, they haven't tried F1. But that's just life. You have to adjust, change methods and focus and if you are good enough and take the right direction, you can make a living out of racing. I definitely hung onto it [the F1 dream] for too long but when you are in that bubble, you continue on until reality, as it has a way of doing, kicks you in the nuts! That's just part of growing up."

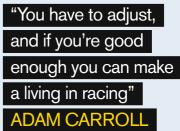
As Carroll points out, just because you were big in single-seater racing does not mean you can simply breeze into sportscar racing. At the end of 2011, a season during which he had dabbled in GP2, Auto GP and Formula Renault 3.5, he started to put himself about in sportscar circles. This led to appearances in both FIA World GT1 and the Blancpain Endurance Series.

Carroll didn't get involved with British GT until last year, when he took over the seat alongside Eastwood vacated by Rob Barff.

"Once I was trying to cross over to GTs, it was about meeting people and trying to figure it all out," he



says. "Anthony Cheshire at FF Corse was one of the guys I met and we got on very well. I was one of the drivers on his shortlist and Gary [Eastwood] followed A1 and knew about me. Once we'd worked together for a weekend, it was



clear we were a good team and we've gone from strength to strength.

"Gary's a brilliant bloke and he wants to win. For someone like me, driving a car quickly is an absolute given and this is why the coaching is the most important part of my job. Once you get the trust, you start to see the gains. It wouldn't be hard for someone like Gary to take someone with money who is still quick, but he wants to become a better driver and try and win the championship. That's what we are going for."

Carroll still has youth on his side, certainly in sportscar terms, so there's a possibility that success in GT racing machinery could lead to opportunities elsewhere. Ideally, he'd be delighted to be picked up by a manufacturer, which would allow him the rare luxury of focusing on his own performance behind the wheel should he choose to do so.

Many of his contemporaries (some of them demonstrably not drivers of his calibre) have reached the top and he just needs to look at the front of the F1 grid to see some of the names he once shared an entry list with. He crossed swords with Lewis Hamilton and Nico







Rosberg in both Formula 3 and GP2 and, rather than having a chip on his shoulder about it, he is completely comfortable with his own ability.

He points to the 2004 Marlboro Masters of F3 event as an illustration of the quality of 'his' era of drivers. And he has a point. He finished third in that race on a grid including Rosberg, Hamilton, Nelson Piquet Jr, Jamie Green, Giedo van der Garde, Adrian Sutil, Bruno Spengler and new DTM signing Maxi Gotz.

"The amount of talent was unbelievable," says Carroll. "Well, I'm not insecure about my own ability. I know what I can do in a racing car because I have done it, so I know what I'm capable of in the same equipment. I also know what my circumstances were and how my career took the path it did.

"Whenever I see people like Lewis or Nico being successful, I know

they were always going to end up there because they had the talent, everything. I'm glad that they're the people at the top because it shows that I went toe-to-toe with some of the best guys in the world. I know that when my time comes around, if it does, and I have a shot at something big like a works drive, I'll be ready for it."

But first up will be to succeed in British GT and ELMS. In the UK last year he made the podium a couple of times with Eastwood, but despite British GT being a national championship it's an incredibly tough ask to win it. Arguably, it's one of the toughest national championships in Europe.

"It you want to be a champion, you have to be the best not just as a driver, but as a team," he says. "That's why consistency is so important. The only downside is

that in GT racing you have the word BoP [Balance of Performance] and sometimes you can be left pretty frustrated by that because they do sometimes genuinely get it wrong."

But Carroll's racing programme is only part of the story. His business is far wider than what he does behind the wheel. That might come as a surprise to those who see only the high-profile moments but, as is the reality for many drivers of Carroll's ilk, he has had to diversify his activities. Last year, for example, he squeezed in 75 flights.

"The coaching is a big part of it," he says. "Last year I did 10 or 11 races with me being paid to turn up and drive. But if you want to make a decent living from this, you have to do everything. I've got my own driver-development programme, which has been successful. And that's what people don't see.

