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THE FALL OF THE RED BULL F1 EMPIRE

...and how it plans to rise again

“Renault and Red Bull’s only option is each other”

Christian Horner



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POLE POSITION

Red Bull and Renault must pull together

TEAMS RISE AND FALL IN MOTORSPORT, AND IN GRAND prix racing it is rare for anyone to maintain supremacy for more than a few years at a time. Red Bull ruled Formula 1 from 2010 to 2013, but while last year could be written off as a blip, this year has started even worse.

But racing teams do not succeed by chance. While Adrian Newey has stepped back from the F1 team, he has still turned up at all the pre-season tests and the Australian Grand Prix, so his influence is still keenly felt. And for all his brilliance, no team is built on one individual and he has always aspired to ensure that Red Bull can continue to be successful even after he is no longer involved.

The relative performance of Red Bull and Toro Rosso does suggest that the chassis perhaps isn't as strong as we've come to expect, but the main weakness is the Renault power unit. That is where the biggest improvement must come.

As team principal Christian Horner has said, Red Bull and Renault have to make it work rather than fighting. It's going to take time, but those believing that Red Bull's decline is irreversible may be disappointed in the long term.



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COVER STORY

“Melbourne might be the catalyst to banging heads together”

Red Bull's struggles, p14



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Cover image: Moy/XPB Images

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THE BIG PICTURE

NASCAR Sprint Cup returnee Kurt Busch leads the field from pole at the start of round five at the Fontana oval. Ford's Brad Keselowski won the 400-mile race, by 0.7s

Photographer How/Getty





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This week in F1

ALONSO AND BOTTAS FACE FIA MEDICAL

Fernando Alonso and Valtteri Bottas face FIA medical tests at Sepang on Thursday before being given the green light for their Formula 1 returns in the Malaysian Grand Prix.

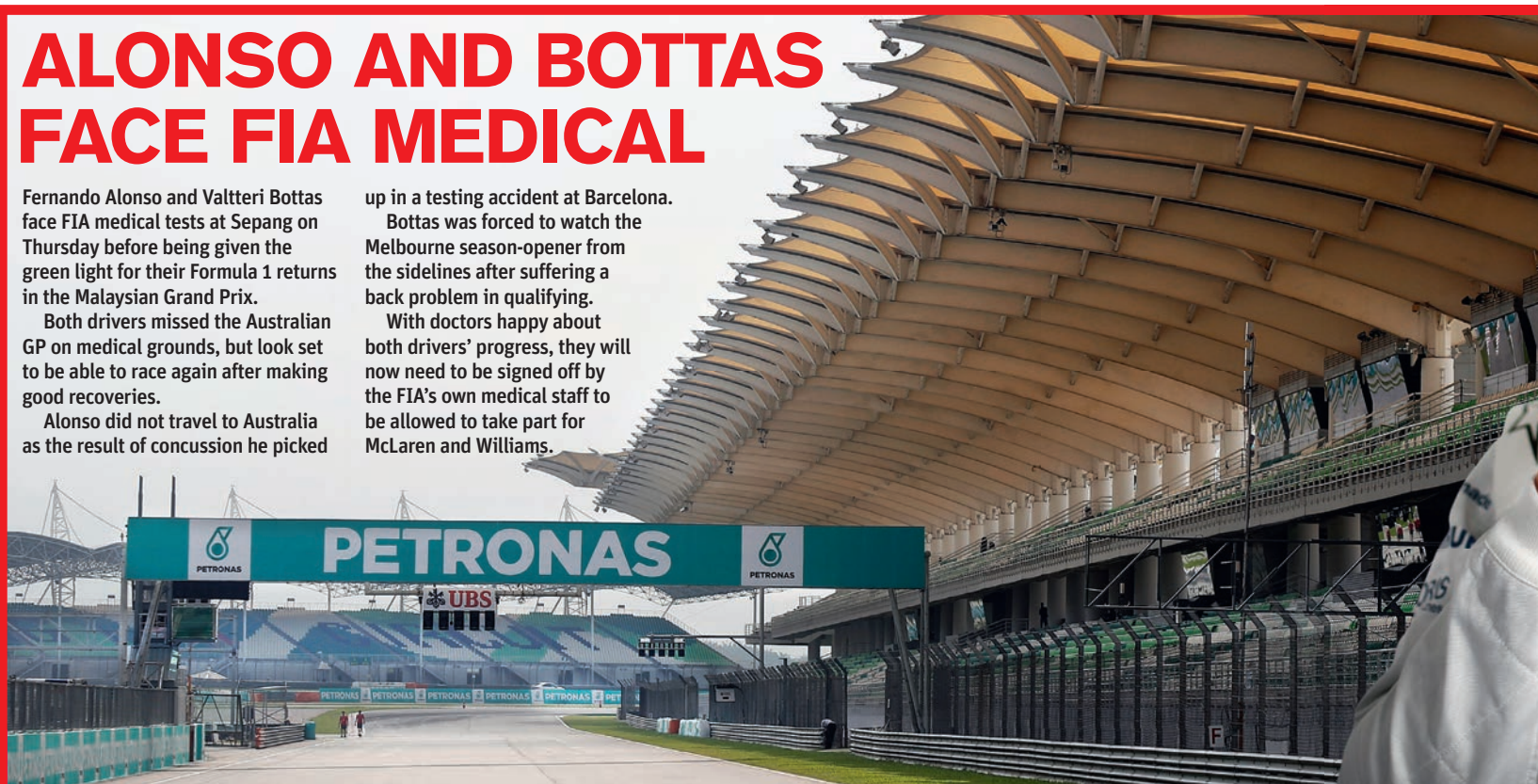
Both drivers missed the Australian GP on medical grounds, but look set to be able to race again after making good recoveries.

Alonso did not travel to Australia as the result of concussion he picked

up in a testing accident at Barcelona.

Bottas was forced to watch the Melbourne season-opener from the sidelines after suffering a back problem in qualifying.

With doctors happy about both drivers' progress, they will now need to be signed off by the FIA's own medical staff to be allowed to take part for McLaren and Williams.



FOR THE LATEST NEWS ON THE PROGRESS OF ALONSO AND

6

Renault eyes STR buy-in

Toro Rosso has emerged as favourite for a tie-up with Renault as the French car manufacturer considers new works team plans.

Renault is evaluating buying in to Sauber, Force India or Toro Rosso as a way of improving its profile in Formula 1.

Toro Rosso team principal Franz Tost told AUTOSPORT the team would be open to becoming a works outfit.

"It would be a next step for us," he said. "It would be good for Toro Rosso to be together with a manufacturer."

BIG NUMBER
539

The number of F1 races that Renault engines have taken part in. It is second in the all-time list behind Ferrari, which has 892 starts to its name.

KVYAT GEARBOX PROBLEM IDENTIFIED

Red Bull has discovered that Daniil Kvyat's gearbox failure at the Australian Grand Prix was caused by oil pressure problems.

Although the team initially suspected that engine vibrations had contributed to the problem, factory analysis showed that a drop of oil pressure led to the

gearbox overheating.

Red Bull's chief engineer Paul Monaghan said: "We've worked hard to ensure it doesn't happen again."



Sauber and van der Garde settle

Giedo van der Garde and Sauber have reached a settlement in the wake of their court battle over a 2015 race seat.

The Dutch driver won legal backing that a race contract he had for this year was valid – although he relinquished the right to race in the season-opening Australian Grand Prix.

Following talks with Sauber in the days after the race, a compensation package was agreed that means he will drop his action against the team.

"We have reached a settlement with Sauber and my driver contract with the team has been ended by mutual consent," van der Garde said.

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BOTTAS, SEE AUTOSPORT.COM



GERMAN GRAND PRIX AXED

Formula 1's calendar has been reduced to 19 races this season following the cancellation of the German Grand Prix.

F1 supremo Bernie Ecclestone had hoped to conclude a deal with Hockenheim after the Nurburgring's new owners suggested they could not afford to hold the race, which was scheduled for July 19.

However, with no agreement in place and time running out to finalise matters, the FIA announced last week that the German GP was being dropped.

It will be the first time since 1960 – when the German GP was held as a Formula 2 race – that the event will not feature on the F1 calendar.

REMEMBER WHEN

1960



The last time a world championship round was not staged in Germany was in 1960 amid safety fears over proposed venue Avus. That year's German GP was staged for F2 machinery on the Nurburgring Sudschleife and won by Jo Bonnier.

We need to stop thinking about second. We need to start to think and look forward to first



Ferrari team boss Maurizio Arrivabene shifts focus to Mercedes after promising start to the campaign.

Smedley's charity gala

Williams performance chief Rob Smedley is to host a charity gala dinner on August 1 for charity Zoe's Place Baby Hospice.

Smedley and his wife Lucy have been patrons of the charity for four years, and have agreed to hold the event following the success of one they organised in 2011.

More details can be found via: elaine@zoes-place.org.uk

RED BULL BACK-TRACKS ON EQUALISATION CALLS

Red Bull boss Christian Horner has blamed frustration at his team's lack of form for his recent calls on the FIA to make F1 more equal.

Horner said after the Australian Grand Prix that motor racing's governing body should move to equalise engine performance to make F1 more exciting.

But, having had time to reflect on the situation, he says that equalisation efforts would be wrong for the sport.

"Is that [equalisation] likely to happen? Of course it's not," he told AUTOSPORT in an exclusive interview.

"Is it fundamentally right for it to happen? Probably not.

"I was frustrated with the situation, but we also have a fairly unhealthy situation if you've got huge disparity between the different power units."



P14 HOW THE RED BULL EMPIRE FELL

Pirelli wants to know Formula 1 direction

Pirelli motorsport boss Paul Hembery has admitted that it will be difficult to commit to supplying F1 with tyres beyond the end of its current contract in 2016 amid uncertainty over plans for a revamped 1000bhp F1. "We want to see what is happening in 2017," he said. "If you're going to have a tender process you want to know what you are signing up to."

DID YOU KNOW?

Pirelli is now the third most successful F1 tyre supplier in terms of wins. It has 122 victories, behind only Goodyear (368) and Bridgestone (175) and 20 ahead of Michelin.



*"In these ten years of Formula 1,
my greatest joys came
from the fans."*

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Lawrence Barretto

From the paddock

The cancellation of the German Grand Prix demonstrates how some circuits have failed to adapt to the changing sporting landscape

When Hockenheim threw in the towel in its bid to save the German Grand Prix last week, it was proof that a rich heritage in Formula 1 means precious little these days.

Germany has hosted a Formula 1 race every year since 1960; only two countries – Britain and Italy – have staged more. And for 12 seasons between 1995 and 2006 the country even hosted two in one year, with the Nurburgring race running under the European GP banner.

F1 was big business in the country back then, with seven-time world champion Michael Schumacher having captured the heart of the nation. He drove fans through the gates on race day almost single-handedly. But those glory days have long gone: Hockenheim attracted just 52,000 fans last year, compared with 120,000 at Silverstone, amid a well-publicised drop in interest. For the past nine years it has been forced to alternate with the Nurburgring on the calendar.

Hockenheim had tried to reinvent itself, taking the axe to the long sweeping straights that plunged through the forest in a bid to create a smaller track with a stadium atmosphere, but it didn't have the desired effect. Now F1 has watched another stalwart drop off with no guarantees that it will ever return. How did it get to this?

It is not cheap to host a Formula 1 race. Russia, for example, reportedly pays £25m per year for the privilege of running a grand prix. Although iconic circuits such as Monza, Spa-Francorchamps and Silverstone pay slightly

days and they can buy a ticket to the first Ashes Test in Cardiff. Now that's some choice.

So how do you convince people to allocate a day (or whole weekend) to come to a race that lasts just 90 minutes? That's a challenge that has faced Silverstone, which does not have the benefit of government funding, in recent years, and in 2008 it came close to losing the British Grand Prix entirely when Donington launched an ultimately doomed bid to host the race. Two years ago, Silverstone had the third most expensive race-day ticket on the calendar, behind only Brazil and Abu Dhabi. But that's about to change.

"We want to make the British Grand Prix a four-day festival," says Silverstone's managing director Patrick Allen, who started his new role in September. "It's no longer just about Sunday's race. We need to make sure there's entertainment for fans both on and off track."

At the heart of Silverstone's new business model are families. Children under 11 get in for free, while those aged between 11 and 15 get cheaper tickets. Prices have been chopped across the board with a focus on getting people through the gates.

Once inside, fans will have access to more entertainment, including fairgrounds and a Thursday night concert, as well as the traditional grand prix afterparty. They've got some way to go to match Singapore, which this year has Pharrell Williams, Maroon 5 and Spandau Ballet headlining, but it's a start.

“Circuits must put greater focus on tailoring experiences to their individual locations”

less because of their history in the sport, while Monaco pays nothing (because, well, it's Monaco), up until recently there has been no shortage of new countries willing to pay that price. China, Bahrain and Abu Dhabi have joined the fray with multi-million pound venues in recent years, with Azerbaijan making its debut in 2016.

The sporting viewing landscape has changed, too. Fans have access to more TV coverage than ever before, with tablets and smartphones and the sophisticated data that is available on them providing a second-screen experience. Throw in the internet and social media and fans can get a supreme race day experience on their sofa, with plenty of distractions if the race fails to entertain.

Other sports are competing for attention as well. On the weekend of July 4-5 this year, British fans have the option to go to Wimbledon to watch a spot of tennis, travel to Silverstone for the British Grand Prix, or head across the Channel to catch the Grand Depart and opening two stages of the Tour de France. Wait a few

Of course, one size doesn't fit all. It's unreasonable to think that packing the schedule at every race is a way to attract the fans. In Malaysia, the climate precludes staying outside all day but by keeping the ticket prices low – the cheapest race ticket is around £13 – it remains a viable option for locals.

One solution would be for F1 boss Bernie Ecclestone to reduce sanctioning fees to help promoters offer more competitive ticket prices. But assuming that's not going to happen, circuits must continue to put a greater focus on tailoring experiences to their individual locations and managing ticket prices and entertainment accordingly.

They can't just charge people a lot of money to sit in a grandstand all day, on hard plastic chairs, with very little else to do, and then moan when nobody turns up.

Had the German Grand Prix organisers played the long game and thought more about their paying customers and how the world has moved on, they might still have an event. Perhaps even a profitable one. ❧

This week in motorsport

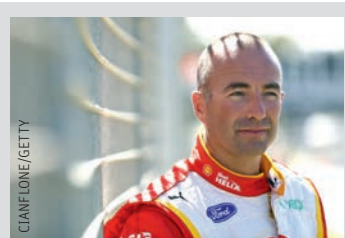


EBREY/LAT

Hamilton completes 32-strong BTCC field

Nicolas Hamilton, the younger brother of Formula 1 champion Lewis, will contest five British Touring Car Championship rounds in the second half of this season in an AmD Tuning Audi S3, starting at Croft in June. The 22-year-old, who has cerebral palsy, brings the series' 2015 entries up to 32

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AMBROSE STEPS DOWN

Marcos Ambrose has relinquished his DJR Team Penske V8 Supercars seat, just two events into his comeback.

After nine years in NASCAR, the two-time V8s champion was signed to spearhead Dick Johnson Racing and Team Penske's new joint venture but has found the going tough, with a ninth in Adelaide his best result so far.

"It has become clear to me over the first two events of the season that I need more experience in these cars to do what is required of the lead driver and to be competitive," he said.

Starting with this weekend's races at Symmons Plains, 2014 DJR driver Scott Pye will replace Ambrose.



Status change for WSR BMW

British Touring Car Championship-winning team WSR will run as a constructor this season, after series bosses ruled Dick Bennetts' BMW squad is no longer eligible as an independent because of its customer-

support relationship with the factory.

WSR, which announced JCT600 and GardX as replacements for lost sponsor eBay, fears its 125i M Sports may struggle in 2015 thanks to rule tweaks to rear-wheel-drive cars.

Dracone to replace Wilson

Dale Coyne Racing has been able to finalise its IndyCar line-up in advance of the season-opener for the first time in several years, but race winner Justin Wilson has had to move aside for ex-Auto GP backmarker Francesco Dracone. The Italian, who contested a partial IndyCar



LEPAGE/LAT

campaign in 2010, joins Carlos Huertas. Dracone was 4.5s off the pace in the Barber test (above), but was yet to receive the new-for-2015 aero kit.

BELL BACK TO ASTON MARTIN

Briton Rob Bell is returning to Aston Martin Racing after a year away for an attack on the Le Mans 24 Hours in June.

The Briton, who is contracted to McLaren for its GT3 programmes, will race the lead Aston Martin Vantage GTE together with Darren Turner and Stefan Mucke in the GTE Pro class at Le Mans and the Spa World Endurance Championship round in May.

Richie Stanaway is scheduled to contest the full WEC for the first time in AMR's second car alongside Fernando Rees and Alex MacDowall.



DOLE/LAT

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Blood clots hit Vickers again

Brian Vickers will miss the next three months of the NASCAR Sprint Cup season due to a recurrence of the blood clots that sidelined him in 2010 and '13.

Vickers had already sat out the opening rounds of the 2015 season following winter heart surgery.

Brett Moffitt, who previously stood in for Vickers at Michael Waltrip Racing at Atlanta, was recalled for Fontana and will stay in the Toyota at Martinsville this weekend. Moffitt had been scheduled to drive for Front Row Motorsports to replace David Ragan, currently racing for Joe Gibbs while Kyle Busch is injured, but will instead continue at MWR. Rookie Chris Buescher comes in at Front Row in his place.

"We are fortunate to have Brett Moffitt in our system and marvelled at his great drive in Atlanta," said Waltrip.



Vickers (right) with Moffitt



MCKLEIN/DE

Ouninpohja stage revived

This year's Rally Finland will include the revival of the legendary Ouninpohja stage in what will be one of the toughest opening days of the 2015 World Rally Championship.

Only half of the test was run last year, but the 2015 route appears in full twice on the itinerary for the July 30-August 2 event. Sebastien Ogier holds the Ouninpohja record, completing the 21-miler at an average speed of 81.24mph in 2013 as he lowered

the best time to 15m08.9s. Such is Ouninpohja's appeal that Colin McRae named his racehorse after the super-fast stage, located west of host city Jyväskylä.

In a further change from last year, there are no forest stages on Thursday night. Instead, crews face a longer Friday, with 100 competitive miles with only a change of tyres and no service on leg one. Saturday runs to a more traditional format while Myhinpaa is the final day's only test, run twice.



SMP reveals its new LMP2 car

Russian entrant SMP Racing has unveiled its all-new LMP2 contender.

The BR Engineering-Nissan BR01 was launched during the two-day Paul Ricard official test for the European Le Mans Series, in which SMP will field two cars this season.

The car did not leave the pitlane during the ELMS test and is scheduled to run for the first time at Ricard on Sunday ahead of further testing before the ELMS opener at Silverstone on April 11. SMP won last year's WEC LMP2 title with an ORECA-Nissan.

Yelloly parts with Jota team

GP3 and Formula Renault 3.5 race winner Nick Yelloly will be unable to take up his European Le Mans Series seat with the Jota Sport team.

The Briton will no longer drive the team's Gibson-Nissan O15S alongside Filipe Albuquerque and Simon Dolan due to what a team statement described as "other commitments".

Nissan LMP1 driver Harry Tincknell returned to the team to drive at this week's official ELMS test at Paul Ricard.

ZANARDI SET FOR SPA 24 HRS

Alex Zanardi will take part in long-distance racing for the first time since losing his legs, with two outings in the 2015 Blancpain Endurance Series.

The BMW factory driver, who overcame shocking injuries sustained at the Lausitz CART event in 2001

to race again with prosthetic limbs, will drive one of the German marque's Z4 GT3s in the blue-riband Spa 24 Hours BES round in July and, in preparation, the 1000km event at Paul Ricard in June.

The identity of the squad that will run him and his team-mates has yet to be announced.



BIG NUMBER

81.24

The average speed in mph that Sebastien Ogier set between the trees as he lowered the record on the WRC's infamous Ouninpohja stage last time it was part of Rally Finland in 2013.

In brief



S. BLOXHAM/LAT

BOSCHUNG HEADS GP3

Jenzer Motorsport driver Ralph Boschung set the fastest time of the opening GP3 pre-season test at Estoril. The 17-year-old Swiss racer was two tenths faster than ART's Marvin Kirchhofer.