"I've been around GP2 and GP3 the last few seasons with Ryan [Cullen] and people ask me if I even still race," he says. "I just chuckle to myself because it's quite funny — on a grand prix weekend, I'm one of only a small number of guys who are genuinely earning a living from race driving, including those in F1!"

But central to Carroll's business is winning. That will be the challenge across his programmes this year. While he isn't doing it in the kinds of cars that his younger self would have predicted a decade ago, that objective has never changed. So don't feel sorry for him. He doesn't. After all, he has succeed where most have failed. &

The forgotten world champion

Adam Carroll Is a world champion, of sorts. The self-styled A1GP 'World Cup of Nations' was officially contested by countries rather than individual drivers, but it was Carroll who flew the flag for Ireland for the final two seasons. In the 2008/09 season, A1GP's swansong, he beat now-Porsche LMP1 driver Neel Jani to the title, the biggest success of his career.

"Of course it was the highlight, but at the end of the day you can't retire after winning A1GP and go and live on the beach," he says. "We had a world-class team, and going back to GP2 after that, it really was at a lower level professionally. Team Ireland was a uniquely talented bunch of guys with experience who were massively aggressive towards winning."

After a dire start to the season at Zandvoort, Carroll had a strong campaign, culminating in a title-clinching double victory at Brands Hatch. Winning the crown was key to the F1 opportunities that subsequently arose, but failed to come off. He was slated to drive for the stillborn Lola F1 project, which did not gain one of the new-team entries on offer for 2010, while there was also the possibility of driving for a version of the Campos team that became HRT, had the ownership situation panned out differently. Carroll believes A1 was the perfect finishing school for F1.

"A1 had a lot of very good people and the cars were great, the last-generation car in particular, and everybody absolutely loved being there," he says. "It was an experience that allowed me to take the next step in making myself better. I've always been a racer, that's never been a problem, but it helped me to focus and to harness my speed over one lap without overdoing it or making mistakes."

Those skills are standing him in good stead in GT racing.



EDITOR Edd Straw ext.5887 edd.straw@haymarl

DEPUTY EDITOR

GROUP F1 EDITOR

F1 ASSISTANT EDITOR

FEATURES EDITOR

EDITOR AUTOSPORT.COM

DEPUTY EDITOR

MANAGING EDITOR Peter Hodges ext.5903 peter.hodges@haymar

EXECUTIVE EDITOR
Stuart Codling ext.5835
stuart.codling@haymarket.com

RALLIES EDITOR

david.evans@haymarket.com

ART EDITOR

Lynsey Row ext.5914

SENIOR DESIGNER

PHOTOGRAPHS

GROUP PICTURE EDITOR

peter.mills@haymarket.com

AUTOSPORT.COM TECHNICAL TEAM LEADER

Geoff Creighton geoff.creighton@haymarket.com

AUTOSPORT.COM DEVELOPER

tomasz.trznadel@havmarket.com

OFFICE MANAGER

Gary Watkins Henry Hope-Frost Marcus Pye

Alan Eldridge Pablo Elizalde Andrew van Leeuwer

ARGENTINA AUSTRALIA AUSTRIA BELGIUM Cardon McKay FINLAND GERMANY

ITALY JAPAN Iiro Takahashi, Len G NEW ZEALAND RUSSIA

SOUTH AFRICA Richard Asher SPAIN SWEDEN Toro Toroyall

UK & EIRE

ADVERTISING

Tel: +44 (0) 20 8267 5389 Fax: +44 (0) 20 8267 5850 E-mail: autosport.ads@haymarket.com

DISPLAY SALES MANAGER

Martin Lee ext.5389 martin.lee@ DISPLAY ADVERTISING

Gary-Lee Hoebeeck ext.5576 garylee.hoebeeck@ havmarket.com

CLASSIFIED SALES MANAGER

nathan william t.5908 nathan.whitehead@

CLASSIFIED ADVERTISING

AUTOSPORT.COM SALES MANAGER

ONLINE ADVERTISING

el: +44 (0) 20 8267

ADVERTISING DIRECTOR Matthew Witham LICENSING DIRECTO

PRODUCTION MA

UK 0844 8488817 OVERSEAS +44 (0)1795 592 974 EMAIL autosport@servicehelpline

BACK ISSUES Tel: 0844 8488817

DIRECT MARKETING EXECUTIVE

LICENSING MANAGER David Ryan ext: 5024

GROUP DIRECTOR

GROUP COMMERCIAL DIRECTOR PUBLISHER

SPECIAL EVENTS MANAGEI DIGITAL SPECIAL PROJECT MANAGE

amaica NY 11451. Subscription records irre maintained at Haymarket Media Group, Teddington Studios, Broom Roac Feddington TW11 9BE. Air Business Ltd s acting as our mailing agent.

CIRCULATION TRADE ENOUIRIES

© 2015, HAYMARKET MEDIA GROUP LTD





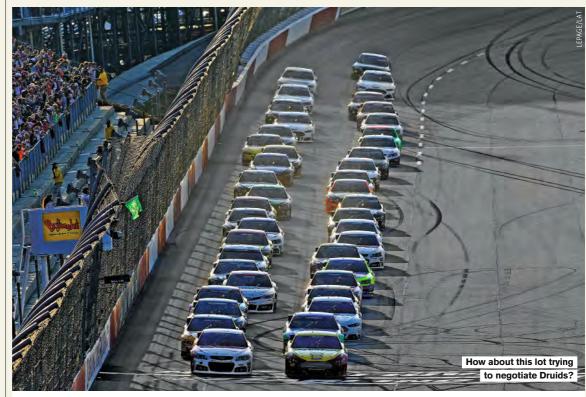




WEEK

LETTERS • ON TRACK • TV PICKS • FROM THE WEB • AUTOSPORT.COM

What you think of the motorsport news of the past week



Time to get NASCAR over here

Having witnessed the amazing growth of NFL in the UK in recent years, I think that NASCAR could replicate it.

NASCAR should sell the live UK television rights to Sky, with a one-hour highlights show on terrestrial TV. Build a following over two/three years.

Then NASCAR should do a deal with

MSV to hold one of the pre-Chase rounds of the series on the Indy track at Brands.

Sky wins, NASCAR wins, MSV wins and the fans win. Make it happen!

Tim Richardson, Marlborough

Premier Sports has been showing NASCAR live in recent years - ed

Enjoyed seeing Daniel Ricciardo

demolish the 'F1 star in a reasonably priced car' track record in Sunday's Top Gear.

Iknow we're not supposed to take it seriously, but anything that stokes a bit of pre-season needle among the drivers is a good thing, I reckon.

Looking forward to Lewis Hamilton's return after he wins the 2015 world championship...

John Richards By email

As with most recent F1 'innovations', the 1000bhp car will inevitably fail to live up to expectations.

Fans shouldn't kid themselves that the cars will be much more difficult to drive - the electronics will still do most of the work. Don't forget that Audi will sell you a 1000bhp-plus road car (with a Bugatti badge on it) that even James May can drive flat-out.

The idea that such PR friendly (eg headline-grabbing) solutions will improve F1 is part of the problem. The money people must start to understand what the fans really want (eg when they say overtaking they mean two similar cars racing for position, not someone passing in a car that is 20km/h faster) and stop wondering how to maximise their 'investment' (in what? The money people

don't own anything that is essential for a top-level motor race). Peter Morley

Tervuren, Belgium

Edd Straw's Iudicrous

suggestion on autosport.com last week that F1 testing is boring and shouldn't be televised had me in stitches. What we as fans wouldn't give to be trackside when the returning legendary partnership that is McLaren-Honda takes to the circuit!