INFINITI'S LATE START

The new Infiniti manufacturer team was set to miss the British Touring Car Championship official pre-season test as AUTOSPORT closed for press. The build of its two Q50s, which are linked to the Support Our Paras charity, has been delayed by issues with a supply of parts. The cars will be shaken down at the team's Mallory Park base.

KISS TO RALLYCROSS

GP3 and Auto GP race-winner Tamas Pal Kiss will make a full-time move to rallycross this season. The Hungarian is set for sporadic appearances in the world championship along with a full campaign in his native country.

FIA F2 PLAN PROCEEDS

The FIA has started work on its plans to introduce a new Formula 2 Championship. The governing body will have prepared a detailed outline of the proposed series by July's World Motor Sport Council meeting. The new F2 was given top billing in the FIA's new superlicence system.

GIOVINAZZI SETS PACE

Antonio Giovinazzi led the Formula 3 European Championship test at Valencia. He was a quarter of a second faster than Carlin team-mate George Russell. Van Amersfoort Racing's Charles Leclerc topped the wet second day.

GRINT JOINS ALBATEC

James Grint, younger brother of actor Rupert Grint – who played Ron Weasley in the *Harry Potter* films – will drive Jacques Villeneuve's former car in the European Rallycross Championship. Albatec Racing signed Grint for its Peugeot 208 after he impressed in a test last year.

Nissan is “100 per cent certain” to be on the grid for the Le Mans 24 Hours with three of its new GT-R LM NISMO racers, despite scratching the radical front-wheel-drive LMP1 contender from the opening two rounds of the World Endurance Championship.

Nissan global motorsport boss Darren Cox insisted that it was “full steam ahead” with the GT-R LM programme after the recent decision to miss the Silverstone and Spa events in April and May respectively.

“The test car has been on the seven-post rig today and we will be testing for two days later in the week,” said Cox on Monday, who couldn’t confirm that the first GT-R will be running at a test track at Chevrolet’s Bowling Green production facility in Kentucky.

“We’ll then be testing for two days a week before we ship the cars over for the Test Day [on May 31]. We will be at Le Mans and we will be there with all three cars.”

Nissan was forced to withdraw from the Silverstone 6 Hours on April 12 because the GT-R could not be homologated within the required 30 days of the opening event after failing its crash test two weeks ago. Cox explained that there was never an intention to ask for an extension of the homologation deadline in order to be able to compete at Silverstone.

“We didn’t ask for it, because we knew we wouldn’t get it,” he said. “The Automobile Club de l’Ouest and the FIA [which run the WEC] have been incredibly supportive, but they are also the guardians of the series and the rulebook.”

Cox claimed that it was better to also miss Spa rather than “scrambling to be ready in time”.

“We’re better off staying in the US to continue testing near to base,” he explained. “If we’d had to ship the cars to Europe we would have compromised our development testing. Our main aim for this year was always Le Mans and we have decided to re-focus on that race, so in the circumstances this was the right thing to do.”

Cox said that he expected the

Nissan delayed, but will be at Le Mans

The distinctive, front-engined machine won’t contest the first two

WEC rounds. **GARY WATKINS** explains why the car is expected to

be ready for the biggest race in sportscars, the Le Mans 24 Hours



Drivers will continue to test right up until Le Mans

GT-R LM would pass its crash test this week after revisions to the front roll structure. It is known that Nissan has had to undertake significant changes to the car’s monocoque after a dialogue with the rule makers: the Torotrak flywheels used to store retrieved energy could be removed from the car via a detachable cassette section between the front-mounted engine and monocoque, but it is understood that this will have now have to be bonded to the tub.

The homologation process includes the nomination of the

hybrid sub-class a car runs in and it is known that Nissan will go for the lowest of the four categories, which allows for two megajoules of power to be deployed over the 8.47-mile Le Mans track. Cox would not confirm this, but he hinted that it will fall short of its target of running in the highest division that allows for 8MJ.

“Everyone wants to stretch to the maximum size, but look at Audi,” he said. “They are in their fourth year running a hybrid and they have only got halfway there [its R18 e-tron quattro has been

EXPERT VIEW: GARY WATKINS

The radical concept of the GT-R LM NISMO makes sense when you listen to the car's architect, the free-thinking Ben Bowlby. He explains it calmly and clearly, and after half an hour with the guy, you start believing.

So, mount the engine up front to enable the air from the front splitter to be channelled through the car for aerodynamic gain. You put the relatively limited power from the internal combustion engine through the front wheels to avoid the requirement for a differential that would upset the forward weight distribution required if you are shifting the aero balance to the front. Then, you send the retrieved power to the narrow rear wheels in one big boost to create what Bowlby has described as a "Le Mans special".

It appears to make sense to my untrained mind. There's a clear chain



...using new LMP1 class hybrid tech



Small combustion engine will need retrieved-power boost...

in the thought process – "if you do that, why not do this?" is how Bowlby puts it. My question is what happens if you break a link? Does the concept suddenly unravel?

Putting all the power through the front wheels is clearly going to be problematic, and explains why Nissan has opted for the lowest megajoule category. The torque steer that Bowlby always insisted wouldn't be an problem must surely now become an issue, while a move away from high-profile tyres must complicate its attempts to get the

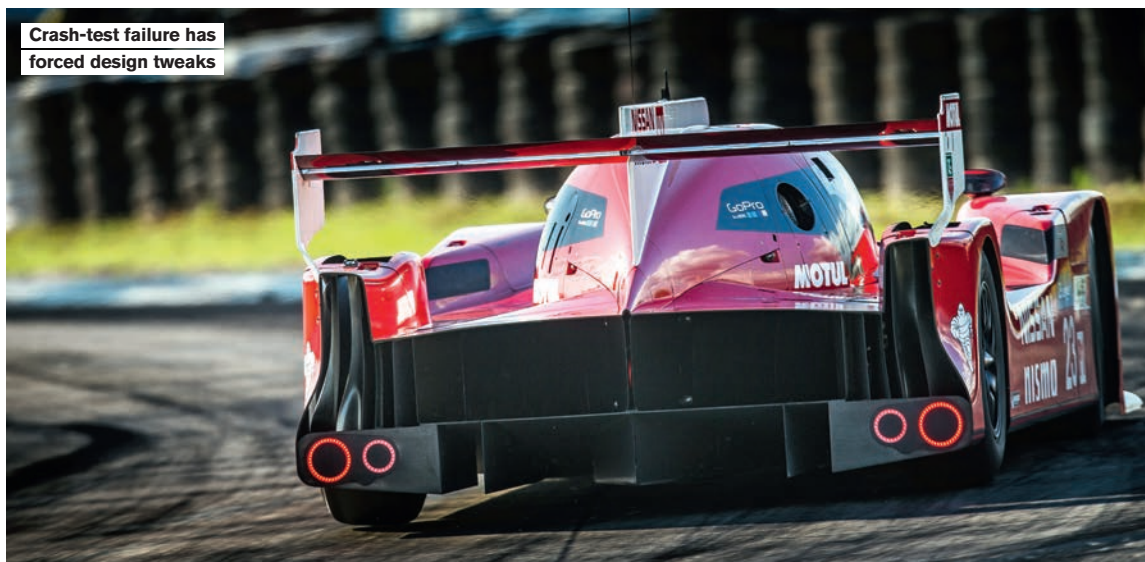
rubber at the front to last.

Maybe the GT-R LM will be compromised in year one, and massively so, but is that such a disaster? Porsche has designed a new car for its second season back in 2015 and Toyota made a significant upgrade between 2012 and '13.

There will be more to come from the new Nissan next year, so let's hope that the car achieves enough this season to ensure it is still around in 2016.



Homologation issues have forced programme rethink



Crash-test failure has forced design tweaks

"Our main aim for this year was always Le Mans, so we're better off testing near our base" DARREN COX

homologated in the 4MJ class]."

The GT-R LM was conceived to regenerate power from the front axle and deploy it via the fully-mechanical Torotrak system to the narrow nine-inch-wide rear wheels. The Nissan has yet to run with the rear deployment system in place and the decision to run in the 2MJ class provides confirmation that it has no plans to run it this year.

That has forced Nissan to adopt bigger front brakes on the GT-R because the hybrid system is providing less braking assistance. It has had to abandon the 16-inch

diameter wheels to accommodate bigger brake discs, which in turn means it is unable to run the high-profile Michelin tyres the car was conceived for in favour of more conventional rubber.

Cox would only say that Nissan was experimenting with "different size wheels and tyres". He did admit, however, that there would be "significant development opportunities between Le Mans this year and next".

"We are very happy with our V6 engine and we think we will be among the best in terms of power

and efficiency," he continued. "The next big thing is the aero, and we wouldn't have gone with our concept if we didn't think it was correct. If you've got the engine and the aero right, you are 90 per cent of the way there."

Nissan is still aiming to be "credible" when it pitches up at Le Mans. Asked to elaborate on what that means, Cox says: "We don't want to be qualifying ninth; we want to have at least one car in among our rivals. As for the race, we'll have to see, but the aim is to get at least one car to the finish." ❧

ARE WE WITNESSING

THE FALL OF THE RED BULL F1 EMP

Amid pullout threats, complaints about equalisation, and an increasingly frosty relationship with Renault, how does Red Bull plan to re-emerge as a title-winning force? By **BEN ANDERSON**

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That all great empires rise and fall is no great revelation. It happened to the Romans, then the Ottomans who overthrew them, and of course it happened to the Britons, whose empire was the largest of them all. But the point is that they all fall eventually, whether by force or through gradual decline. This is part of the natural ebb and flow of civilisation, as true in sport as it is in life.

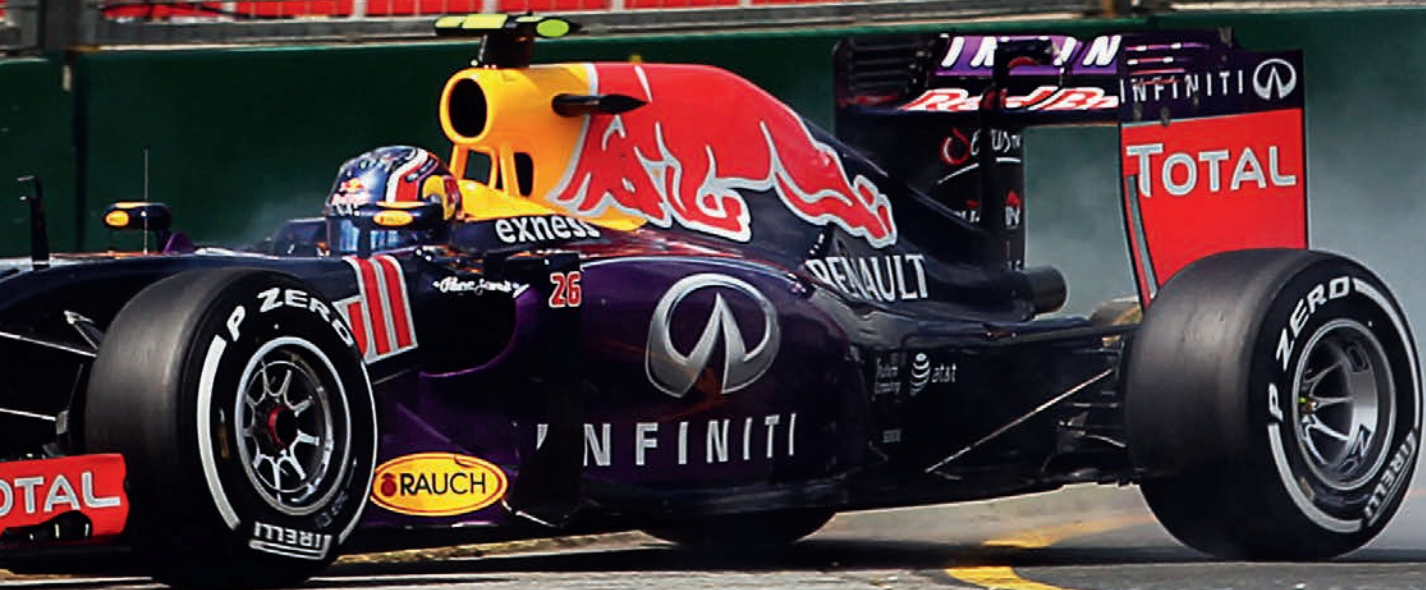
Over the past 10 years, Red Bull has taken Formula 1 by storm, morphing from a party team to relentless conqueror of the world. And it didn't conquer the world just once, but four times in a row. There for most of that time (since 2007 to be precise) has been Renault – the French engine maker that has helped propel Red Bull into the record books as one of the most successful teams in F1 history.

Red Bull and Renault built their own empire together in Formula 1. It looked unstoppable. But now, after being toppled as the world champion partnership by Lewis Hamilton and Mercedes in 2014, Red Bull-Renault looks a shadow of its former self. It has taken the spoils of only three victories from the past 20 races, its star driver has jumped ship for a new chapter at Ferrari, and the design ▶



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IRE?



Drop in oil pressure caused Kvyat's gearbox to fail on the way to Melbourne grid

► guru who built the technical foundations of that success has declared himself more interested in boats...

And things are getting worse. During the first grand prix of 2015 in Australia, Red Bull could finish no higher than sixth with home hero Daniel Ricciardo. The Renault-powered RB11 was, on average, 1.3s per lap slower than the fastest car in the field over the course of that race, and rubbing salt into that festering wound was star debutant Felipe Nasr, who beat Ricciardo driving a car produced by a Sauber team that failed to register a single points finish last season. Not since 2008, when Ferrari-powered junior team Toro Rosso finished ahead in the constructors' championship, has the Red Bull-Renault alliance looked so competitively weak.

For a team that boasts one of the biggest budgets and some of the most impressive facilities in the sport, that's got to hurt. It would appear Red Bull's mighty empire is crumbling before its very eyes. For Red Bull, the source of blame for this decline has been clear: Renault. The engine partner that was left trailing by Mercedes in year one of F1's new V6 hybrid turbo formula has now slipped behind Ferrari too as the second season under these regulations has begun.

Antagonism within the ruling faction is a recurring theme in the history of fallen empires. Red Bull has pulled no punches in terms of openly criticising its engine supplier, but team boss Christian Horner says this is a vital part of any healthy working relationship. Red Bull and Renault are going through a rough patch, but he is adamant the relationship can and will work.

"We're in a difficult situation at this point in time," explains Horner. "Neither of us is happy with the current performance of the engine. Red Bull and Renault are both competitive entities and sometimes frustration bubbles over.

"Believe me we are just as critical internally. One of the strengths Red Bull has had is its ability to be self-analytical and say: 'What areas do we need to improve?'

"Unfortunately, tensions were running high in Australia; promises had been made, and to lose an engine in the first session when you've only got four for the year, plus the driveability issues we had...

"But it is what it is. There are many areas Red Bull and Renault can complement each other and there are areas where there is room for improvement. There are some very capable people in Viry; we've got some very capable people in Milton Keynes. Our cultures are slightly different, but the objective remains the same."

The problems with Renault's current V6 hybrid have their roots in a difficulty properly translating gains made with the engine at its Viry base onto the track. Renault's dyno numbers are telling it the 2015 power unit is better than its predecessor (remember it came into the season with a stated aim of halving the gap to Mercedes before the first race), but Red Bull is not able to use this extra performance in reality.

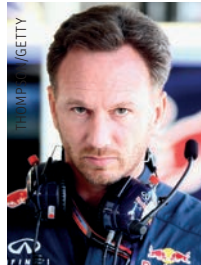
In fact it has taken what Horner describes as a "retrograde step" over the winter. On top of the lack of pace, Red Bull had to compromise the set-up of the RB11 to make up for new driveability problems that Renault's winter upgrades have introduced, while Renault had to turn its engine down in order for the power it was producing to be used effectively.

"It's not a small issue," concedes Renault boss Cyril Abiteboul. "It's not where we should be. We try to fast-track a little bit the process we normally have – in particular spending time thinking about new designs and concepts than on the downstream parts of engine development.

"I think maybe we have been a bit too aggressive, but we need to take that away and understand why when we get to the track we don't have what we think we should have from the experience of the dyno. How many times have aero guys used the excuse of 'correlation' between windtunnel and track? There is a little bit of this also in the engine side. But it shouldn't be an



"RED BULL HAD TO COMPROMISE THE SET-UP OF THE RB11 TO MAKE UP FOR NEW PROBLEMS"



Horner: tensions were "running high" in Australia

excuse. What we have is not acceptable and we need to fix a very strong roadmap to remedy that.

"I'm not going to portray a situation that does not correspond to reality. One of the fundamental things that is different to Mercedes and Ferrari is that we are a supplier of an engine, and from my perspective we need to get ourselves a little bit outside that customer/supplier model that is detrimental to what the new engine is.

"It's not [simply] an engine; it's much more complicated than that, so the relationship has to be much more complicated and sophisticated. We are trying to go in that direction with Red Bull [but] it's not easy."

It certainly looks from the outside as if relations are strained right now. Key Red Bull figures have made disparaging public comments about the job Renault has done, while Renault is unhappy with

the marketing visibility it has received from its alliance with Red Bull, and has made no secret of the fact it is currently evaluating whether it would be better off returning to full-blown works status and running its own F1 operation.

For Renault, the fact it doesn't always see eye-to-eye with Red Bull stems from the fundamental differences between producing and running successful racing cars, and the work of producing a functional power unit under the most complex set of engine regulations the sport has ever seen.

"Red Bull is a fantastic racing team that has a very simple agenda, which is to win races," says Abiteboul. "We can respect that. They are very impatient, they are extremely short-term oriented, which is something they can afford from the financial and resource perspective. Secondly, the UK environment gives them access to a lot of ideas through people they can employ.

"There are more teams than engine suppliers, so when it comes to getting new IP [intellectual property], new ideas, new people, there are more teams around to pick from. When you are an engine supplier, you can only pick between three. And when you are an engine supplier you are usually much more structured and robust than in the chassis world. ►



Ricciardo couldn't beat Felipe Nasr in the resurgent Sauber



Pressure is on Renault's White and Abiteboul

XPPI/IMAGES



Toro Rosso also had engine trouble in Melbourne, losing Max Verstappen from the race

► “Last, but not least, the time to change and design parts from new ideas to when you can get it to race on the track is much shorter on the chassis side than it is on the engine side. Red Bull wants to overcome situations in the very short term, but it cannot work like this on the engine side.

“I would like it to, but we have to work out what the short, middle and long-term objectives we want to set ourselves and work out how we get there – how we employ the collective resources we have, including people, to the best of the situation. I think this is something we struggle with from the relationship perspective.”

Abiteboul also suggests maybe the Red Bull-Renault alliance became a bit “blurred” by its run of success, which meant it didn’t invest the time, energy and money required to challenge Mercedes properly when the new engine regulations were introduced, while Red Bull believes Renault has everything it needs to get the job done in theory; it just needs to deploy its resources in a better way.

“There are some very capable people in Viry, [but] it reminds me a little of when Red Bull first bought Jaguar,” explains Horner. “There were a lot of very capable people within the team, what was lacking was clear technical direction. Renault has struggled with that within the current engine formula, but it’s something they’re looking to address.”

Hence Renault has taken on former Mercedes engine guru Mario Illien as a consultant to its F1 project. This is an example of the alliance working well – Red Bull identified someone it felt could strengthen Renault’s technical team, and Renault went out and secured his services. Red Bull is also prepared to make its powerful simulation tools available to help Renault solve the ‘correlation’ problems with its engine.

These are steps in the right direction – and all part of what was intended to be a re-alignment towards a works relationship this year, after Renault committed to supplying only Red Bull and its sister team Toro Rosso for 2015 – but perhaps they don’t address the fundamental challenge of trying to get back to winning ways.

Much of the frustration inside Red Bull stems from the lack of real influence it has in solving the problems it is discovering at the circuit. If the engine doesn’t work properly, suddenly the campaign becomes more complicated – not just from a technological point of view, but from the fact that operationally you have to bring another organisation into the fold. This is because Red Bull and Renault are two separate entities, with their own specific agendas, unlike the integrated works outfits at Mercedes and Ferrari, which are leading the way in F1 right now.

The obvious solution would be for Red Bull to ape this model and become a full-on factory entry, either by absorbing Renault’s operations into its own (not something Renault wants), or cutting Renault loose and building its own engines...