Typical privileged motorsport journalist, not realising how good he has it! It's not F1 that's disengaged with the fans, it's Straw! **David Smith**

By email

BIG NUMBER

Degrees celsius to which the temperature can drop on Pall. temperature can drop on Rally Sweden. Crews will be OK, but it'll be tough for mechanics in outdoor servicing.

BIG NUMBER

Number who will race in the NASCAR Sprint Unlimited. This includes all 2014 pole winners and last year's 16 Chase drivers, plus others.



WHAT'S ON TRACK



RALLY SWEDEN

World Rally Championship Rd 2/13 Karlstad, Sweden February 12-15 wrc.com

NASCAR SPRINT UNLIMITED

Daytona, USA February 14 nascar.com



SERIES

Rd 5/5 Manfeild, New Zealand February 14-15 toyota.co.nz

WAUTUSPURT COMPETITION

A DAY AT THE 73RD **GOODWOOD MEMBERS'**

at the Goodwood Motor Circuit

We have teamed up with Goodwood to offer readers the chance to win one of five pairs of single-day tickets to the 73rd Goodwood Members' Meeting on Sunday March 22, 2015.

The event follows the success of last year's 72nd Members' Meeting, which allowed members of the GRRC and other Goodwood clubs the chance to enjoy a weekend of historic motor racing without the packed crowds found at the circuit's other events.

The 72nd Goodwood Members' Meeting was a huge success, and 2015's event is expected to be even bigger and better.



TO ENTER

To stand a chance of winning. simply answer the following question, emailing your answer to autosport.competitions@haymarket.com with Goodwood Members' Meeting in the subject line. Competition closes February 25, 2015.

When did the Goodwood circuit hold its first race meeting?

A 1928

C 11958



FROM THE SOFA

WHAT'S ON TELEVISION



A GT thriller vs seven hours of testing

V8 SUPERCARS ARE THE LATEST

battleground in the increasingly doomed fight to keep major sports on free-to-air television. Though victory went to pay TV with the sport's big-money 2015-20 deal with Fox Sports, the dumped Channel 7 did at least start the season with a moral win when Fox's marathon V8-launching 'supertest' show went head-to-head with 7's Bathurst 12 Hour broadcast.

V8 chief James Warburton has been adamant that moving to Fox is a no-brainer – fans get high-definition live coverage of every session and race, and the \$241 million (AUS) involved are good for the series, with Warburton arguing that the 7 deal "put the sport on its knees". Six of the 14 events are live on the free-to-air Ten network too, which also shows delayed highlights in a deal that V8s endearingly compared to the BBC Match of the Day method of following football's Premier League.

Then a new flashpoint was created when the V8 supertest was moved to a direct clash with Bathurst's GT enduro.

Despite the insistence that the motivation was dodging the Australian Open tennis and Asian Cup football, not to stop V8 drivers racing in the GT event - Craig Lowndes having been part of the 2014 winning line-up, with Will Davison and Shane van Gisbergen in the top four too - bad blood lingered among hardcore fans and the sportscar world.

And it's hard not to feel the move backfired. Fox Sports embarked on a mammoth seven hours of live coverage from the V8 supertest at Eastern Creek,

while 7 showed the full 12 Hour race live, split between its main channel and sister station 7Mate.

"The supertest was moved to a direct clash with Bathurst"



with 'Live and Free' logos very prominent. UK fans could join the head-to-head too, thanks to Bathurst streaming the 7 feed on its website and Motors TV picking up Fox's V8 show.

This fight was a knockout GT win. The supertest may have had a quasi-competitive element shoehorned in with a one-lap shootout at the end, but to get there you had to endure a five-hour build-up split into an hour of preamble, two hours of testing, then two more hours of chat.

A stellar line-up including Mark Skaife, Russell Ingall and Greg Murphy, with access to teams, garages and drivers, was all very well, but there simply wasn't enough to talk about. And Chaz Mostert winning \$2500 at the end wasn't much of a crescendo, especially when compared to a strong Bathurst GT field producing a race decided on the penultimate lap.