“Then there is a commercial issue,” explains Abiteboul. “Red Bull will be looking, I guess, for someone to finance the development of an engine. I don’t think there is any appetite from the Red Bull side to finance the very expensive development of a new power unit, and this is without thinking about the capital expenditure that must be made on the dyno and so on.

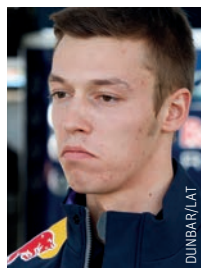
“We have 24 dynos in Viry. A dyno is not the cost of a windtunnel, but 20 together are not far from the cost of a windtunnel. I don’t think this is their priority.”

“Red Bull has no appetite to design and manufacture its own engines,” confirms Horner. “We have a desire to have a good understanding of simulation and modelling of the engine, and that’s an area where we can really assist Renault, but our objective is to sort out the issues we have. We have to work together in an open fashion in order to get the best out of each other and achieve the results both parties desire.



XPBIMAGES

“IT SEEMS THERE ARE SOME FUNDAMENTAL PROBLEMS WITH THE RED BULL PARTNERSHIP”



Kvyat didn't even start the race in Melbourne

“The reality is Renault and Red Bull’s only option is each other.”

But is it? For Red Bull, almost certainly, but perhaps Renault feels it can get more out of F1 by becoming an entrant in its own right, as it was with the team now known as Lotus between 2002 and ‘11. It has already held tentative discussions with certain existing squads regarding this possibility, but Abiteboul insists the priority for his organisation is to make its relationship with Red Bull work.

“I’m going to be a bit harsh, but honestly sometimes, in order to make a relationship work, it’s good to see what else is outside,” he explains. “I’m not saying we are flirting, but what’s interesting is to see how we [Renault] can improve the situation we have.

“We are here for marketing; we are here to deliver a story. We have been very successful with Red Bull, but from a marketing perspective it was not

delivering a great story, and last year we were not as successful and again the marketing story was not great, so in the two situations we don’t get the return we would like – we need to improve that.

“From an operational perspective, we need to have more sophistication in the way we are working. When Mercedes makes its budget planning for the subsequent year – let’s assume they have 100 per cent of budget to spend – according to their situation they can decide whether they want to allocate a big part of that to the engine, a smaller part to the chassis, and a smaller part to the drivers.

“The model they have is allowing them to do this. I don’t think having a team on your own is the only way to get this model to work, but this should be the target for our relationship with Red Bull.”

To some, that will sound like Renault simply asking for more money from its works partner. But regardless of the finances involved, it’s clear the Red Bull-Renault empire is not aligned correctly for this current era of complex hybrid Formula 1.

McLaren racing director Eric Boullier told this magazine last year that it was “impossible” for a customer team to win the

Q&A



Vettel struggled with 2014 package and became disenchanted

world championship. Both McLaren (with Honda) and Red Bull have moved towards the works model, but neither could be considered factory teams in the way Mercedes and Ferrari operate – one team, one (massive) budget, no secrets...

The question is whether Red Bull and Renault have done enough to integrate their operations, or whether fundamental change is required in order to attain the success they enjoyed together in the previous era of F1.

“To all intents and purposes we have a customer/supplier relationship – we still pay for engines and there’s obviously strain put on that relationship when you’re paying for a product that isn’t delivering as you want, hoped, or expected,” says Horner, who attended a crunch meeting with Renault chiefs last week as both parties sought to get back on track after a disastrous first race. “Yes, there needs to be a common philosophy between Renault and Red Bull as to the development of the power unit, because it’s such an integral part of the car’s performance now. To be honest with you, Melbourne might be the catalyst to banging heads together and realising we only have each other, so we need to get on with it.

“We’ve won 50 grands prix with Renault; we’ve won eight world championships together; the relationship started in 2007, when I twisted Flavio Briatore’s arm to supply us with a customer engine, and we’ve demonstrated on collaboration with exhaust-blowing that the organisations can work well together.

“Yes, we didn’t have the most powerful engine in the V8 era, but we managed to achieve decent drivability and utilise exhaust gases in a positive way for the aerodynamics of the car. That was a great example of the two groups working in harmony together. That’s where we need to get back to.

“We need to all get back on the same page as to what is the right way forward in terms of development, and then work together to achieve that. I believe that’s possible. It’s not going to be easy, but you’ve got to work at it.”

If the relationship can’t be made to work then this will truly mark the end of an era. Empires, once extinguished, don’t tend to rise again (except in genre fiction) and it seems there are some fundamental problems with the Red Bull-Renault partnership that may not be resolved without drastic changes to the way these two companies operate together.

For now, the best thing for this marriage would be some serious counselling. If that doesn’t work, perhaps the best solution for both parties would be a parting of ways. Trouble is, as things stand that simply isn’t an option for Red Bull. ❧



DANIEL RICCIARDO

RED BULL DRIVER

Where exactly is the engine weak - it looks as though you run out of power at the end of the straights?

I don’t know exactly where it comes from. It [the top end] is probably the part where I thought we were a bit further down last year, where the others seem to keep pulling. Obviously we’re trying to make those improvements, but I think that is one area in terms of pure power where we lack. It’s those last 100 or 200 metres where we’d like to get more out of it.

Do the drivability problems you’re having compound that issue?

We’re still a long way off where we need to be. I can’t speak so much about numbers in terms of raw horsepower, but in terms of what I feel, when I get on the power there are things that need to be ironed out just to make it easier to drive and that will give us more laptime in itself.

How much are you compromising the setup of the chassis because of the engine?

A bit, to be honest. When you have these issues it hurts your feeling on traction and it’s easier to break into wheelspin, so you have to look at setting up the car differently to mask these problems.



Ricciardo feels that better drivability will yield a laptime gain



WHY TAKE MANOR GP SERIOUSLY?

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The ex-Marussia team was a few days away from oblivion over the winter, has a proven track record for running at the back and couldn't even get its cars out of the garage in Australia earlier this month.

EDD STRAW decides if its cause is hopeless

Manor GP went to the season-opening Australian Grand Prix knowing that there was relatively little chance of being able to run its cars, which in themselves were cut-and-shut 2014 models. After all the weeks of build-up, the rejections, the rush to convert its car to 2015 specifications, the two Marussia-turned Manors spent most of the race weekend up on axle stands in the garage. After the letdown of their failure to turn a wheel, you can understand why many question the team's credibility. After its struggles in the past, and descent into near-oblivion, why should we expect things to be different this time round?

Well, one thing is beyond doubt; if Manor is

to have any chance of starting to pick up the FOM payments that its lofty position of ninth in the 2014 constructors' championship entitles it to, the cars have to start moving in anger in Malaysia this weekend. The payments could add up to in the vicinity of \$46 million (£31 million), with the first of 10 instalments due after the Malaysian GP, but Manor won't get paid if it simply sits in the garages. There have been doubts over the reason for not running, but given the complexity not just of running the cars, but of integrating all the systems, both those on the cars and pairing them with each other and the IT infrastructure at the track, it seems legitimate.

This team *has* to do far more than simply turn up. Bernie Ecclestone recently marked Manor's card, saying "we should never, ever have allowed Manor to do what they've done", which on top of the FIA stewards summoning the team to explain its failure to participate in qualifying two weeks ago ▶

► makes very clear that things, literally, have to get moving very soon. That's why the intentions of the team management should be taken seriously. Turning up and sitting in the garage gets it nowhere, other than on a costly trip to the other side of the world.

So what has changed? The unpleasant side of what is perceived by many as a feelgood story is that a lot of suppliers to the team in the past will not get their money back – well, only a small slice of it, at any rate. As is standard business practice, the team was only able to restart trading after finalising a Company Voluntary Agreement (CVA), which pays an agreed, relatively modest, percentage of the money owed to creditors. This is not unique to F1 and, without it, the team would have been liquidated

“YOU CAN WIN AND YOU CAN LOSE BUT YOU CANNOT GIVE UP, THAT'S UNACCEPTABLE”
GRAEME LOWDON

and the creditors likely never paid. But that doesn't make it any more palatable for those owed money. No one in the team wants to point the finger, but it's no coincidence that the team dropped off the grid after last year's Russian GP, when the Marussia car company lost interest.

But with last year's debts dealt with, Manor does have a clean slate for its activities in 2015. Stephen Fitzpatrick, founder of Ovo Energy and now the sole owner of the team (founders



Lowdon is helping team to restore its credibility

Graeme Lowdon and John Booth are no longer stakeholders), is a serious individual with a serious commitment to invest. Ferrari is happy to supply engines, and as team principal Maurizio Arrivabene made very clear in Australia, the deal is one of “no money, no honey”. If Manor does not fulfil its financial obligations there, then there will be no engine attached to the loud pedal. But ranged against that is a history of financial hardship.

So what are the pluses on Manor's side? Well, if it can get its car running – and do so credibly – it can re-establish itself as a bona fide grand prix team. The demise of Caterham means that it is also guaranteed a place in the top 10 in the constructors' standings this year. That grants access to 'column 1' of the FOM payments, and to stay there you need to have finished in the top 10 in two of the previous three seasons. That means Manor is guaranteed a big payment for 2016 and '17 as well as this year, even with the arrival of the Haas team.

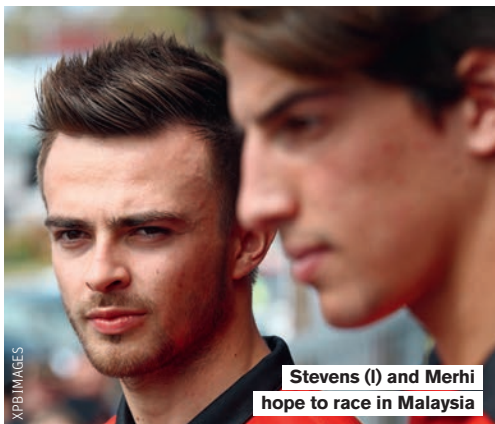
“This allows us to plan,” says Lowdon. “That's one of the things that has been, historically, so difficult. If you come into the main prize-fund pool, or drop out of it, the impact on your topline income is massive. And you don't know

what's going to happen until the end of the season. But we can set budgets now – and for the first time we know pretty much what that is.”

Lowdon claims that design work on the 2016 car starts “in three months time”. And it's going to be an important car, because Manor cannot afford to fall behind the Haas team, which has a commercial partnership with Ferrari and serious ambitions. So for Manor to get into next season in good shape, there are hurdles to overcome.

The plan from now is simple. As you read this, more staff are being employed. In Australia, the team didn't have the maximum permitted 60 operational personnel, although it wasn't too far off, but in Malaysia Lowdon expects to be “back to where we were”. So the short-term objective is simple: to get back to full operational strength. Last year, the team peaked at 225 people, and ultimately that again is the objective. But it will need somewhere to house them.

So as well as trying to get the cars running and working on building up a pukka 2015 car, which will house the latest Ferrari engine – likely buying around a second a lap in terms of laptime – the team needs to rebuild itself. Its Banbury base was acquired by Haas, so for now Manor is back in its old base of race operations in



Stevens (I) and Merhi hope to race in Malaysia

HOW MANOR UPDATED 2014 CAR TO MEET NEW RULES

Manor faced a huge challenge to get to Australia with a modified car. Rule changes over the winter forced the team to adapt its 2014 chassis to make it legal to race, with work needed on the nose and the front of the chassis.

A 2015 nose was already designed in preparation for the new season, so the structural and aerodynamic work was already complete. The 2014 anteaer nose design was modified to bring the bulk of the nose forward to meet the secondary cross-section-area rule. As a result, the new nose looks similar to the old one, simply with the exposed finger area reduced in accordance with the rules.

The top of the chassis had to meet a new rule

requiring it to slope from the chassis top to the front bulkhead over a 375mm distance. Last year's car had an extreme interpretation of the old rules, with a sudden step from chassis top to bulkhead in around 10cm. Modifying the chassis structure to incorporate the new slope was impractical, so the team added a spacer to the front of the chassis. The front of the spacer is now the front bulkhead and this 20cm extension is enough to make the chassis structure sit below the mandatory slope.

Other regulations demanded the anti-intrusion Xylon panel, to protect the driver in the case of a side impact, be extended. But this extra material could be applied retrospectively to the chassis.

Last year's car was already a backmarker,

running this year against updated cars will further handicap Manor GP. These problems affect both the chassis, which has not been subject to a winter's aero and suspension development, and the power unit, which has to be the less effective 2014 Ferrari unit. This is because the new power unit cannot be integrated into the old chassis.

Although aided by improved Pirelli rubber, it will be a challenge for Manor GP to qualify. The 107 per cent target time is calculated based on the first segment of qualifying. Thanks to the dominance of Mercedes, it does not need to run at 100 per cent in this session on the option tyre. This means the target time is unlikely to be as quick as it would be were one of the Mercedes cars running flat out.



This is about as far as the cars got in Australia



Team has endured de Villota tragedy



F1 struggles began, as Virgin, in 2010

Dinnington in Yorkshire. But that facility isn't a long-term solution. On top of Dinnington, it has taken office space at Silverstone where the design team, led by John McQuillam, is operating.

The team is working on locating a new facility where the whole operation can be taken in-house, although the precise timeline for this will be dictated by when it finds the ideal base. In the meantime, it can continue to tick over as it is currently set up. Put it to Lowdon that the team should emerge from the August break having come out of 'survival mode', with a settled team in terms of personnel and a new car on track, and he describes it as "a very fair assessment". That's a realistic objective that a team that wants credibility in its rebuilding needs to hit – and it will be confirmation that it has a future.

The amazing thing about Manor is that it still exists at all. Remember, this is a team that has been through a huge amount. Not only was it a few days from oblivion last month, but over the years it has endured a huge amount of pain. The terrible accidents that befell Maria de Villota and Jules Bianchi would have been enough to make less determined characters quit, while the financial hardships and struggle to get results has made others – former Caterham team owner

Tony Fernandes, for example – give up.

This is the heart of the feelgood side of this story. And the clue for the reason that it is so resilient is in its new name. Manor, created by Booth in 1990, has its roots in the team principal's own, successful, racing activities in Formula Ford long before that. Perhaps that is why, for all the team's struggles to produce a competitive car since joining F1 as Virgin in 2010, the operation side of actually running the cars has been very effective. Those are the qualities that suggest that, against almost insurmountable odds, the team does have the potential to succeed.

"There is a racing ethic here," says Lowdon. "You can win, and everyone wants to, and you can lose fairly under the rules and you can accept that. But you *cannot* give up, that's unacceptable. You don't chase a lost cause, but by definition this is not a lost cause. It has been unbelievably difficult and required a huge amount of effort, but that's because fundamentally we believe that we can do something. We can't show it today, but there is a model here that can be a good thing for the sport, a sustainable team that can go racing and give the fans what they want.

"I had a lot of business interests before

coming into F1, I know how to make money and the objective of our involvement in F1 is not to make money – I can think of a thousand better ways to do that. There is a real passion here – not a 'marketing' passion. Manor has got a proud history and there's Manor DNA in everyone in the team."

Whatever happens now, the team has no excuses. It has the income it has always craved – provided its cars get moving very soon – and the regrowth of Manor in terms of recruitment is proof that cash is being invested. The test is whether it can hit its targets: get the car on the grid, get the real 2015 car built, establish itself in a new factory and ensure that it can do what it couldn't do in its previous incarnation and keep its suppliers paid. All the evidence points to the team being sincere.

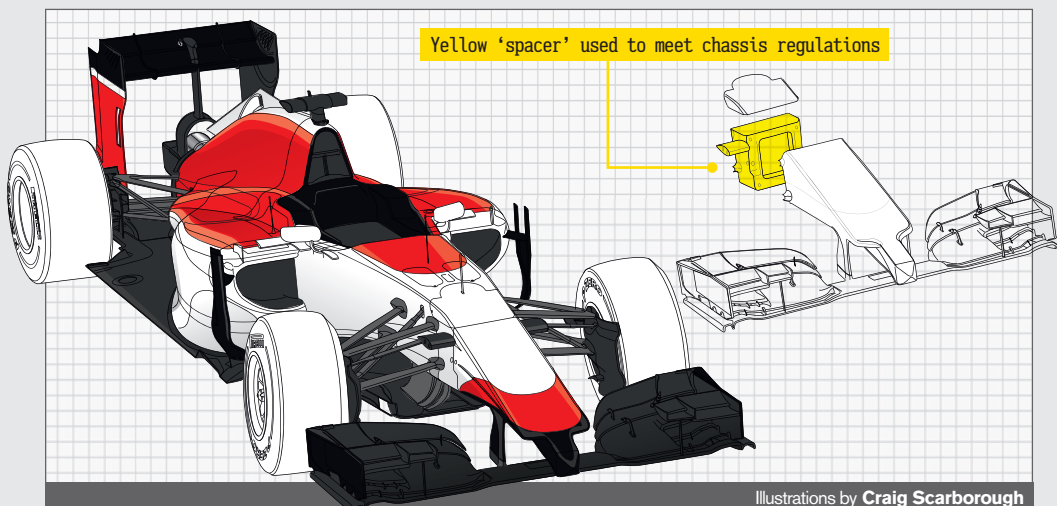
"The new owners are very straightforward and have proven to be incredibly helpful both in terms of financial investment and solving the challenges of restructuring," says Lowdon. "It has been about structured, straightforward steps with the correct objectives in mind and everything has been done correctly. We were up against an immovable object in the Australian GP and we were just left with not enough time to get to the level that we wanted to.

"But I hope people can see that we are not looking for some quick-fix; this is a proper, long-term commitment to be a Formula 1 racing team. We've spent a long time focused on restructuring, which you never have to do again. By doing that, we've saved a good team. We've never had the opportunity to show what we can do before because we've always been fighting something.

"We've still got challenges – we've got a car that hasn't turned a wheel yet – but once we get that going the pain will be a distant memory."

The objectives are clear, and it won't be long before Manor has to show the evidence of the progress it is claiming. Everything Lowdon says adds up...what has to happen now is that this likable racing team proves its intentions to the doubters by doing exactly what it exists to do: going racing. And doing so built on a stable financial foundation.

First step: get rolling in Malaysia. ❧



Illustrations by Craig Scarborough

Alonso's road to recovery

After missing the Australian GP with concussion, Fernando Alonso is closing in on a return to the cockpit in Malaysia. By **LAWRENCE BARRETTO**

24

S. BLOXHAM/LAT

Mclaren's Fernando Alonso will undergo a series of medical tests in the Sepang paddock today (Thursday) to assess his fitness ahead of a planned racing return in the Malaysian Grand Prix.

The double world champion suffered a concussion in a still-unexplained testing crash at Barcelona last month that led to him sitting out the season-opening Australian Grand Prix. This was the first time since 2002 that Alonso had missed a Formula 1 race.

But having resumed fitness training earlier this month, Alonso flew to McLaren's factory in Woking last week to spend some time in the team's simulator for the first time since the crash. He then travelled to Cambridge University on Sunday, where he was assessed by three physicians.

Following those tests, Alonso flew to Malaysia on Monday and now needs to be passed fit by both the FIA medical delegate Jean-Charles Piette and the track's medical officer before being given the go-ahead to compete.

It has not been the ideal start to the second edition of the Alonso-McLaren partnership after the Spaniard rejoined the team this season, having spent a year with McLaren back in 2007. His signing alongside Jenson Button was part of a refreshed package that also featured the return of Honda power as the team targeted a move back to the front of the grid after two woeful seasons.

But McLaren completed a pitiful number of laps in pre-season testing as it struggled with reliability. Its woes were then compounded after Alonso suffered a concussion when he crashed into the wall between Turns 3 and 4 at the second test at Barcelona.

There was a lack of clear video footage to explain exactly what happened, and details such as the speed of the lateral impact with the wall, or the *g*-force that Alonso experienced when he crashed, have not been made public.

But McLaren did confirm on Monday that Alonso has reported the steering felt "heavy" just before the accident happened.



Alonso was airlifted to hospital after Barcelona crash

THOMPSON/GETTY

"While there was nothing evident in the extensive car telemetry data, nor anything abnormal in the subsequent reconstructions and laboratory tests, Fernando recalls a sense of 'heavy' steering prior to the accident," said a McLaren statement.

"Consequently, the team has fitted an additional sensor to the car to increase our data capture."

F1 chiefs are now aiming to push through new rules which will require cars to be fitted with

high-speed cameras from 2016 to assist with data-gathering from such accidents. Played back at normal speed, footage from these cameras gives a slow-motion effect which will assist in the accident investigation process.

Alonso was airlifted to hospital, where he spent three days undergoing tests before being released. At the time, the team described the crash as a 'normal testing accident', while Alonso's

ALONSO'S ACCIDENT AND RECOVERY STEP BY STEP

FEBRUARY 22

Alonso crashes into the inside wall on the run between Turns 3 and 4 at the second Barcelona test and is airlifted to hospital.

FEBRUARY 25

The Spaniard is released from hospital after completing a series of tests over a three-day period. McLaren announce Kevin Magnussen will replace Alonso for the final test while the FIA says it will launch an investigation into the incident.



Magnussen filled in for Alonso in the final winter test

BLOXHAM/LAT

FEBRUARY 26

McLaren chief Ron Dennis tells reporters in Barcelona that the team is unsure if Alonso will be fit to race in Australia.

FEBRUARY 27

Alonso releases a video message where he says he wanted to be at the final test but was advised against doing so by doctors.

MARCH 3

The Spaniard pulls out of the Australian Grand Prix after doctors advise him that it is too soon for him to get back in a Formula 1 car because of the risk that another impact could have serious long-term consequences.

MARCH 10

Alonso says he has returned to training and is "giving everything" to return to the sport in time for the Malaysian Grand Prix.

MARCH 12

The FIA says there is no timeframe for when its investigation into Alonso's testing crash will be complete.

MARCH 13

McLaren racing director Eric Boullier says McLaren has "nothing to hide" over Alonso's crash as mystery surrounding the accident remains.



Boullier says McLaren has "nothing to hide" in crash probe

TEE/LAT

MARCH 18

Alonso returns to McLaren's factory in Woking to drive the team's simulator for the first time since the accident.

MARCH 22

Alonso is tested by three independent physicians at Cambridge University as he continues his bid to return to action.

MARCH 23

Following the assessment, Alonso flies to Malaysia but faces further tests by the FIA medical delegate and the track's medical officer.



Dennis mistakenly claimed Alonso was not concussed

manager tweeted a picture of the driver smiling in his hospital bed.

If this was intended to quieten speculation about the causes or effects of the accident, it failed. Wild rumours spread that Alonso had suffered an electric shock, or that he had fainted after breathing fumes from a battery problem.

McLaren chief Ron Dennis called a news conference at Barcelona in a further bid to put the brakes on the rampant rumour-mongering, but instead his pronouncements had the opposite effect. He claimed Alonso was "not even concussed" – something which was inaccurate and he later admitted was a mistake on his part.

Five days after the accident, Alonso released a video saying he was "completely fine", but five days after that, McLaren announced he would not take part in the Australian GP. Doctors had advised him to delay his return because of the long-term health risks associated with a second head impact, should he crash again.

McLaren's racing director Eric Boullier insisted that the team had "nothing to hide", and as investigations continued Alonso told fans that he was "giving everything" to return.

He remained at home during the Australian Grand Prix weekend, but was kept in the loop throughout, as McLaren qualified on the back row. His stand-in, Kevin

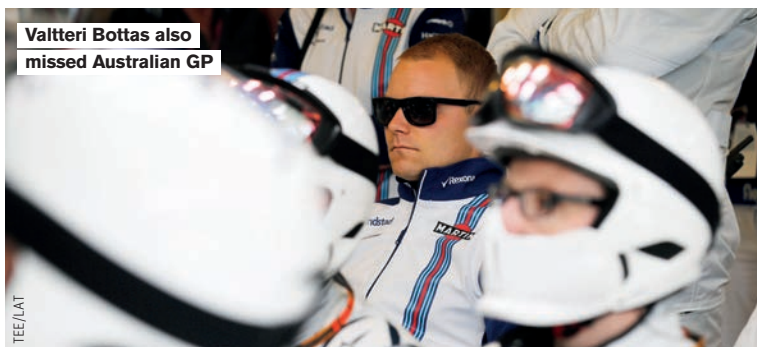
"Dennis claimed Alonso was 'not even concussed' – something he later admitted was a mistake"

Magnussen, then failed to start the race, following more Honda engine trouble, while Button finished last.

Last week, Alonso took a step closer to a return when he drove the McLaren simulator and then underwent the tests at Cambridge. The results of those tests were passed on to the FIA.

The FIA medical delegate and the Sepang International Circuit medical officer will now assess Alonso as well as Valtteri Bottas, who missed the Australian GP with a back injury, and make the final call on whether they can race.

If Alonso is cleared, whether he will be able to do much with a car that locked out the back row of the grid in Australia and finished a distant last, remains another question entirely. ❧



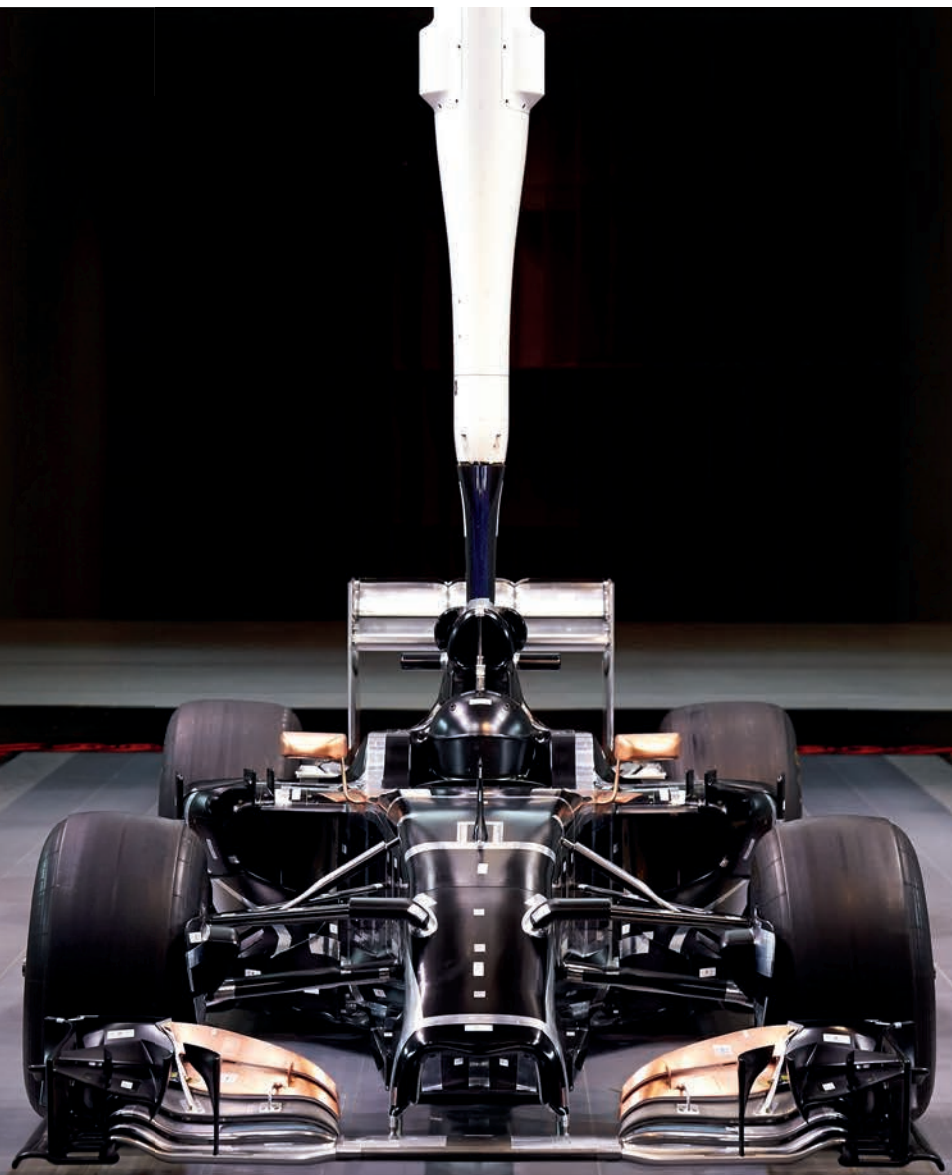
Valtteri Bottas also missed Australian GP

TEE/LAT

Would a windtunnel ban be right for Formula 1?

While F1 bosses and the teams argue over cost cuts, a ban on windtunnels has been proposed – with mixed reactions.

By DIETER RENCKEN and LAWRENCE BARRETTO



Red Bull boss Christian Horner caused a stir at the season-opening grand prix in Australia when he suggested to AUTOSPORT that Formula 1 should consider a ban on windtunnel use as a radical cost-cutting measure.

It was quite a claim and one that was given short shrift by Mercedes boss Toto Wolff. “That’s not going to happen,” he said. “Windtunnels are an integral part of Formula 1. They are an integral part of any road car business.”

The argument is an interesting one. On the one hand, a ban would save teams money. Force India boss Bob Fernley, one of the supporters of Horner’s suggestion, said it costs around \$15-20m a year to operate a windtunnel but estimates just \$1m in investment to get a full CFD (Computer Fluid Dynamics) set-up and “hardly anything” to run it.

But building a car using just computer simulation technology is not easy; just ask Virgin Racing who designed F1’s first entirely digital

car in 2010 in a bid to cut costs. The project was not a success and the team changed tack during the following season, agreeing a deal with McLaren to use its facilities, which included the windtunnel.

On the other hand, Wolff said Formula 1 is supposed to push the boundaries of motorsport technology and banning windtunnel use would hamper that bid.

“By not using the windtunnel, how do you want to put the car on the track without having measured it?” he said. “You can’t expect Formula 1 to be the pinnacle of motorsport and race the most competitive cars without checking the aerodynamic performance.”

But Fernley has countered: “If we’re supposed to be pushing the limits of technology, why aren’t we pushing the limits of CFD?” Horner agreed, suggesting a ban would encourage innovation.

“Give everybody the same microchip for the CFD cluster and make it down to the brainpower within the team as opposed to

computer or windtunnel power. Why not be radical? Why not make everyone have the same processes?”

The primary aim of a ban would be to save costs, but Williams deputy team principal Claire Williams suggested it would be counter-productive as it would serve to increase costs in the short-term. “As a team that has invested heavily in windtunnels – we have two, the second of which we put in at a cost of millions – we

wouldn’t support a ban on them,” she said. “There are things you can do from a cost-control perspective before you go down that route.

“Of course it would generate a big saving in the long-term, but in the short-term its going to drive up costs because you have to counterbalance aero, you have to counterbalance using a windtunnel with other technologies. You have to invest more in CAD and CFD, get rid of a whole load of people and

Red Bull boss Horner would support a ban – if he was forced to



Mercedes says windtunnels are integral to F1 and road cars



“You can’t expect F1 to be the pinnacle of motorsport without checking the car’s aerodynamic performance”

TOTO WOLFF

Q&A



BOB FERNLEY
FORCE INDIA DEPUTY TEAM PRINCIPAL

Do you agree with a ban on windtunnel use?

“We’ve proposed this twice now to the F1 Strategy Group and it’s been declined twice, including by Red Bull, but I’m pleased to see some light is coming on an issue that needs to be resolved and hopefully it will go further.”

Is a ban realistic?

“I think it’s very realistic. We’re using a device for our aero departments which is archaic and incredibly expensive to operate and to purchase. It consumes huge amounts of power so environmentally it’s a disaster.”

What are the benefits of a ban?

“It would reduce costs and make Formula 1 more sustainable for all teams, particularly the independent teams, and because CFD simulation is cost effective, it lowers the entry barrier for new teams coming in and that’s very significant for me.”

How much would it cost to get a full CFD set-up?

“If you wanted to put a competitive windtunnel in, and we looked at it very seriously two or three years ago, we were talking about \$40m at that point. For a full CFD set-up, you’re talking around \$1m.”

What is the next step?

“We have to discuss it with the Strategy Group. I think there is a significant amount of interest from both the FIA and the commercial rights holder to get F1’s costs under control. If they were behind it, plus at least Red Bull and Force India at the Strategy Group, it will go through to the F1 Commission.”



Opinion is divided over whether a windtunnel ban would save money

make them redundant, which we don’t want to do, and that costs you money anyway.”

Sauber built its own windtunnel – considered to be one of the best in Formula 1 – back in 2004. For a midfield team to make such an investment suggests the facility is integral and the Swiss team is on the fence as to whether to back a windtunnel ban, implying it will not solve a wider problem, which is slashing costs across the board.

“You can look at banning windtunnels but then what else is there?” said Sauber team principal Monisha Kaltenborn. “You are not going to make the situation better just by having no windtunnels. You have to look at a sensible concept and that should lead to a massive cost reduction.”

However, Kaltenborn said she “wouldn’t be too worried” if a ban was enforced because the team

could rent their windtunnel out – something it already does to help make its business sustainable.

Horner agreed, saying: “A [windtunnel] ban wouldn’t sit comfortably with us, but if we genuinely believed it was the right thing to do, we’d rent it commercially for another use,



Boullier feels there are better ways to cut costs in F1

as Sauber has demonstrated – they’re subsidising a Formula 1 team by making their windtunnel available to third parties. There are always ways. Frank [Williams] has two windtunnels, and his race team only uses one.”

For McLaren, a decision needs to be made soon, with the team working on extending its facilities, with plans that include a new windtunnel, in Woking.

“They need to decide what they want to do,” said McLaren racing director Eric Boullier. “If you ban one thing, it does not solve your problem. I am against a ban.”

If it came down to a vote, Toro Rosso team principal Franz Tost said: “If all teams decide windtunnels should be banned, then of course we would support that.” But as we have seen in Formula 1, getting everyone to agree on something is quite a challenge.”

NO DERAILING THE ACTION EXPRESS

Consistency proved to be the key as Action Express motored away from its rivals on race pace to claim Chevrolet's first outright Sebring victory in half a century. **GARY WATKINS** reports from Florida



LEVITT/LAT





Attrition would hinder the early frontrunners

ACTION EXPRESS RACING DID THE UNTHINKABLE, or at least something that has never happened before in the short history of the United SportsCar Championship. Its lead Coyote-Chevrolet Corvette DP driven by Joao Barbosa, Christian Fittipaldi and Sebastien Bourdais took an overall victory in the series by more than a lap. Such was its dominance at last weekend's Sebring 12 Hours that it was already out of reach by the time of the inevitable late-race safety car.

No one could really hold a candle to the #5 Daytona Prototype, not once the respective challenges from the pair of Ligier LMP2 coupes and the best of the Extreme Speed Motorsports HPDs went off the rails early in the race. Barbosa was able to establish the Coyote in the lead in the second hour, and the Portuguese and his team-mates looked to be in near-total control even before an amazing double stint from Bourdais gave the car that all-important one-lap advantage before the end of the ninth hour.

That left their pursuers — the Chip Ganassi, Spirit of Daytona and Wayne Taylor teams — no way back when the safety car was deployed for the sixth and final time with just over two hours to

go. Barbosa was ensconced at the front of the queue when it pulled in and was able to maintain the one-lap cushion to the chequered flag.

The Action Express Coyote was marginally faster than its DP challengers over one lap, but significantly quicker over a stint. That was the key to victory for the reigning USC champion team and last year's Daytona 24 Hours-winning trio.

"The team did a great great job in preparing the car for the long runs — we are very consistent through the stint," explained Barbosa. "On old tyres [the set on which he had qualified as per the regulations] after the start, I was able to keep up with everyone and when we put on new tyres, the car came alive. The car was so consistent and just got better as the temperatures came down."

The double stint from Bourdais straight after the fifth safety car was nothing short of stunning. In less than two hours, he put a lap on Michael Valiante, the slowest of the three drivers in the Spirit of Daytona Coyote-Chevrolet, and an off-form Scott Pruett aboard Chip Ganassi Racing's Riley-Ford EcoBoost DP.

It was somehow fitting that Bourdais' star should shine so high, even if that double stint

“There were times when we could race with the #5 car, but we didn't have the pace to beat them”

RICHARD WESTBROOK

probably wasn't decisive to the outcome. He might have had a class win to his name in the 12 Hours winner with the Multimatic Panoz GT2 team in 2006, but the two years that he finished second with the Peugeot LMP1 squad in 2009-10 were both near-misses for the Frenchman.

If Action Express had a near-perfect race, apart from a broken front anti-roll bar, the Spirit of Daytona, Wayne Taylor Racing and Chip Ganassi teams suffered myriad problems between them as they raced for a distant second place. Although there were occasions early on when they looked capable of challenging the ultimate winners, it was always going to be a long shot.

The Spirit of Daytona Coyote-Chevrolet that Valiante shared with Richard Westbrook and Mike Rockenfeller looked the car most likely to take the fight to Barbosa and his team-mates. Westbrook was able to overhaul Barbosa shortly after the fourth safety car period when he took on new tyres and the Action Express car didn't.

The Briton was seven seconds up the road when he had to take to the grass to avoid the factory

Olivier Pla qualified the Krohn Ligier on pole





Bourdais (centre) has been runner-up twice



Airjack failure cost #90 Corvette second place

Aston Martin GT Le Mans car at the Turn 7 hairpin. Even after this delay, Valiante was only 11s down on Bourdais after the stops were completed before the Frenchman's mega double.

Late in the race, the failure of the Coyote-Chevrolet's airjacks almost certainly lost the car second place to the Wayne Taylor Racing Dallara-Chevrolet Corvette DP, though Westbrook was still able to fight back to overhaul Scott Dixon in the Ganassi car during the final stint.

"I thought the track was coming to us at one point and was beginning to believe that we had a chance," said Westbrook. "There were times when we could race with the #5 car, but we probably didn't have the pace to beat them. We should have been second, though."

Second place for the WTR Dallara shared by Taylor brothers Ricky and Jordan and Max Angelelli was an amazing result given their problems in practice, qualifying and the first third of the race. Their car was snatching right under braking and nothing the team did to it appeared to make much of a difference. Only when the team opted for a change of brake discs (to the set that it had taken off after completing the full 24 hours at Daytona in January) late in the fourth hour did the problem go away.

"If anyone had said we'd finish second before the race, I'd have said they were crazy," said Ricky Taylor. "We thought putting back the brakes from the 24 Hours might fix the problem, but we couldn't be 100 per cent certain. We only tried it when we got desperate."

At least WTR fixed its issues, unlike Ganassi. Its Riley-Ford, which Joey Hand shared with Dixon and Pruett, had an understeer problem throughout. It did improve over the course of the race, but not to the point where the team ever



Night's lower ambients helped some runners

looked likely to repeat its 2014 Sebring victory, or to the extent that Dixon could hold off Westbrook near the finish.

"We've had understeer all weekend and have done a lot of stuff to it. We're not just turning the small knobs, we're turning the big knobs," explained Hand of the team's efforts to improve the car's errant handling.

All but one of the six LMP2s in the race failed to finish. The Krohn Racing Ligier-Judd/BMW JS P2 that Olivier Pla had qualified on pole ended up a delayed eighth. The Frenchman led the opening stint, but a slow stop as team owner Tracy Krohn was squeezed into the cockpit, which was compounded by contact with the Prototype Challenge car as he left his pit box, dropped the car down the order.

Four laps were lost by the car in which Nic Jonsson completed the driver line-up when Krohn had contact with another car that broke an exhaust silencer. Four of the six laps that the Ligier finished behind the winners were lost to its replacement in the third hour.

The other Ligier coupe, the Honda-powered car fielded by Michael Shank Racing, was out of the race in the second hour when Oswaldo Negri Jr thought Bryan Sellers in the Falken Tire Porsche was giving him room at the fast Bishop Bend and then had to take to the kerbs in avoidance when it turned out he wasn't. The car spun violently into the barriers and was out on the spot.

Extreme Speed Motorsports' late decision to revert from the new and so-far slow HPD-Honda ARX-04b coupe it debuted at Daytona to its pair of old open-top ARX-03bs looked like it might pay dividends. Ryan Dalziel qualified second in the lead car, which remained on the lead lap into the fourth hour when a glitch with the gearbox electronics cost it two laps. A rear suspension problem eventually resulted in its retirement shortly after half distance, while the second ESM entry remained on the lead lap into the eighth hour until losing turbo boost and retiring.