The stream scarcely faltered (bar a few minutes when everything turned blue), a commentary team blending Australian motorsport and Radio Le Mans skills ticked all boxes and 7's in-car cameras included pretty much every angle imaginable. Although missing the final-corner sort-out that settled second-to-fourth places was frustrating, it was a rare blemish. Socialmedia traffic showed that the eyes of the motorsport world were firmly on Bathurst, not Eastern Creek. Pay TV may be the future for all sports broadcasting but, for those who still resent that tide, Sunday's events in Australia would've provided a smile.

TV pick of

Edited by Matt Beer



RALLY SWEDEN - LIVE

BT Sport 1

Sunday 1100-1200

There are loads of ways to follow round two of the 2015 World Rally Championship on telly, with daily highlights packages on both BT Sport and Motors TV, and a post-event round-up on Tuesday night on ITV4. BT has the live rights too, and will be showing both the opening superspecial at 7pm on Thursday and the Powerstage on Sunday morning. Whether there's snow or not, Sweden is always one of the closest and most eventful rallies of the year.



TOYOTA RACING SERIES **Motors TV**

Friday 2000-2100 + repeats

Is it going to be two years on the trot that the visiting international young guns deny the local stars in New Zealand's hotly contested junior singleseater series? It's looking that way so far, with Canadian Ferrari protege Lance Stroll up against India's BRDC Formula 4 title contender Arjun Maini for the championship, and Scottish racer Sam MacLeod - who recently sealed a European Formula 3 deal - also a winner. Rounds two and three from Teretonga and Hampton Downs are on Motors TV this week.

GET AUTOSPORT ON THE MOVE

ON SALE ALL OVER THE WORLD FOR ONLY £2.99 DOWNLOAD IT NOW FROM AUTOSPORT.COM



ONLINE

the week



F1 DEVELOPMENT SPECIAL Sky Sports F1

Thursday 2100-2145 + repeats AUTOSPORT's own technical guru

Craig Scarborough is joined by ex-Ferrari engineer Steve Clark to analyse the Formula 1 winter testing form so far and explain the developments already seen, as the grand prix teams take a quick break between Jerez and Barcelona. Consensus right now is that the 2015 F1 breed is undoubtedly better looking than last year's controversially ugly-nosed designs and, on the evidence of Jerez, they're set to be faster too. But can anyone close the gap on Mercedes?



THE MIKE HAILWOOD STORY **BT Sport 1** Wednesday 2200-2330

The BT Sport Films strand contains some fascinating archive topics from all areas of sport, and few stories are as absorbing as that of 'Mike the Bike' Hailwood. A nine-time world champion on two wheels, he shrugged off early 'playboy' jibes to become a motorcycle-racing legend. His parallel and subsequent car-racing careers brought two Formula 1 podiums - one for Surtees, one for McLaren and the 1972 Formula 2 title for Surtees. before he popped back to bikes and won the Isle of Man TT again after an 11-year absence at the age of 38.



ANDROS TROPHY SUPER FINAL

Motors TV

Thursday 1720-1855 + repeats

Jean-Philippe Dayraut wrapped up a sixth title - and third in a row - in the premier ice-racing series, but only by one point over ex-F1 driver Olivier Panis. They went head-to-head again in the end-of-term non-championship super final at St-Die-des-Vosges. The whirring Electric cars were out too, including Panis's son Aurelien, GP2 racer Nathanael Berthon, FRenault 3.5 frontrunner Matthieu Vaxiviere and rising rally star Quentin Gilbert.



GLOBAL RALLYCROSS 2014 **Motors TV** Saturday 1415-1515

A motorsport fan without a Valentine's Day lunch date could find plenty of entertainment elsewhere, thanks to the latest instalment of Motors TV's recap of a breakthrough season for America's spectacular (if not really 'global') rallycross series. Enjoy the incongruity of 2000s Formula 1 racers Scott Speed and Nelson Piquet Jr taking on the likes of home-grown daredevils Ken Block and Travis Pastrana as the series nears its denouement with a Los Angeles

double-header



GLENN FREEMAN EDITOR AUTOSPORT.COM

glenn.freeman@haymarket.com 💟 @glenn_autosport

WHAT'S IT LIKE COVERING

Formula 1 testing for autosport.com? You have to be prepared for early starts and 13-hour days (those are the short shifts!), and learn to deal with long periods of not a lot going on while you're trying to fill a livetext commentary feed. It's for times like those that mad ideas such as #SauberFacts are born - those of you who were with us on 'Autosport Live' last week will know exactly what we're talking about.

And you can't run out of steam towards the end of the day, because once the track action finishes the work gets even more intense. In the 90 minutes or so after the track falls silent, teams and drivers will hold their end-of-day media sessions, so you have to be ready to get yourself around the paddock and then return to the media centre in darkness (on one night we even had a power cut!) to start working on producing stories on the big topics of the day.

At times it's a slog, but last week was the second busiest in our website's history, which makes it all worth it. Bring on test two.

HOT ON THE WEB THIS WEEK

YOU TUDE LAST-GASP DRAMA ON MOUNT PANORAMA



SEARCH FOR: GTR WINS BATHURST 12HR 2015!! WINNING MOMENT

After shunting his Nissan GT-R Nismo in qualifying, resulting in an overnight rebuild, Katsumasa Chiyo redeemed himself spectacularly in the race, taking two places, and the lead, within 30 seconds on the penultimate lap of the Aussie enduro.

AUTOSPORT'S TWEETERS



Autosport



Edd Straw



Ben Anderson **Matt Beer**



Gary Watkins



Mark Glendenning





Glenn Freeman



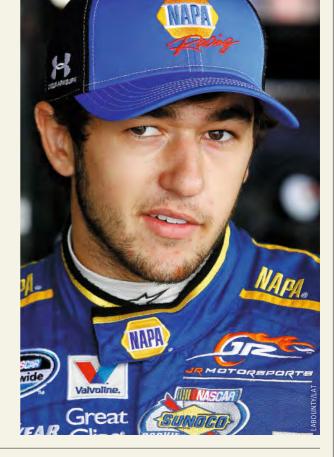
Jonathan Noble



INTRODUCING

Chase Elliott

The 19-year-old NASCAR scion who will take over from Jeff Gordon



ELLIOTT CV

Age Nov 28 1995 From Dawsonville, Georgia

2014 NASCAR Nationwide Series championship for JR Motorsports (3 wins), the first driver to win the series in his rookie year

2013 Selected outings in NASCAR Truck Series for Hendrick Motorsports (1 win); 2 wins in 5 ARCA races for Bill Elliott Racing

2012 4th in NASCAR K&N Pro East Series (1 win), 1 pole position and 2 podium finishes in 6 ARCA outings

2011 9th in K&N Pro Fast NASCAR series (1 podium)



t has been a heck of a fortnight for the Elliott family. Two weeks ago, 1988 Cup champion and two-time Daytona 500 winner Bill was elected into NASCAR's Hall of Fame. And just one day before that, his 19-year-old son Chase was handed the keys to Jeff Gordon's #24 entry at Hendrick Motorsports once Gordon retires at the end of the season.

Good genes alone aren't enough to earn the right to replace one of the most significant drivers of NASCAR's modern era, but the younger Elliot hasn't been relying on his family tree: last year, he became the youngest-ever winner of a NASCAR national title by securing the second-tier Nationwide Series crown as an 18-year-old.

EARLY IMPACT

Elliott's nomination as successor to Gordon might have taken those who only follow NASCAR from a distance as a surprise. When you're working to replace a four-time series champion and 92-time race winner, a teenage rookie who hasn't yet made a Cup start might seem an unlikely choice.

But Elliott is already an established part of the set-up at Hendrick, having signed a three-year development deal with



the team back in early 2011. That contract came off the back of a season in which he won 12 races from 40 starts across various regional Late Model championships.