The high attrition rate among the Prototype entries allowed the best of the one-make Prototype Challenge cars to come through to take sixth place overall behind the second-string Action Express car, which was delayed when it lost a wheel early in the race. The PR1/Mathiasen ORECA-Chevrolet FLM9 driven by Tom Kimber-Smith, Andrew Palmer and Mike Guasch followed up on its Daytona victory to make it two in a row.

The team's victory in the USC opener owed a lot to fortune given that the CORE Autosport entry crashed out. This time PR1/Mathiasen had the edge. It was still close at the end, with Colin Braun less than a second behind Kimber-Smith as they headed into the final pitstops. The winning team opted against giving the Brit new tyres, which gave him space for what turned out to be an unchallenged run to the flag. ▶



Pitstops proved crucial to Chevrolet's class win

GTLM

Fuel allowance gives Chevrolet the vital edge over Porsche

IT MIGHT HAVE LOOKED LIKE THE CORVETTE Racing trio of Jan Magnussen, Antonio Garcia and Ryan Briscoe got lucky on the way to completing a Daytona-Sebring GT Le Mans class double. Yet the truth was that the best of the Chevrolet Corvette C7.Rs was on course for victory even before the factory Porsches that were running one-two as the race entered its final stages hit trouble.

The two CORE-run 911 RSRs led much of the 12 hours: the #912 that class pole-winner Frederic Makowiecki shared with Earl Bamber and Jorg Bergmeister was the quicker Porsche for the first half of the race, although it lost time when repairs to the windscreen were required, but the #911 of Patrick Pilet, Nick Tandy and Richard Lietz had the edge when it became cooler after the sun went down.

Porsche appeared to be in control of this race until the safety car came out for the final time when the second Chevy stopped out on the track with a repeat of a sticking throttle issue. Everyone had to dive in for fuel when the pits opened just after the 10-hour mark.

Garcia was able to eke out his fuel allocation to complete the race on one final full stop. The Porsches – which had lost four litres of tank capacity under the pre-event Adjustment of Performance – were going to need a proper stop

and a splash. It didn't matter that Makowiecki lost time when the left-rear wheel was slow to disengage in the pits and that Tandy got stuck in sixth gear later in the final hour.

"The moment that last safety car came out, it became a fuel race," explained Garcia. "I was trying to stretch it in that second-to-last stint and went four or five more laps [than the Porsches]. That meant the race was ours because they would have to stop again."

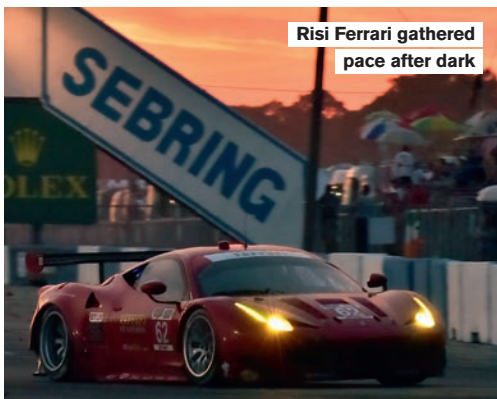
Pilet was happy to admit that. "They could go further on the fuel than us, and then when it mattered they could go a lot further," he said.

Porsche's woes left them fifth (#911) and seventh (#912) at the finish. That allowed the Risi Competizione Ferrari squad to come through to take second with Giancarlo Fisichella, Pierre Kaffer and Andrea Bertolini after emerging as a true contender in the closing stages.

They kept their 458 Italia on the lead through the opening two thirds of the race despite an overheating issue that forced them to short-shift, but as the ambient temperatures dropped they were able to pick up the pace. Fisichella was meant to go to the end after getting in the car during the final yellow, but cramp resulting from a footballing injury forced him into the pits before the scheduled end of his stint. That meant Kaffer would have to make a splash-and-dash before the finish, though no one at Risi was pretending they could have beaten the Corvette.

Third went to the Walker-run Falken Tire Porsche 911 RSR of Bryan Sellers, Wolf Henzler and Patrick Long. It emerged as a genuine contender when temperatures were at their hottest, but there is only one compound of Falken tyre, meaning they dropped off the ultimate pace when their Michelin rivals swapped to softer compound rubber when it cooled.

There was no fairytale class victory for BMW with its retro liveries: the two Rahal Z4 GTEs were not quite on the pace. Lucas Luhr, John Edwards and Jens Klingmann finished a lap down in fourth, while the sister car was delayed with a broken chassis crossmember.



Risi Ferrari gathered pace after dark

GARY WATKINS
SPORTSCAR CONTRIBUTOR

@gazzasportscars



FLICK DOWN THE ENTRY LISTS OF ALL THE series for which LMP2 machinery is eligible this year, and you'll find 10 different chassis from six constructors. And powering them you'll count four engine makers. Great, isn't it?

You might have heard me banging on about diversity in sportscar racing and why it is key to the discipline's attraction for me (and, probably, you too). That applies as much in LMP2 as it does in the P1 or the GT ranks. The freedom in the secondary prototype class down the years has given us such delights as the Lancia LC1 and the MG EX257 and oddities such as the Sthemo and the Strandell.

That's why the first step towards confirmation of new rules from the FIA and the Automobile Club de l'Ouest at Le Mans that are going to stifle variety comes as a disappointment. But my doubts about this idea go deeper than personal preference. The reason that Brendon Hartley, Mike Conway and Harry Tincknell have been plucked from P2's midst by WEC factory teams is that it offers a microcosm of P1.

It's an open formula, just with a few more limitations than its big brother. Take that away, and P2 suddenly isn't the great training ground any more, though it seems that multiple tyre suppliers will (crucially) still be allowed.

I do understand that it's tough for constructors to make money out of P2, but no one is forcing them to build cars. Thankfully, they do.



BIG NUMBER

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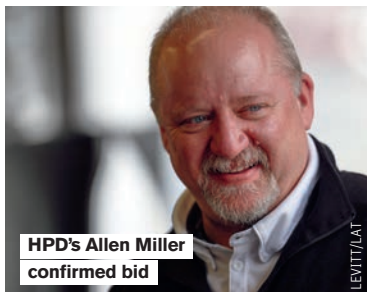
Miles completed by the #5 Action Express Racing Coyote in the short history of the United SportsCar Championship. That's every racing lap of every race held since the beginning of the 2014 season.

US constructor in the P2 mix

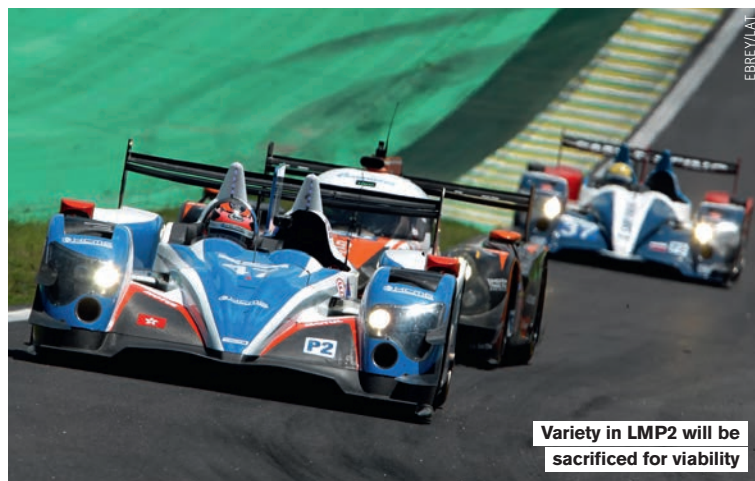
AT LEAST ONE OF THE FOUR constructors to be given the right to build cars for the new LMP2 formula from 2017 will be a North American company, according to the latest proposals.

The plan for the category, which will form the basis of the Prototype class in the United SportsCar Championship, is to limit the number of constructors in the interests of economic viability. There will be a formal tender process, but it is the intention of the rulemakers for one of the spots to be reserved for company from North America.

The FIA, the Automobile Club de l'Ouest and USC sanctioning body IMSA have yet to go public on their plans to limit the number of chassis manufacturers in P2, but it is known that they will outline details of tender procedures at a meeting of interested parties during this week's



HPD's Allen Miller confirmed bid



Variety in LMP2 will be sacrificed for viability

official World Endurance Championship test at Paul Ricard.

Honda Performance Development and Riley Technologies have both confirmed their intention to bid for one of the places.

HPD race team leader Allen Miller said: "We will be happy to make a submission to become the North American constructor. We are committed to P2, but the proposed new regs have thrown us a bit of a curve ball."

Miller admitted concern that P2 would adopt a spec engine in the WEC and the Le Mans Series in Europe and Asia, something that was confirmed by last week's FIA World Motor Sport Council.

"There has to be disappointment," he said, "because we've put a lot of effort

into developing a package that could be raced in all series."

The World Council said that the single engine idea was designed to "universalise the 2017 LMP2 category". It is known that the rules proposal does not call for the engine to be production-based.

The Prototype class in the USC would allow different engine manufacturers, at the same time as allowing them to incorporate styling cues on the cars.

The line from the World Council bulletin is the only public acknowledgement of any details in the latest rules proposal, but ACO sporting manager Vincent Beaumesnil has said that the vision of the new P2 was "for a slightly faster and stronger car with lower running costs".

HPD seeking new partner

HONDA PERFORMANCE

Development is working to bring the new ARX-04b abandoned by the Extreme Speed Motorsports squad back to the United SportsCar Championship before the end of the season.

ESM has no plans to return to the car that it gave a low-key and shortlived debut to at Daytona in January. This means that HPD is now looking for another team to race the car after homologating the chassis in the summer.

HPD race team leader Allen Miller said: "Our goal is to come up with a new package of parts, get the car sorted and then race in the US this year. How we do it is not set, but we have already had communication with a lot of teams.

"We need to be able to say, 'it's done,' otherwise it is going to be a hard sell."



ESM has gone back to old car



Job trio reclaimed lead with the chequered flag in sight

GTD battle goes to the wire

ALEX JOB RACING CLAIMED A 10th Sebring class victory in a thrilling climax to a GT Daytona battle that was close all the way.

The best of the two AJR Porsche 911 GT Americas shared by Mario Farnbacher, Ian James and Alex Riberas appeared to have lost victory when fading brakes sent Farnbacher off at Turn 7 with nine minutes left. He thought he'd lost the race, but what he didn't know was that the chasing Jeroen Bleekemolen had problems of his own: the temperature gauge of the

Riley-run Dodge SRT Viper GTS-R he shared with brother Sebastiaan and Ben Keating was steadily rising courtesy of a holed radiator.

The team's gamble not to change the rad didn't pay off: Bleekemolen retired with five minutes left.

The Job car had come back into contention after Riberas sustained a puncture in the pitlane and had to complete a full lap on the deflated tyre. The final safety car allowed him to close in on the leaders and he was then able to pass the Viper and James Davison's Aston Martin.

McMURRY TO RETURN

Matt McMurry, who last year became the youngest driver to compete at the Le Mans 24 Hours, is due to return to the Michael Shank Racing Ligier line-up at the Watkins Glen Six Hours in June. He was stood down for Sebring and is in line for an intensive test programme prior to the resumption of the North American Endurance Cup. "We regard this as a long-term proposition because Matt is only 17," said team boss Michael Shank. "We have got four days of testing with him over the next eight weeks."

ACO AND IMSA EXTEND

The Automobile Club de l'Ouest and IMSA, sanctioning body of the USC, have extended their partnership until the end of 2020. The new agreement follows a previous two-year contract that straddled the final year of the American Le Mans Series in 2013 and the first season of the USC. It could also result in an increase in number of guaranteed entries it can award for Le Mans, which currently stands at two, according to IMSA president Scott Atherton.

NEW DELTAWING PLAN

DeltaWing has outlined plans to race a new GT supercar based around the concept of the DWC13 in the US before the end of the season. It is planning to develop an aluminium-chassis road car, which will be powered by four-cylinder turbo engine of undisclosed origin, in a racing environment. It has yet to confirm that the car would compete under GTE regulations in the GTLM class of the USC, but company boss Don Panoz has hinted at ambitions to take the car to the Le Mans 24 Hours.

STARWORKS OPTS OUT

The Starworks squad opted against running its Riley-Dinan/BMW Daytona Prototype at Sebring in the wake of engine failure at the Daytona series opener. The Florida team could return with a revised V8, with modified valve gear, at the Detroit USC round in May.

BLANCPAIN PREP

8Star Motorsports team boss Enzo Potolicchio contested the Sebring 12 Hours with AF Corse in preparation for an assault on the Blancpain Endurance Series with the Ferrari team. The Venezuelan shared a GTD class 458 Italia with Marco Cioci, Piergiuseppe Perazzini, his BES team-mates, and Rui Aguas.



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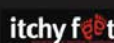
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RESULTS

Second Action Express
Corvette finished fifth



DOLE/LAT

Wright Porsche blew
engine in practice



LEPAGE/LAT

Campers' vans double
as viewing platforms



Patron Endurance Cup
has two rounds to go



LEVITT/LAT

SEBRING 24 HOURS – 340 LAPS, 1271.600 MILES

POS	DRIVERS	TEAM	CAR	CLASS	RESULTS	GRID
1	Joao Barbosa/Christian Fittipaldi/Sebastien Bourdais	Action Express Racing	Coyote-Chevrolet Corvette DP	P	12h01m40.097s	3
2	Ricky Taylor/Jordan Taylor/Max Angelelli	Wayne Taylor Racing	Dallara-Chevrolet Corvette DP	P	-1 lap	7
3	Richard Westbrook/Michael Valiante/Mike Rockenfeller	Spirit of Daytona	Coyote-Chevrolet Corvette DP	P	-1 lap	6
4	Joey Hand/Scott Pruett/Scott Dixon	Chip Ganassi Racing	Riley-Ford EcoBoost DP	P	-1 lap	9
5	Dane Cameron/Eric Curran/Max Papis	Action Express Racing	Coyote-Chevrolet Corvette DP	P	-2 laps	5
6	Tom Kimber-Smith/Michael Guasch/Andrew Palmer	PR1/Mathiasen Motorsports	ORECA-Chevrolet FLM09	PC	-6 laps	13
7	Colin Braun/Jon Bennett/James Gue	CORE Autosport	ORECA-Chevrolet FLM09	PC	-6 laps	12
8	Olivier Pla/Tracy Krohn/Nic Jonsson	Krohn Racing	Ligier-Judd/BMW JS P2	P	-6 laps	1
9	Conor Daly/Jerome Mee/James French	Performance Tech Motorsports	ORECA-Chevrolet FLM09	PC	-7 laps	14
10	Antonio Garcia/Jan Magnussen/Ryan Briscoe	Corvette Racing (Pratt & Miller)	Chevrolet Corvette C7.R	GTLM	-10 laps	23
11	Giancarlo Fisichella/Pierre Kaffer/Andrea Bertolini	Risi Competizione	Ferrari 458 Italia	GTLM	-10 laps	25
12	Wolf Henzler/Bryan Sellers/Patrick Long	Team Falken Tire (Walker)	Porsche 911 RSR	GTLM	-11 laps	28
13	Lucas Sald/John Michael Edwards/Jens Klingmann	BMW Team RLL	BMW Z4 GTE	GTLM	-11 laps	26
14	Patrick Pilet/Nick Tandy/Richard Lietz	Porsche North America (CORE)	Porsche 911 RSR	GTLM	-12 laps	22
15	Mario Farnbacher/Ian James/Alex Riberas	Team Seattle/Alex Job Racing	Porsche 911 GT America	GTD	-22 laps	31
16	James Davison/Christina Nielsen/Brandon Davis	TRG-AMR	Aston Martin V12 Vantage	GTD	-22 laps	34
17	Pedro Lamy/Paul Dalla Lana/Darren Turner/Mathias Lauda	Aston Martin Racing	Aston Martin Vantage GTE	GTLM	-22 laps	29
18	Anthony Lazzaro/Bill Sweedler/Townsend Bell	Scuderia Corsa	Ferrari 458 Italia	GTD	-22 laps	42
19	Ben Keating/Al Carter/Marc Goossens/Cameron Lawrence	Riley Motorsports	Dodge SRT Viper GT3-R	GTD	-23 laps	38
20	Bryce Miller/Christopher Haase/Dion von Moltke	Paul Miller Racing	Audi R8 LMS	GTD	-23 laps	39
21	Frederic Makowiecki/Jorg Bergmeister/Earl Bamber	Porsche North America (CORE)	Porsche 911 RSR	GTLM	-23 laps	21
22	Dirk Werner/Bill Auberlen/Augusto Farfus	BMW Team RLL	BMW Z4 GTE	GTLM	-23 laps	24
23	Jan Heylen/Madison Snow/Milo Valverde	Wright Motorsports	Porsche 911 GT America	GTD	-24 laps	37
24	Leh Keen/Cooper MacNeill/Andrew Davis	Alex Job Racing	Porsche 911 GT America	GTD	-24 laps	33
25	Boris Said/Michael Marsal/Markus Palittala/Andy Priaulx	Turner Motorsport	BMW Z4 GT3	GTD	-25 laps	43
26	Jeroen Bleekemolen/Ben Keating/Sebastiaan Bleekemolen	Riley Motorsports	Dodge Viper SRT GT3-R	GTD	-26 laps - radiator/engine	30
27	Jim Pace/Byron DeFoor/David Hinton/Dorsey Schroeder	Fifty Plus Racing	Riley-Dinan/BMW DP	P	-31 laps	20
28	Marco Cioci/Piergiuseppe Perazzini/Rui Aguas/Enzo Potolicchio	AF Corse	Ferrari 458 Italia	GTD	-32 laps	41
29	Rusty Mitchell/Mikhail Goikhberg/Chris Miller/Gerry Kraut	JDC/Miller Motorsports	ORECA-Chevrolet FLM09	PC	-50 laps - engine	16
30	Alex Popov/Renger van der Zande/Mike Hedlund/Mirco Schultis	Starworks Motorsport	ORECA-Chevrolet FLM09	PC	-60 laps	18
31	Chris Cumming/Bruno Junqueira/Gustavo Menezes	RSR Racing	ORECA-Chevrolet FLM09	PC	-73 laps - parked/no third gear	15
32	Tommy Milner/Oliver Gavin/Simon Pagenaud	Corvette Racing (Pratt & Miller)	Chevrolet Corvette C7.R	GTLM	-76 laps - throttle/accident	27
33	Johannes van Overbeek/Ed Brown/Jon Fogarty	Extreme Speed Motorsports	HPD-Honda ARX-04b	P	-129 laps - engine	8
34	Martin Plowman/Marc Drumwright/Tomy Drissi/David Cheng	BAR1 Motorsports	ORECA-Chevrolet FLM09	PC	-146 laps	11
35	Andy Lally/John Potter/Marco Seefried	Magnus Racing	Porsche 911 GT America	GTD	-161 laps - damage	36
36	Ryan Dalziel/Scott Sharp/David Hansson	Extreme Speed Motorsports	HPD-Honda ARX-04b	P	-178 laps - suspension	2
37	Spencer Pumpelly/Patrick Lindsey/Jim Norman	Park Place Motorsports	Porsche 911 GT America	GTD	-185 laps - damage	32
38	Tristan Nunez/Jonathan Bomarito/Sylvain Tremblay	Speedsource	Lola-Mazda Skyactiv-D B12/80	P	-229 laps - oil pump belt	17
39	Tom Long/Joel Miller/Ben Devlin/Sylvain Tremblay	Speedsource	Lola-Mazda Skyactiv-D B12/80	P	-236 laps - overheating	19
40	Damien Faulkner/Mike Skeen/Michael Avenatti	GB Autosport	Porsche 911 GT America	GTD	-243 laps - engine	35
41	Memo Rojas/Katherine Legge/Andrew Meyrick	DeltaWing-Racing	DeltaWing-Elan/Mazda DWC13	P	-280 laps - suspension	10
42	Oswaldo Negri Jr/John Pew/Justin Wilson	Michael Shank Racing	Ligier-Honda JS P2	P	-294 laps - accident	4
43	Marco Holzer/Robert Thorne/Colin Thompson	Flying Lizard Motorsports	Audi R8 LMS	GTD	-317 laps - oil leak	40

In each car, the first-named driver both set the qualifying time and started the race. Winners' average speed: 105.721mph. Fastest lap: Pla, 1m52.261s, 119.935mph; PC: Junqueira, 1m1m55.563ss, 116.507mph; GTLM Auberlen, 1m57.379s, 112.783 mph; GT Daytona: Farnbacher, 1m2,03.923s, 174.852mph. Championship points unavailable at time of going to press.

WHERE NEXT FOR

INDYCAR?



36

IndyCar's latest attempt at global expansion failed with the cancellation of its Brazil-based 2015 opener. Can it hit the ground running after a long off-season that has been extended further still?

MARK GLENDENNING assesses America's single-seater pinnacle

The IndyCar Series has stood on the precipice. At the dawn of the 2012 season, it was preparing for a year that was make or break in a very real sense: wounds were still raw from the catastrophic Las Vegas event a few months earlier; four ovals had withdrawn from the schedule; the paddock was rife with political bickering; the judicial system was being lambasted; domestic TV figures barely registered.

There were also concerns about the fact that the new

Dallara DW12 looked like an optimised hippopotamus; yet this car proved to be one of the main reasons that the series has successfully navigated its way through a period of stabilisation. Ugly as it looked, the DW12 raced majestically on road/street courses and ovals alike. There have been 52 races during the DW12 era, and maybe four of those were duds.

Fast-forward to the eve of the 2015 season, and much has changed. Former series CEO Randy Bernard was replaced by Mark Miles, who was then a board member of IndyCar and IMS parent company Hulman & Co, and is now its CEO. Derrick Walker transitioned from team management to a series-management role and overhauled race control. The paddock is more unified and more TV viewers are tuning in.

The previous, disengaged title sponsor has given way to a blue-chip company in Verizon that is aggressively activating its association with a sport that was in danger of being relegated to America's sporting fringe. Nobody is under the illusion that IndyCar is out of the woods, but there's a distinct sense the trees are thinning.

"I'm very pleased with our progress over the past couple of years," says Miles. "IndyCar had a terrific year from 2013 to 2014 in terms of our television audience. The average viewership increased by 25 per cent. The average rating increased by 25 per cent. And this is at a time when it's not natural law that sports ratings are increasing, so that is a significant achievement. It's starting from a low base, and we aspire to grow that television audience meaningfully."

LEVITT/LAT



Miles is correct that IndyCar's ratings were low-hanging fruit, but he's also right to be pleased: IndyCar's dramatic spike came in a year when both NASCAR and Formula 1's American TV figures shrank. Other aspects of the series' improved health are less easily measured by metrics, but are significant nonetheless.

"We still need to grow our economy, but I think the stakeholder confidence is in a much happier place," Miles says. "People know what we're trying to do and why we're trying to do it, and even if they don't agree with it, they've given us the benefit of the doubt, and they trust us.

"Related to this is the paddock confidence. A couple of years ago there were concerns about how good we were as a sanctioning body: the basic 'making and enforcing rules' stuff. This is

more difficult to gauge — although we do survey stakeholders, in addition to talking to them regularly — but I think we've moved up several notches in terms of the credibility as a sanctioning body.

"And for the most part, we got race control out of the newspapers last year. That's what you hope for. It will happen, because it is a sport, it's officiating, and there are controversies. Sometimes, even mistakes are made.

"But we've spent a lot of money to improve the technology. Derrick changed the system to create clearer standards for what penalties will be levied when there are infractions; he created a communications process post-race so that teams and drivers and come in and see the people who made the decisions and the videos that were ▶

“INDYCAR'S TV SPIKE CAME WHEN NASCAR AND F1 RATINGS SHRANK”

DOLE/LAT

St Petersburg will host the opener after the Brazil deal collapsed



► available to race control. That doesn't always mean that they were delighted, but the communication was good, and they know why we did what we did, and I think that's foundational."

The sceptic – and after such a tumultuous recent history, IndyCar still has many – will immediately point to the Brazil-sized elephant in the room. Last year's schedule was the first step in IndyCar's broader plan to begin and end its season earlier, and the rollout of that idea took the form of a calendar that ended in early August. Having the 2015 season begin in March resulted in an off-season that was almost as long as the season itself, which is a massive risk for a series that was finally gaining momentum. Few North American venues are located in climates suitable for racing in February, which prompted Miles' controversial plan to plug the gap by expanding internationally.

The plan was for this new phase of international expansion to start in a market that IndyCar is already familiar with: Brazil. IndyCar raced on a street circuit in Sao Paulo between 2010 and 2013; this year it was supposed to open its season with a race in Brasilia. That event was cancelled with just a few weeks' notice after the regional government withdrew its funding.

Miles says that he was "angry and bitterly disappointed" that the race collapsed so late, but points out that it was on track to be a success, with title and presenting sponsorships having been secured, hospitality suites having sold out, and around 25,000 tickets having been sold at the time the event was canned.

It's the second international IndyCar race to have fallen over in recent times, following on three years after the scrapped race in Qingdao, China. Tempting as it is to draw parallels however, the circumstances were quite different in each case. All signs point to Qingdao as an example of the potential pitfalls that accompany dealing with relatively inexperienced motorsport

Brit Jack Hawksworth is now an IndyCar star

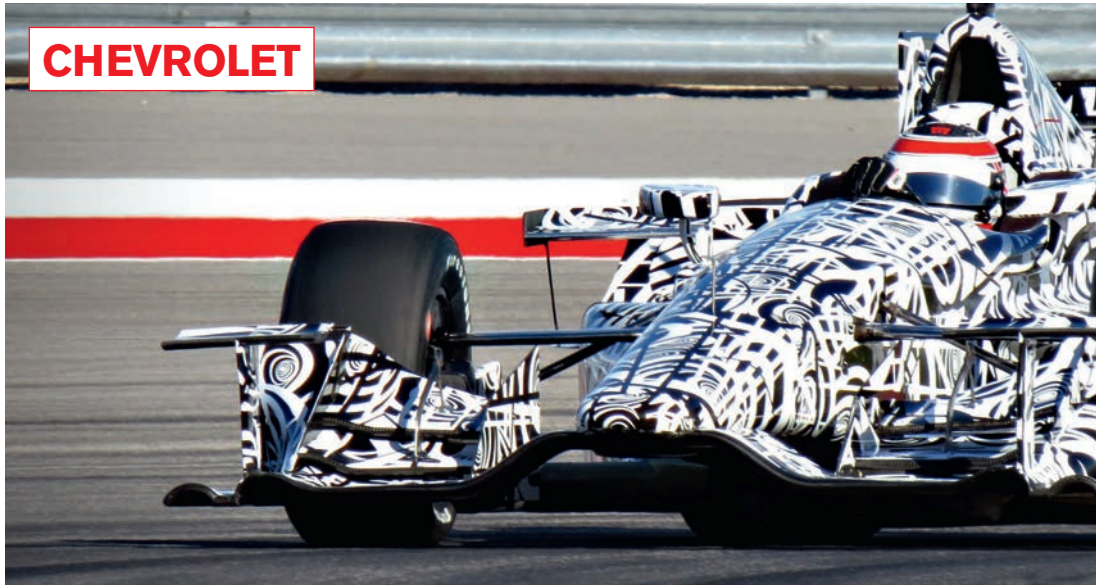


MOUNCE/LAT

HONDA



CHEVROLET



promoters in emerging markets. The Brasilia promoters, however, were the same group that had successfully run the Sao Paulo event.

Brasilia's cancellation lengthened an off-season that was already too long, but this was actually an additional form of insurance in itself. Miles's reasoning was that it's less disruptive to lose a race at the very start of the year than to create an unwanted gap by losing one in the middle. For all of the disappointment though, his commitment to international expansion remains unwavering.

"People – Americans in particular – tend to forget that American races fall over too, for economic reasons, for political reasons, for all kinds of reasons," he says. "The schedule today isn't the schedule of CART 20 years ago. And it will always be somewhat dynamic.

"Bernie Ecclestone and others have done quite well, at least economically, and I would argue also in terms of growing their fan base, by being international. So the idea that Americans can't do business outside the US because people aren't trustworthy and you can't live by the rule of law; you can't make contracts you can depend on. Sure, there will be issues. But there are plenty of examples of it working."

As strongly as Miles advocates IndyCar's international expansion, he does not think it is critical to the series' future.

“EVERY TENTH IS MADE TO COUNT AND ANY TINY SHORTCOMINGS ARE PUNISHED”

"We can pursue the approach of moving earlier and expanding the number of races, even if every race was in North America," he says. "But there is a market opportunity internationally that is greater, perhaps, than it is typically in the States. So I think we would continue to grow, but we would grow somewhat more slowly."

And what of the product that he's trying to sell? The standard of racing has spoken for itself, but for those looking through an F1 lens, it's easy to underestimate the standard of drivers.

Attributing Juan Pablo Montoya's successful

INDYCAR'S STRIKING NEW LOOK



SINCLAIR/LAT

The saga of manufacturer-designed aero kits for the Dallara DW12 has been an ever-present storyline in the IndyCar paddock for the past three years. After a few false starts they are finally ready for implementation – and whether that's a good thing depends upon your standpoint.

At a basic level, the aero upgrades are a clear winner. The performance increases that they promise should lead to dramatically quicker lap times at all tracks, and will take the series closer to its aim of bettering Arie Luyendyk's long-standing speed record at Indy.

They'll also add some visual variety between Honda and Chevrolet. In both cases this essentially means that each car will look like a DW12 with some bits stuck on it. Manufacturers were not given a clean slate for their designs, but instead had to work within specific boxes that were designated as being open for development.

An additional bonus for the manufacturers is that they will have more control over their own destiny: as well as influencing the engine, they now have a significant say in the aero, and therefore a far more direct impact on the overall performance of the car.

The downsides? The strongest card in IndyCar's hand during the DW12 era has been the exceptionally high standard of racing; throwing new variables into the mix could disrupt that, especially if one manufacturer misses the mark.

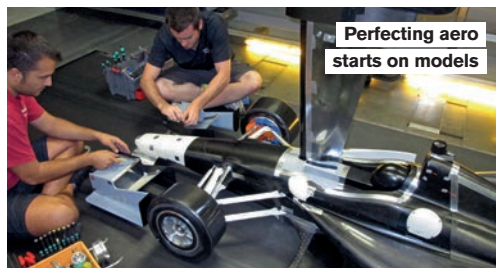
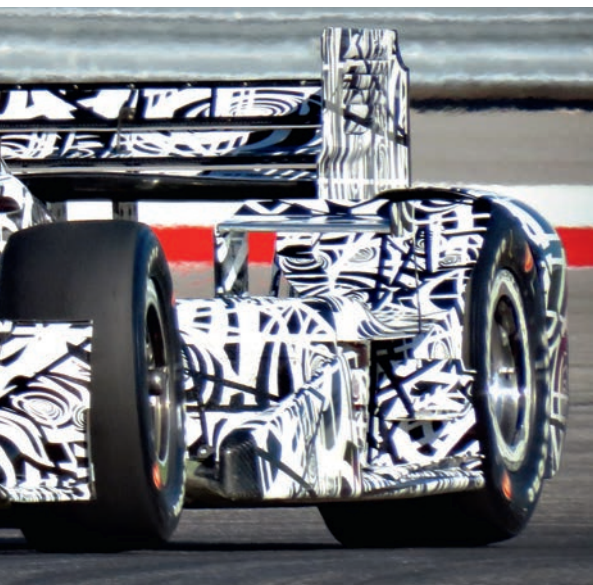


SINCLAIR/LAT

Will the new aero set-up spoil racing?

There's also the risk that the airflow over the new bodywork will make it harder for cars to closely follow one another through corners, which could in turn mean less passing. And we're still yet to see what sort of impact the new aero will have on tyre wear, and how that will impact the racing.

After such a long off-season, IndyCar needed a way to reinsert itself into the global motorsport conversation, and the arrival of the aero kits has already delivered on that front. Now, they just need to back it up on the track.



Perfecting aero starts on models

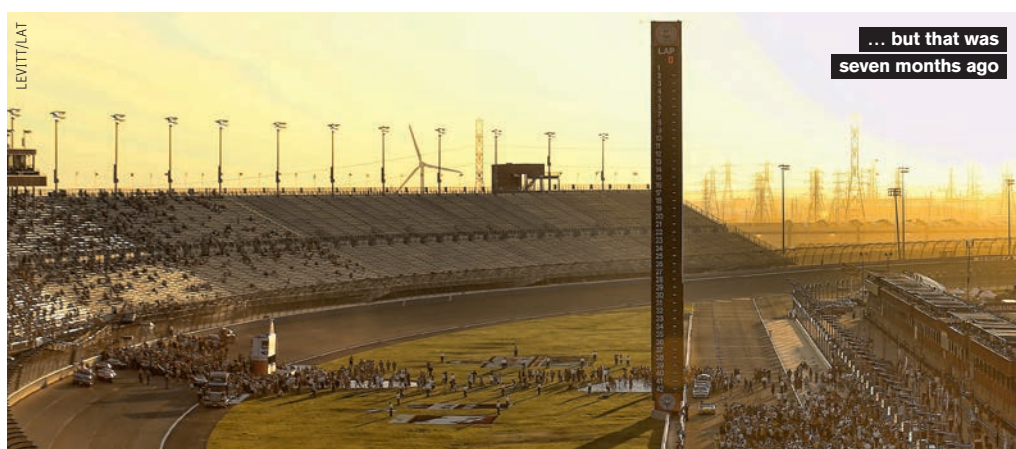


Chevy's old and new bodywork contrast



Power took the 2014 title for Penske...

LEVITT/LAT



... but that was seven months ago

LEVITT/LAT

comeback to poor-quality opposition does a massive disservice not only to the level of talent on the IndyCar grid, but also to the considerable work that both Montoya and those at Penske put in to get him to the point where he could secure his win at Pocono. If IndyCar were easy, Rubens Barrichello would have won races.

The ratio of paid drivers to paying ones is probably not all that different to that in F1, and the standard of drivers who are buying their way into the sport is generally similar in both cases.

The reason that less-fancied entries can shine

in IndyCar in a way that their F1 counterparts cannot is the element of mechanical supremacy is eliminated. Will Power does not automatically have a two-second-per-lap buffer over the backmarkers that the leading F1 teams enjoy. Each tenth is made to count, and any tiny shortcoming in racecraft or set-up will be punished. One of Bernard's legacies is the elimination of the Milka Dunos from the IndyCar grid, and the current field is as strong as it has ever been.

It's Miles's job to sound bullish about

IndyCar's future but, finally, there is cause for optimism. The product is good. The numbers are up. The paddock is calm. Of course, it wouldn't be IndyCar if there wasn't something to be concerned about, and any impact of six months' winter dormancy on the momentum with which the series finished 2014 remains to be seen.

There's also the threat of whether the performance increases promised by the much-vaunted manufacturer aero kits will come at a cost to the quality of racing [see sidebar]. But IndyCar has faced, and survived, far worse. ❧

RUNNERS AND RIDERS

Ahead of this weekend's season opener, **TONY DIZINNO** takes the pulse of the IndyCar grid



TEAM PENSKE CHEVROLET

Roger Penske's powerhouse organisation takes the bold, unprecedented step of running four entries for the first time. The team has added and rotated crew around to account for the new car. It has four of the top five drivers from the 2014 standings, and seeks to match, if not exceed, that mark in 2015.



CHIP GANASSI RACING CHEVROLET

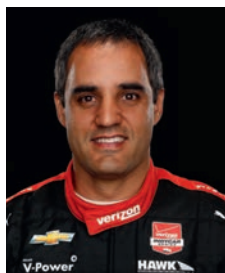
Ganassi's men traditionally start slow but have made a habit in recent years of coming on in the second half. The team has shifted its engineering line-up this year, with Chris Simmons (Scott Dixon), Todd Malloy (Tony Kanaan) and Eric Cowdin (Sage Karam) all working with new drivers. Always a title threat, but must start better.

40



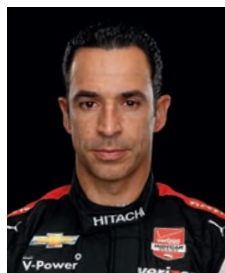
1 WILL POWER
Age 34
Debut **Miami 2008**
Starts **109**
Wins **21**
Best season **1st (2014)**

The championship monkey is off his back. Power finally broke through in 2014 after three previous chances to win slipped away. His consistency matched his usually unrivalled pace, he only failed to finish one race lap, and he continued to improve on ovals. Should be stronger still in 2015.



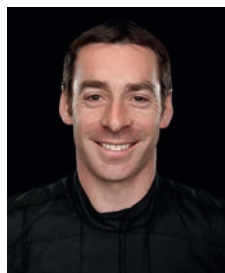
2 JUAN PABLO MONTOYA
Age 39
Debut **Indianapolis 2000**
Starts **19**
Wins **2**
Best season **4th (2014)**

Montoya's return after a 14-year hiatus brought back a decent haul, including an excellent win and pole at Pocono. The biggest thing he'll seek to improve is his road and street course qualifying, having taken a year to reacclimatise to the Firestone alternate tyres. He remains a force on ovals.



3 HELIO CASTRONEVES
Age 39
Debut **Phoenix 2001**
Starts **217**
Wins **23**
Best season **2nd (x4)**

IndyCar's 'nearly man' came up just 0.06 seconds shy of his fourth Indianapolis 500 win, and 62 points away from his elusive first championship. Although he's nearing 40 and about to begin his 16th season with Team Penske, Castroneves is still pretty much an all-around contender.



4 SIMON PAGENAUD
Age 30
Debut **Alabama 2011**
Starts **55**
Wins **4**
Best season **3rd (2013)**

Team Penske's French wildcard could be the driver that disturbs the squad's status quo. Pagenaud overachieved with Schmidt Peterson, and should be on pace immediately despite this being a new entry. Renowned for his tech expertise, Pagenaud expects to handle the new aero kit quickly.



8 SAGE KARAM
Age 19
Debut **Indianapolis 2014**
Starts **1**
Best finish **9th**
Best season **27th (2014)**

The 2013 Indy Lights champion and Chip Ganassi development driver will seek to impress in what is currently scheduled to be a one-off outing in St Pete, although he had a minor setback in a Barber test crash. The fast but fragile rookie should benefit from Dario Franchitti's coaching.



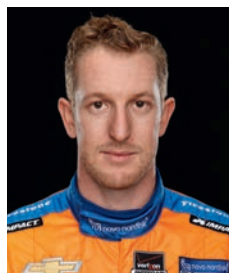
9 SCOTT DIXON
Age 34
Debut **Miami 2003**
Starts **200**
Wins **34**
Best season **1st ('03,'08,'13)**

Dixon has a chance to extend his streak of eight consecutive top-three championship finishes to nine this year. With his next race win, his 36th, he'll move into fifth in the all-time list. The New Zealander already opened 2015 with a win in the Daytona 24 Hours, and he'll certainly lead CGR's charge this year.



ANDRETTI AUTOSPORT HONDA

Michael Andretti's team fought through various inconsistencies in 2014 despite winning the Indianapolis 500 and rookie-of-the-year honours. The team loses James Hinchcliffe and strategist Kyle Moyer, but gains director of race operations/engineering Rob Edwards for the year and fan favourite Simona de Silvestro for at least St Pete.



10 TONY KANAAN

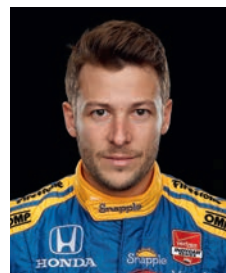
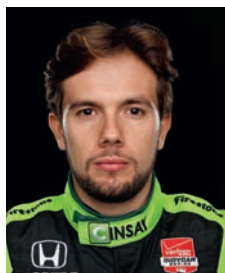
Age 40
Debut Indianapolis 2002
Starts 202
Wins 16
Best season 1st (2004)

The Brazilian proved he had plenty of life in him in 2014 with a second-half surge that produced 318 points, a win, and five podium finishes in the final eight races. That points total was second only to Dixon in that stretch. The oval ace should only improve with Todd Malloy on the engineering strength.

83 CHARLIE KIMBALL

Age 30
Debut St Petersburg 2011
Starts 69
Wins 1
Best season 9th (2013)

Kimball regressed ever so slightly in 2014, particularly in qualifying, where his average grid spot dropped from around 12th to 16th. In this field, making up the extra places was always going to be a challenge. The personable and quick-on-his-day Californian needs to improve this season.