With Hendrick's support, he gradated to the K&N Pro Series East in 2011, remained in the series the following year, and stepped up to a joint ARCA/Truck Series programme in '13, when he became the youngest-ever ARCA race winner, as well as the youngest-ever polesitter in Trucks. Last year he moved into Nationwide full-time, and secured the title as a rookie.

"Walking into the garage in 2016 and seeing the #24 without Jeff's name on it will be a traumatic experience for me," says Rick Hendrick. "But I'm excited about Chase. He's a heck of a talent. There's a natural combination of competitiveness, work ethic and smarts that you rarely see."

FILLING BIG SHOES

Elliott will spend most of this year attempting to repeat his title in NASCAR's second tier, but he is also scheduled to make five Cup starts as a dress rehearsal.

"It's going to be a big learning curve for me, and I need to make the most of [those races]," he says. "You're never going to replace Jeff Gordon; he's a hero and a legend of the sport, and that's something you're just never going to do. But you obviously have goals. I just want to try to be successful.

Elliott will certainly be given every opportunity to do just that. As well as having the vast collective experience of team-mates Jimmie Johnson, Dale Earnhardt Jr and Kasey Kahne to draw upon, he'll also have Gordon's current crew chief Alan Gustafson when he moves into the #24 seat.

And most encouragingly of all, he has the support of the man with whom he will inevitably be compared.

"When I'm looking for talented drivers — the ones that I'm thinking are championship-calibre - you're looking for ones that improve throughout the race, handle a certain situation calmly or improve throughout the season," says Gordon. "And he has all those qualities." > Mark Glendenning

NEXT WEEK TIME FOR KIMI TO DELIVER Plus: Richard Petty, Heikki Kovalainen, Rally Sweden

LE INVITATION

HEURES 11th-12th July 2015

Teams of up to 10 Drivers

RARIING

www.teessidekarting.co.uk

Email: admin@teessidekarting.co.uk

The 25th Le Mans 24hr Kart

The prestigious Le Mans 24 hour needs no introduction... it's spirit and uniqueness is known all over the World

The Ultimate Corporate Challenge

A unique corporate European race enabling you to
Tailor make your event for clients, colleagues or race enthusiasts
The successful Le Mans Kart Race is now in it's 25th year
and has hosted drivers from around the world. It's now your
chance to race at this iconic circuit in brand new race karts ...
whether you are a novice, experienced racer or a corporate team

Complete Race Packages Available

Includes a race prepared Biz Clubman Kart, fitted with new tyres
All service & technical support, including consumables & crash damage
Electronic live timing compatible with iOS, Andriod and Windows

Full medical back up including on site paramedics
Commemorative drivers medal and trophies
Race wear (if required), Trackside hospitality & full on site catering facilities

and lots of optional extras, contact us and see our website for more information

NEW KARTS FOR 2015

Cost £2,750 per Team

THE CIRCUIT

there is nothing quite like it anywhere
It's the most prestigious circuit in
The World

this is a very popular event ... so book early

01642 231117

Teesside Autodrome, South Tees Motor Sports Park, Dormor Way, Southbank, Middlesbrough. TS6 6XH



CONFERENCE CENTRE ENGINEERED TO INSPIRE

WILLIAMS

The award-winning Williams Conference Centre is a state of the art conferencing facility that never fails to impress.

Located at the home of leading Formula One team Williams in Grove, Oxfordshire, the Williams Conference Centre offers a secure environment in which to meet, inform, discuss, educate and celebrate.

Our 10 multi-purpose event rooms can accommodate up to 200 guests and afford excellent flexibility within modern and inspiring surroundings.







T +44 (0) 1235 777900
E CONFERENCES@WILLIAMSF1.COM
W WILLIAMSCONFERENCECENTRE.COM
FACEBOOK.COM/WILLIAMSCONFERENCECENTRE
@WILLIAMSCONFCTR