26 CARLOS MUNOZ

Age 23
Debut Indianapolis 2013
Starts 21
Best finish 2nd
Best season 8th (2014)

IndyCar's 2014 rookie-of-the-year finished a slightly inflated eighth in last year's points standings, owing to the fact he was third among those in the double points races, only trailing Montoya and Castroneves. Had a decent rookie year, but hasn't yet had that one standout drive.

27 MARCO ANDRETTI

Age 28
Debut Miami 2006
Starts 152
Wins 2
Best season 5th (2013)

Like Ganassi's Charlie Kimball, Andretti faltered a little from 2013 and 2014 and it was hard to pinpoint why. His races were fine but qualifying lacked the punch it needed. Andretti was frequently anonymous, but he'll remain a win threat at Indy. He needs more as he prepares for his 10th season.



29 RYAN HUNTER-REAY

Age 34
Debut Mid-Ohio 2007
Starts 127
Wins 12
Best season 1st (2012)

Andretti's best title bullet now has an Indianapolis 500 win under his belt, but must improve his consistency in 2015. His qualifying also needs a slight uptick; after making the first four Fast Six sessions last year, he made only two more during the rest of the campaign. A good grid spot is vital in this field.

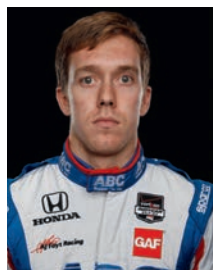
TBC SIMONA DE SILVESTRO

Age 26
Debut Sao Paulo 2010
Starts 66
Best finish 2nd
Best season 13th (2013)

With a fourth and sixth already on her St Petersburg CV, de Silvestro is well positioned to add to it during this one-off outing. A likeable driver who must seize her chance, de Silvestro will be hoping to impress enough to secure more IndyCar outings after her F1 disappointment.

AJ FOYT ENTERPRISES HONDA

The team may have AJ's name on it, but it's firmly son Larry's show. Larry, since promoted from team director to team president, leads the team's return to a two-car line-up for the first time in more than a decade. AJ, however, remains the figurehead and team icon, after turning 80 during the off-season.



14 TAKUMA SATO

Age 38
Debut Sao Paulo 2010
Starts 87
Wins 1
Best season 13th (2011)

Sato remains one of IndyCar's most exciting drivers, although his form has varied depending on the weekend or circuit type. Oddly joined Ryan Briscoe and Justin Wilson as notable full-season drivers who missed the podium in 2014. Has a high ceiling, but needs to hit it more frequently.

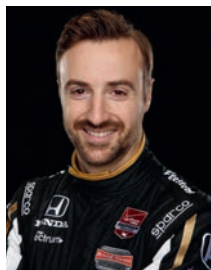
41 JACK HAWKSWORTH

Age 24
Debut: St Petersburg 2014
Starts 17
Best finish 3rd
Best season 17th (2014)

Hawksworth overachieved as a rookie with Bryan Herta's single-car team last year and now joins Foyt's team as a second driver. Still, his qualifying tailed off badly in the second half, from an 8.8 average grid spot in the first six races to 19th in the final 12. Like Sato, he seeks consistency.

SCHMIDT PETERSON MOTORSPORTS HONDA

The losses of Simon Pagenaud and team manager Rob Edwards will probably hurt Schmidt Peterson, at least at the outset. But the team retains many of the crew that produced so much success recently.



5 JAMES HINCHCLIFFE

Age 28
Debut Alabama 2011
Starts 69
Wins 3
Best season 8th ('12,'13)

The popular Canadian kept smiling throughout a roller coaster 2014 plagued with bad luck at every turn. Hinchcliffe has been one of IndyCar's most active drivers in this long off-season. Paired with engineer Allen McDonald, Hinch should return to victory lane at some point this year.

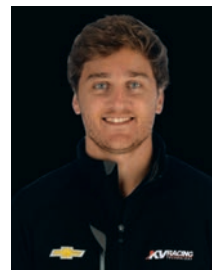
7 JAMES JAKES

Age 27
Debut St Petersburg 2011
Starts 51
Best finish 2nd
Best season 19th (2013)

While he didn't give Justin Wilson too many fits at Dale Coyne Racing, Jakes was a persistent thorn in Graham Rahal's side at Rahal Letterman Lanigan in 2013. Replacing Mikhail Aleshin, Jakes will tone down the flair the Russian brought but may bring an uptick in the number of finishes.

KV RACING CHEVROLET

IndyCar's most consistently maddening organisation, KV can be top-six one weekend and mid-teens the next. But the potential is there for one of the best years since the Will Power/Oriol Servia combo in 2008; in Sebastien Bourdais it has a fast veteran, in Stefano Coletti, a young gun keen to impress.



4 STEFANO COLETTI

Age 25
Starts None

The four-year GP2 veteran from Monaco has impressed the team with his pace and professionalism this off-season, although he'll still need to iron out the occasional mistake. He replaces Colombian Sebastian Saavedra, who never seemed to improve as the season went on in either of his two years as Bourdais' team-mate. That's Coletti's task for 2015.

11 SEBASTIEN BOURDAIS

Age 36
Debut Indianapolis 2005
Starts 58
Wins 1
Best season 10th (2014)

Bourdais made a welcome return to victory lane with his crushing Toronto race one win from pole a year ago. He still made a number of penalty-inducing mistakes, which was surprising for someone with his experience. Still, he should carry over the momentum from the second half of the year.

BRYAN HERTA AUTOSPORT HONDA

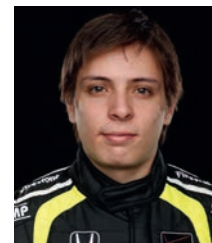
Bryan Herta charts an interesting path for 2015 – he and former team-mate Bobby Rahal are the two sole remaining IndyCar team owners of single-car operations. While Rahal has his son on board, Herta again goes with a rookie in the form of Indy Lights champion Gabby Chaves, paired with veteran engineer John Dick.



98 GABBY CHAVES

Age 21
Starts -

Chaves came back to the US a few years ago after attempting GP3 and has grown in maturity and poise. He only just missed out on Star Mazda and Indy Lights titles before edging Jack Harvey for the



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British GT drivers are also eligible to sign up for the Sunoco Whelen Challenge (GT3) and Sunoco 200 Challenge (GT4) points that count towards prize drives during the Rolex 24 At Daytona race weekend in January 2016.

The 2016 Sunoco Challenges are kicking off this weekend with their first rounds – but who will take the prize drives at the end of the season?

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Avon Tyres
British GT
Championship



First rounds: Radical Enduro 28th March
Britcar 28th March
British GT3 4-6th April

British GT race dates

Oulton Park 4-6th April

Rockingham 2-3rd May

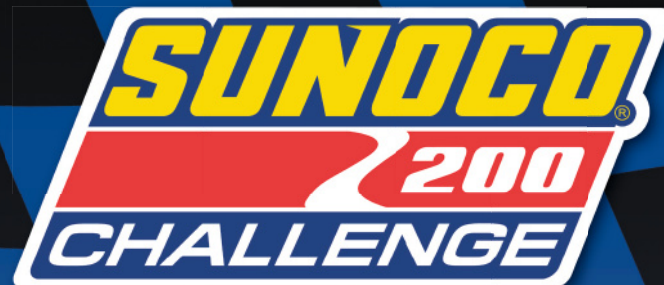
Silverstone 30-31st May

Spa Francorchamps 10-11th July

Brands Hatch 1-2nd August

Snetterton 22-23rd August

Donington Park 12-13th September



Sunoco 200 Challenge eligible series



Avon Tyres
British GT
Championship



MINI
CHALLENGE

GT CUP
CHAMPIONSHIP

F3 CUP



First rounds: Radical Sprint 28th March
Britcar 28th March
British GT4 4-6th April



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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

ROUND 2 RESULTS:

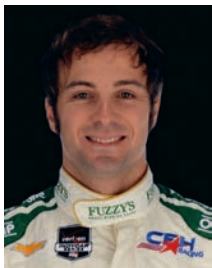
Light Enduro	1st Tom Golding	2nd Dom Whiting	3rd Chris Hackworth	Light Heats	1st Chris Hackworth	2nd Dom Whiting	3rd Tom Golding
Inter Enduro	1st Joe Holmes	2nd Joseph Ellis	3rd Bobby Trundle	Inter Heats	1st Joe Holmes	2nd Joseph Ellis	3rd Stuart Foster
Heavy Enduro	1st Andrew Haine	2nd Chris Carter	3rd Rob Bennett	Heavy Heats	1st Chris Carter	2nd Tomek Zaustowicz	3rd Jamie Pender



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CFH RACING CHEVROLET

All is new here for the former Ed Carpenter Racing and Sarah Fisher Hartman Racing squads, now combined under the CFH Racing moniker. Carpenter and Fisher reunite after working together in 2011, when both driver and team won their first race at Kentucky. The team loses Mike Conway, but gains Luca Filippi.



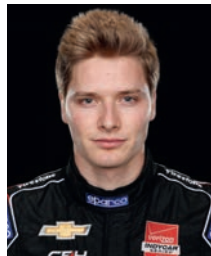
20 **LUCA FILIPPI**
Age 29
Debut Mid-Ohio 2013
Starts 8
Best finish 10th
Best season 28th (2014)

20 **ED CARPENTER**
Age 34
Debut Chicago 2003
Starts 154
Wins 3
Best season 12th (2009)

Filippi takes on the Mike Conway, road/street ringer role for 2015 and will look to work with engineer Matt Barnes to match or exceed Conway's total of two 2014 wins. On outright pace, Filippi is one to watch, but he's proved to be mistake-prone during his limited IndyCar chances. He should be calmer now.

Carpenter's strategic masterstroke to remove himself from the cockpit for the road and street courses and focus solely on ovals paid dividends. He is underrated, still, both as a driver and a businessman; he's easily among IndyCar's five best on ovals and continues to seek that elusive Indianapolis 500 win in 2015.

21/67
JOSEF NEWGARDEN
Age 24
Debut St Petersburg 2012
Starts: 51
Best finish 2nd
Best season 13th (2014)

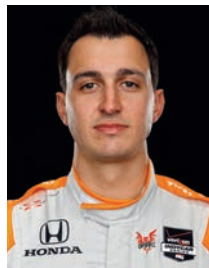


IndyCar's best young American hope must break into the win column, and coupled with a team-mate for the first time in his four-year career he has

the best opportunity to do so. Newgarden has improved his pace and qualifying year-on-year; he needs further top-fives and more podiums in 2015.

RAHAL LETTERMAN LANIGAN RACING HONDA

It's another year, and another reset for Rahal Letterman Lanigan Racing. Martin Pare and Mike Talbott join Graham Rahal's newest engineer Eddie Jones. Testing results have been positive for the single-car operation.

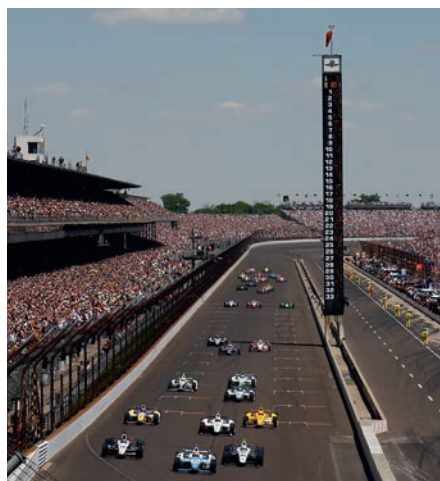


15 **GRAHAM RAHAL**
Age 26
Debut St Petersburg 2008
Starts 114
Wins 1
Best season 7th (2009)

For the second consecutive year, Rahal struggled to the low-teens in the championship with only a single second-place finish on his scorecard. The latest of several personnel reshuffles and resets in the team provides the now 26-year-old Rahal with three technical people with whom he's worked previously, and that innate chemistry should propel him in the direction of improved form.

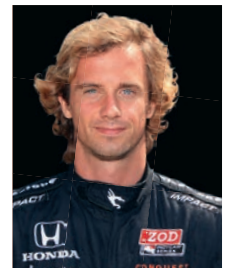
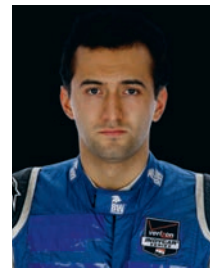
INDY 500-ONLY ENTRIES

Jay Howard (second BHA), Bryan Clauson (Byrd with KV) and Buddy Lazier (Lazier Partners) have been announced for the Indianapolis 500 as one-offs, with others such as Pippa Mann and Townsend Bell likely to finalise their programmes soon. The likes of Justin Wilson, Ryan Briscoe and Conor Daly are in the frame, but budget will play a part.



DALE COYNE RACING HONDA

Dale Coyne remains IndyCar's favourite perennial underdog, no matter the economic climate. It appears as though that climate has hit the team harder this year, though, with no 'star' of note for the first time in more than a decade – a Wilson, Junqueira, Servia, Bourdais, da Matta, or Lloyd is nowhere to be found.



18 **CARLOS HUERTAS**
Age 23
Debut St Petersburg 2014
Starts 18
Wins 1
Best season 20th (2014)

19 **FRANCESCO DRACONE**
Age 31
Debut Mid-Ohio 2010
Starts 2
Best finish 20th
Best season 37th (2010)

Huertas exceeded the minimal expectations heading into the 2014 season. While surprising, his Houston race one win was still well executed since he did have to hold off the field when he had the chance. Other than at Indianapolis, where he had several days to prepare, Huertas struggled on ovals.

The Italian has had a less than distinguished, if consistently active, career in open-wheel racing. He made two IndyCar starts in 2010 and since then has been racing in Auto GP, where sixth places have been the limit of his achievements.. Right now, he's confirmed for just the first four races.

2015 CALENDAR

St Petersburg	March 29
NOLA Motorsports Park	April 12
Long Beach	April 19
Barber Motorsports Park	April 26
Indianapolis Road Course	May 9
Indianapolis 500	May 24
Detroit 1	May 30
Detroit 2	May 31
Texas	June 6
Toronto	June 14
Fontana	June 27
Milwaukee	July 12
Iowa	July 18
Mid-Ohio	August 2
Pocono	August 21
Sonoma	August 30

HOW RELEVANT IS THE DTM TO F1?

Mercedes, Audi and BMW claim the FIA made a mistake in leaving the DTM off its list of series eligible for Formula 1 superlicence points. MITCHELL ADAM asks whether they have a point

Can a touring car series, racing primarily in a single nation, be considered a pathway to Formula 1? Generally, that's a fairly simple question to answer. If you take the UK as an example, then those who have raced in the British Formula 3 Championship over the past few years will have had their sights far more firmly set on F1 than recent British Touring Car champions Colin Turkington, Andrew Jordan and Gordon Shedden. But when you get to Germany, the distinction between reigning DTM champion Marco Wittmann and 2014 F3 king Markus Pommer is a little less clear-cut.

Those national F3 series were in far from rude health last year, and they won't even be run in 2015. And yet, under the FIA's new superlicence qualification rules for 2016, Pommer and British F3 champion Martin Cao moved 10 points closer to F1 eligibility than Wittmann. No tin-top classes are represented on the points system, but it's the unique nature of the DTM – with its quality-laden field and part open-wheeler/part GT/part touring car machinery – that means its absence is a point of debate.

"I feel it's a disgrace that the DTM isn't included in the superlicence qualification system," says 2005 champion and former McLaren test driver Gary Paffett.

"It's a top series, it's a series that's proved it can take drivers to Formula 1, like Paul di Resta – and he made a great job of it in F1 – and now Pascal [Wehrlein] as a reserve driver for Mercedes [is] looking to race in F1."

If the superlicence scoring had been introduced

at the turn of the millennium, it's unlikely that Paffett or anyone else would have felt as strongly.

When the DTM returned in 2000 in its new guise after a three-year hiatus, the top six included champion Bernd Schneider (who turned 36 during the season), Manuel Reuter (39), Klaus Ludwig (51), Joachim Winkelhock (40) and Uwe Alzen (33), all of whom had already carved out successful international careers. The exception was the fourth-placed driver, Marcel Fassler, who at 24 was part of Mercedes' line-up, before forging a triple Le Mans-winning career with Audi.

Today, the DTM boasts a much younger field. Wittmann was 24 when he lifted the crown last September, while the runner-up, double champion Mattias Ekstrom, is an elder statesman at 36.

Wittmann is indicative of the current mix. A runner-up in the Formula 3 Euro Series in 2010 and 2011 before being picked up by BMW, he's the sort of driver who wouldn't be out of place on an F1 grid. As it stands, his 2014 efforts count for nothing if he were to pursue a drive.

The DTM's three manufacturers have requested a rethink on the series' absence from the FIA's list of championships offering superlicence points, which takes us back to the original question: can a touring car series really be a Formula 1 feeder?

OK, it has served as a retirement home for veterans including Mika Hakkinen, David Coulthard, Jean Alesi and Ralf Schumacher, but recent history suggests it can produce new F1 talent. As much as any series outside of GP2, GP3, Formula Renault 3.5 and F3, anyway.

Di Resta's three seasons with Force India are the benchmark, while Christijan Albers raced with Minardi and Spyker between 2005 and '07, new Manor recruit Roberto Merhi spent two years with Mercedes, and Paffett combined the DTM with F1 testing duties for most of his nine-year relationship with McLaren. Of the group, di Resta's and Paffett's F1 opportunities stemmed from their involvement with Mercedes, which picked them up from single-seaters.

"[DTM] always had an appeal from when Dario [Franchitti] was racing in it back in the '90s, and when I got into F3 I was introduced to the guys and felt very comfortable. It was definitely a journey I wanted to go on," says di Resta. ▶



DTM was left off F1 superlicence list



XPB IMAGES

Di Resta ran at the front during pre-F1 DTM career



“I DEFINITELY THINK THE DTM WAS A FAR BETTER WAY FOR ME TO GET INTO F1” PAUL DI RESTA





Complex DTM cars are a far cry from conventional tin-tops

► “I believed they were going to give me the best opportunities to race for them, but equally let me have my options of making Formula 1, which was the ultimate dream. Once that happened, through the likes of Norbert Haug and being introduced to [then-McLaren team principal] Martin Whitmarsh, that all got me on my path.”

Paffett’s touring car move came after his Formula 3000 team went bust, but almost took him to the F1 grid. “I didn’t really have a choice at the time,” Paffett says. “I didn’t really have the funding to do anything else, to be honest. “The superlicence rules would have been a problem for me. There’s no way I would have got a seat with an F1 team in a testing role if I wasn’t able to get a superlicence, which I wouldn’t have been able to [under the new rules].”

In the same timeframe, Allan McNish and Andre Lotterer (the latter particularly briefly) made their F1 debuts from sportscar racing. And Indycars played a role in the promotion of Williams apprentice Juan Pablo Montoya, Cristiano da Matta and Sebastien Bourdais. Both those forms of racing are included on the FIA’s superlicence eligibility points system.

Were it not for the new superlicence regulations, you’d have expected Wehrlein to add to the DTM’s tally. The 20-year-old was, like many of his 2015 rivals, signed from single-seaters, and combines his Mercedes race seat with F1 reserve-driver duties. He’s the public face of the debate.

Wehrlein’s F3 efforts, which yielded race wins in the European championship, were good enough to grab Mercedes’ attention. What he’s done since in the DTM, its F1 simulator and testing has impressed the F1 world champion squad, so much so that investment was made to secure extra seat



DTM driver Wehrlein has tested three Formula 1 cars

“WEHRLEIN IS THE PUBLIC FACE OF THE DEBATE”

time with Force India during the first Barcelona pre-season test in February, before he was summoned to replace an ill Lewis Hamilton. For the rest of the year, a DTM seat is obviously a much more cost-effective way for Mercedes to keep its reserve driver occupied between simulator sessions than GP2.

But whereas di Resta five years earlier was helped into a role with Force India to log the required superlicence mileage, Wehrlein could be all dressed up with nowhere to go.

That is, of course, purely in F1 terms. As a

young driver trying to navigate a complicated and expensive ladder of junior classes, a manufacturer taking you under its wing and potentially setting you up for a career in the world’s most prestigious touring car series isn’t something to sneeze at. Tom Blomqvist has just joined BMW, after splitting Esteban Ocon and Max Verstappen in European F3 last year, while fourth-placed Lucas Auer has been snapped up by Mercedes.

In fact, of the 24 drivers set to line up in 2015, 11 of them have won a race in Formula Renault 3.5, GP3 or F3 since 2010. Edoardo Mortara, Daniel Juncadella and Antonio Felix da Costa have four Macau Grand Prix victories between them.

Like Wehrlein and Wittmann, these are single-seater aces who would likely prove decent (or better) grand prix drivers, but that door is closing unless they trade in a paid factory drive for finding sponsorship for GP2.

There’s no question about the quality within the DTM. Six former champions will be on the 2015 grid and one of them, returnee di Resta, was only 15th in 2014, one spot ahead of another former grand prix driver, Timo Glock. The only driver to not score a point, Vitaly Petrov, has an F1 podium to his name.

“In my opinion, the level of competition and the level of driver in the DTM, throughout the whole field, is better than Formula 1,” Paffett says.

“The guys at the top of F1 are undoubtedly the best drivers in the world, but the strength in depth across the whole field in the DTM is a lot stronger than it is in F1.”

That in itself doesn’t necessarily mean a DTM champion would do the same in F1. Questions linger about the politics of the series, and the make-up within and between manufacturers, as to whether the playing field is always level.

HOW MANY LICENCE POINTS SHOULD THE DTM BE WORTH?

Wehrlein's gained good F1 mileage



XPBIMAGES

Paffett dovetailed DTM career with McLaren role



STALEY/LAT

Petrov (left) was DTM 2014's big flop



XPBIMAGES

There's no doubt that some categories on the upcoming superlicence framework have been overvalued, and others undervalued, but the DTM is the most glaring omission.

Being a touring car series appears to have counted against it, but you could raise negatives about any of the others. FIA Formula 2 doesn't even exist (yet). GP2 has been won by several third and fourth-year drivers after doing their time. The multi-driver World Endurance Championship means one driver could be doing more heavy lifting than their team-mates. And what do IndyCar's ovals have to do with F1? And then there's Max Verstappen, whose third place in the Formula 3 European Championship wouldn't have qualified him for a licence, already ruffling feathers in F1.

Any system should lend itself to having as many as possible of the world's 20 best drivers in F1, and if the push from Germany's big three manufacturers is successful, where should the DTM sit? Overall driver quality is incredibly high and, with the dilution of single-seater talent across several brackets, it's probably higher than anything else on the framework.

Few would suggest it should sit at the top, and politically that would never happen, but slotting in alongside Japanese Super Formula



ABBOTT/LAT

in offering 20 points for a title would be a reasonable fit. Or perhaps at Formula Renault 3.5's current offering, 30 points, if the single-seater class's allocation is increased between now and the 2016 season.

In either case, two or three good seasons alongside testing duties could see someone like Wehrlein qualify, especially if they arrive in the DTM with carryover points from Formula 3.

But, as Paffett notes, "if you're not quite in the right car, you're not going to win a championship", which opens a whole new superlicence debate for another time.

Wehrlein became the DTM's youngest-ever race winner in 2014, but in a tough year for Mercedes he was only eighth in the standings.

If you're not in the right car, you won't win, so superlicence points become a moot point. And the other question is, do the cars even prepare you for F1? Barely a 'touring car' in the conventional sense, and only about 1.5 seconds slower than an F3 car on most circuits despite carrying more than twice the weight, they are streets ahead of other tin-tops in terms of aerodynamics and technology.

"The big difference is the weight of the cars: hundreds of kilos more than an F1 car, and it has less power and less downforce," says Paffett.

"But there are similarities: the DTM is still fundamentally a performance car, it's not like a modified road car. It's rear-wheel drive, it has a lot of downforce for a touring car, it has suspension set-ups similar to F1. So they're not completely different, but there are significant differences in the weight-to-power ratio and grip that make it a different car to drive."

Looking back, di Resta says he found the jump from single-seaters easy, and that

alternating between DTM races and Force India free-practice sessions required little thought by midway through the 2010 season. The only thing that you really have to get your head around [from F3] is your position in a DTM car, and how much visibility you lose," he says.

"You're also sitting slightly more rearward than you would in a single-seater. Obviously that changes your feeling of the car, and when you're using the sidewalls of the tyres and feeling understeer and oversteer in a different way.

"At the end of the day it's a much bigger car than a single-seater, but what you can relate to F1 is that it's very much dependent on aerodynamics. The more the regulations tighten up, the more dependent you've seen the car become on aero. The rate of development is very similar to F1 and even the introduction of things like DRS can be beneficial for anyone who feels that's a road to F1."

Outside driver development, both Paffett and di Resta say they found unique advantages to entering the F1 paddock via the DTM, including working with engineers to develop a car as opposed to jumping into a spec Dallara single-seater.

"I think DTM prepared me much better than

GP2 would ever have done," di Resta says. "I definitely think that DTM was a far better way for me to get into F1, and obviously it was the only way I could do it at that point. Representing a manufacturer like Mercedes-Benz, whether it's press management, developing a car with a team like you do in F1, and doing everything that is required as a driver, it's definitely something I look back on and think was very positive.

"It kept me racing at the front and I believe people can make the jump, should they want it enough and have it come up at the right time."

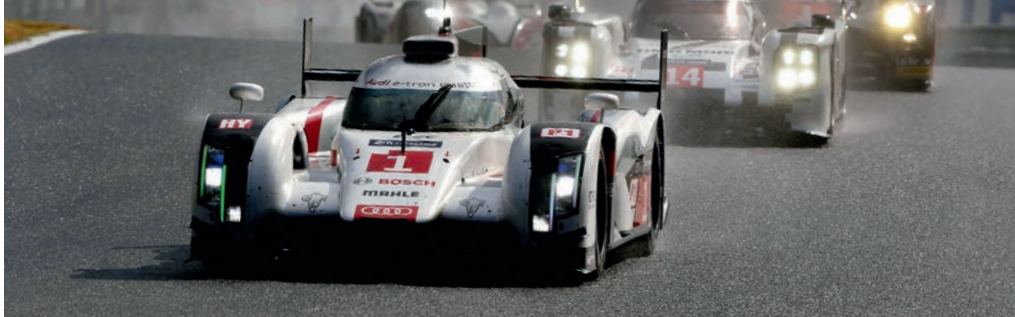
The three DTM manufacturers have different motorsport programmes. For Audi, LMP1 headlines its activities, and the DTM has also played a role in developing endurance drivers. From its 2015 line-up, Fassler, Oliver Jarvis and Filipe Albuquerque all raced in the DTM before sportscars, while 2011 champion Mike Rockenfeller is Audi's WEC reserve. For BMW, the DTM currently sits at the top of the tree, but it has ventured into both F1 and sportscar racing in the past 20 years. And Mercedes currently rules the roost at the pinnacle of the sport.

Despite differing priorities, the trio is united in believing the tin-top series should be recognised by F1 for the role it plays in developing drivers.

Whatever manufacturers are involved in, single-seater racing is the ultimate playground from which to select their star drivers. But racing in a super-competitive 'touring car' series doesn't mean they'll forget how to drive single-seaters.

A quarter of a century ago, Mercedes assembled a crack squad of juniors for the World Sportscar Championship. While most of his contemporaries were in F3000, a certain Michael Schumacher was racing with a roof over his head. A different background didn't seem to hurt him. ❧

Audi's priority is the WEC, but backs DTM's F1 relevance



Pit inferno at
Hockenheim in 1994
illustrates the risks
mechanics take in F1



The next generation

More people work in Formula 1 than ever before, which is why the Grand Prix Mechanics' Trust is rebranding to include more members of an increasingly diverse trade. By **HENRY HOPE-FROST**

As a driver at the top of his game in what was a far more hazardous era of motorsport than today, Sir Jackie Stewart took it upon himself to campaign for an overhaul in safety standards in Formula 1. And the Scot ploughed a lonely furrow as he fought off political and financial disinterest during the late-1960s and early-'70s. His efforts to bring a halt to the needless deaths and serious injuries were well-documented, but not well-supported.

Fast forward to the modern game and it is now just about as safe as it possibly could be (although freak accidents will always occur, of course), which in many ways is down to Stewart's toil a generation or two earlier.

Half a century after his F1 career began with BRM in 1965, Stewart still champions the well-being of its participants, albeit in an area with a less recognisable public face but one that

is close to the 75-year-old's heart. And he has considerably more help now, thanks to the status and persuasive power he commands.

The Grand Prix Mechanics' Trust was formed by the three-time world champion in the late 1980s to look after the needs of those who had risked life and limb week in, week out in overcrowded and outdated Formula 1 pitlanes, where fires were prevalent and speed limits unheard of. Those dedicated grafters – mechanics and team personnel past and present – who were/are injured in the line of duty, or who have fallen/will fall on hard times as a result, have somewhere to turn to.

A recent reunion at the Williams team's headquarters in Oxfordshire brought F1 staff spanning seven decades of endeavour together again to catch up with old friends, tell stories and help fly the flag for the cause. And it gave Stewart a chance to reiterate the work done by the Trust and its aims for the future, as well as introduce

a new name and a new identity as it tries to keep pace with the world's fastest industry.

"The look and the purpose of the Trust has changed very little in the 27 years since I started it with [Ford PR supremo] Walter Hayes and [team boss] Ken Tyrrell," Stewart says. "When I formed this, I was dreading pitlane accidents, the fires. Remember the Jos Verstappen fire at Hockenheim [in 1994]? That could have taken out a lot of mechanics. There were no insurance policies and hardly any pension funds for these guys back then – and it's not *that* long ago."

Stewart admits that the huge numbers of staff employed by teams in F1 these days has meant a rethink for the Trust.

"We've got hundreds of employees in the sport now. I mean teams are vast – especially the top ones. Hundreds and hundreds of people are directly – or indirectly – involved. We're not biased, though – we cater for anyone who works in F1, if they need us.



2015 reunion meeting heard plans for the future



Stewart has never forgotten those people who built his title-winning cars

“We have to embrace new F1 and its broader base of people. We want to do more good”

MARTIN BRUNDLE

“We need to target the new people,” he goes on to explain. “We’ve not been getting to as many of them as we should. And that’s about to change. Even though we’ve helped more people in the past 18 months than ever before, including 20 or so people here today, more people need our help but they don’t know about us. Which is why we’re rebranding to Grand Prix Trust, a name that better reflects the changes in F1.”

And that’s the point at which Stewart introduces the key people who work behind the scenes to promote the Trust.

“Mark Smith, chief enterprise and technology officer with Unilever, one of the world’s biggest companies, is a huge help, spreading the word among big business, while Ruth Ritchie is the eyes and ears of the Trust. She does a fantastic job of navigating social services and is a vital point of contact. I’m also delighted to announce that Jonathan Wheatley, the Red Bull Racing team manager, is joining as a trustee to help bridge the

generation gap and bring new focus.”

In years gone by, a grand prix team’s payroll comprised very few people who all had to multi-task. These days, staff have specific job descriptions, which tends not to encourage loyalty, as Wheatley corroborates.

“At Red Bull, probably only about 10 per cent of the staff will be what the guys in this room would refer to as ‘lifers,’” he says. “It’s a transient society and people move on.”

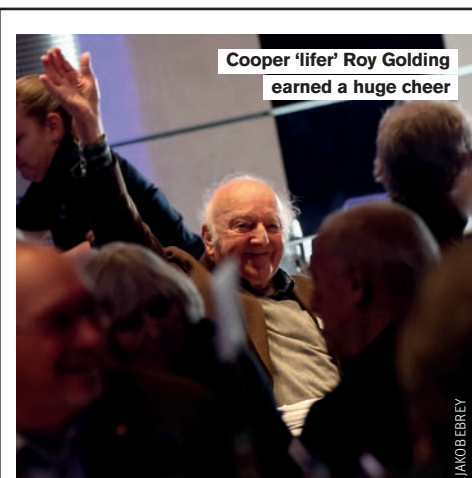
It’s a notion that’s further explained by a man who experienced life in both small and big grand prix teams: Martin Brundle.

“In 1984 at Tyrrell, my first year in F1, there were 12 people in the team, which included Ken and [wife] Norah, Stefan Bellof and myself. Sadly I’m the only one left in that group. That leaves eight and I’ve seen at least three here today.

“I’ve been a trustee for 20 years and seen huge change in the sport. We need to adapt to those huge changes, with the escalation in staff numbers and their ever-changing roles in the sport. We have to embrace new F1 and its broader base of people with different job titles and the ways they are involved in F1. We want to do more good and raise more money.”

Stewart preaches the final word among a congregation that’s experienced the joys and heartache of working in an exhilarating and rewarding, yet dangerous, industry.

“The camaraderie is fantastic, and so is the reminiscing among friends and former colleagues. It’s part of the pleasure of helping in times of need. Be proud of what you’ve achieved for Britain, the world leader in motorsport. Long may it continue.”



Cooper ‘lifer’ Roy Golding earned a huge cheer

SALUTING THE UNSUNG HEROES

Sir Jackie Stewart wasted no time in offering a heartfelt thank-you to the scores of engineers and mechanics – people he describes as the unsung heroes of the sport – who helped shape the careers of many grand prix racing stars, including himself.

“There are so many of you who have been part of the lives of some of the best-known racing drivers,” he said, “and they should all be grateful for what you did, for without you they wouldn’t have had the reliability to win.”

He wound back the clock to his own driving career with a tribute to the Tyrrell mechanics who guided him to his three world titles.

“I want to thank Neil Davis, Roy Topp, Roger Hill and Roland Law, who are here today. If it hadn’t been for them, I wouldn’t be alive today. When I drove for Ken, I drove robust cars – cars I had confidence in, cars that weren’t going to lose wheels. In my whole career I never lost a drop of blood driving a racing car. And that’s because of them.”

But perhaps the man who garnered the biggest cheer upon introduction from Stewart was 90-year-old Roy Golding, a Cooper ‘lifer’ who joined the Surbiton innovators in 1948. He joked about the safety/speed ratio between Cooper and Lotus – in the good-natured way that perfectly encapsulated the ethos of the Grand Prix Trust.

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RD MEMBERS' MEETING

GOODWOOD'S

The Sussex circuit's revival of an old staple last year was



THIRD MUST-SEE EVENT

a success, but the second running proved it's an enduring classic. **MARCUS PYE** recalls the action





Pirro/Lynn Cobra took Graham Hill win in dusk

From rasping Bugatti racers of the 1920s to glorious tall-airbox Formula 1 cars of the 1970s – with period star Jean-Pierre Jarier enjoying the high-speed demos in a stunning Shadow DN5 – superb GT and saloon car enduros and a dramatic photo finish to the circuit's first 1000cc F3 race since June '66, the GRRC's 73rd Members' Meeting had it all.

Honouring 1963 and '64 Tourist Trophy winner Graham Hill, Saturday evening's GT race was shortened to 30 minutes, which intensified it as darkness descended. Five-time Le Mans victor Emanuele Pirro fired Shaun Lynn's AC Cobra off row two like a dragster to lead Andy Wolfe in Jason Wright's Cobra – in which Rob Hall's magnificent 1m25.064s (101.57mph) pole time was inside

Adrian Newey's TT Celebration record – and James Cottingham's Shelby American Daytona Coupe evocation.

Cottingham snatched second at Woodcote, but Pirro eked out a lead before relaying Lynn. An "epic stop" released Cottingham's partner Joe Twyman across Lynn's bows and he held on for a lap and a half before Shaun lunged past into Lavant and secured his first Goodwood win. "I've always been the bridesmaid before," he said. Pirro was equally ecstatic. "The Cobra needs to be driven with muscle, but I always race with a smile and a passion. This is a blessing." Twyman matched last year's second in the Lotus 11 'Breadvan,' while Jamie McIntyre and Bobby Verdon-Roe wrestled their Bizzarrini into third, with Hall closing.

Hugely popular last year, the Gerry Marshall Trophy saloon race grew in stature. Saturday's heat

pitched owners into battle, Nigel Garrett beating David Clark in a Chevrolet Camaro one-two, the latter's Bastos/Luigi car unraced since 1983. Nick Swift gridded his Mini 1275GT sixth, but vanquished six-cylinder Ford Capris, Alfa Romeo GTV6 and BMW 530i to finish third as the quickest Rover V8, Chris Ward's, succumbed to final drive issues.

Stuart Graham – in Garrett's replica of his own '74 Fabergé Brut(e) Z28 – stormed clear of Clark and Swift as Tiff Needell growled Peter Mallett's Daily Express Rover through a pack embroiling the Capris of Paul Pochciol (Esso) and Richard Meins (Bastos) plus Phil Perryman's splendid UFO Jeans BMW in Sunday's 45-minute feature.

Needell sent Clark spinning at Fordwater, but David resumed undeterred, fourth behind the grinning Swift. Clark, whose recovery impressed

HUNT WOWS THE CROWDS IN HESKETH

Goodwood's machinery tends to draw the big crowds at the Members' Meeting, but the clamour to catch a glimpse of Freddie Hunt as he hauled himself from his late father James' 1975 Hesketh 308 surpassed any of the weekend's other throngs.

The joy on Hunt's face was evident even before he removed his helmet. For someone who was only five when his father died, in June 1993, this was an incredibly poignant moment.

"That's what really made me so emotional," he said once he'd had chance to collect his thoughts. "That was the bit that got me. It was very emotional indeed."

The joy of sampling a mid-'70s F1 car was not lost on the 27-year-old either. He was as eager to find out if anybody had timed the session as he was to talk about it.

"I didn't think I was going to be able to drive it," he enthused. "I thought everybody would be flying past me.

Quite frankly I thought I'd be a bit overwhelmed by it. But I wasn't. I felt confident, after a couple of laps I got the hang of it. I started really enjoying myself, I had to hold myself back so I didn't push it too hard.

"Once I realised how quickly I could adapt to it I was allowed to be able to indulge in it! It was a hell of a feeling."

Hunt was not scheduled to take part in the demo, but having driven the car before – "on a two-lap demo at jogging pace" – he chanced his arm.

"I just came along and as the car was here I thought I'd just ask..."

"It's really nice I've finally had chance to get to know the car a little bit. It was only five or six laps but it was great.

"I'm going to get the owner's details and send him a very nice e-mail to say thanks, and if he ever wants me to drive the car again..."

Scott Mitchell



Shades of 1975, with that helmet in that car



**BTCC ace Neal won
Gerry Marshall thrash**



**Tiff Needell: mighty in V8
Rover, until safety car**



**Andy Wallace (centre) took
Sopwith Cup win in Mk1 Jag**

Jochen Mass, stopped as the window opened, triple BTCC champion Matt Neal blasting off before the narrow pitlane became busy. It proved an excellent call, for while Swift put Andrew Jordan in, Graham, Needell, Patrick Watts (Mazda RX7) and Gordon Shedden (Capri) pounded round to maximise their stints, as did Anthony Reid (Triumph Dolomite Sprint).

Their strategies backfired when a Capri and a Dolly tangled at Madgwick, triggering a safety car. Graham, on his in-lap and in time until the Porsche emerged, lights flashing, was gutted as memories of missing the window last year are still raw. All the quintet could do was continue until the green, five laps later, then stop. By then, Neal had Ward's Rover (started by Chris Harris) on his tail, with Jordan third. As the lead scrap continued, the Camaro, still smoking like its period sponsor's products, continued at unabated pace, but a misfire blunted the Rover's edge, settling the order.

"What an animal, what a joy to drive," effused Neal. "The clutch was going, the alternator light on, and I passed someone with two wheels on the grass, but the old girl got there." Behind the Rover, Swift was "over the moon" as Jordan bagged third.

Garrett salvaged fourth, ahead of Nic Minassian (in Pochciol's Capri), Pirro's stripy 'Beemer' and Jason Plato (in Papa Swift's Jon Mowatt 1275GT), but Rob Huff abandoned Meins' Capri at Lavant. Sunday morning's opening races brought poignant reminders of the 71 Members' Meetings of yore. Named for period winners, the Les Leston Cup and [Tommy] Sopwith Cup contests (for British GT cars and '50s saloons respectively) featured the type of machinery that would have been driven to the circuit back then.

The MG-engined TVR Granturas of Rod Begbie and Will Penrose qualified one-two among 14 marques, with Jeremy Cooke's Lotus Elan alongside. The slippery Elites of Dutchman John Hugenholtz and Robin Ellis sat behind, but 'super sub' Chris Ryan skilfully guided '60s Goodwood

"What an animal to drive! I passed someone on the grass, but the old girl got there" Matt Neal

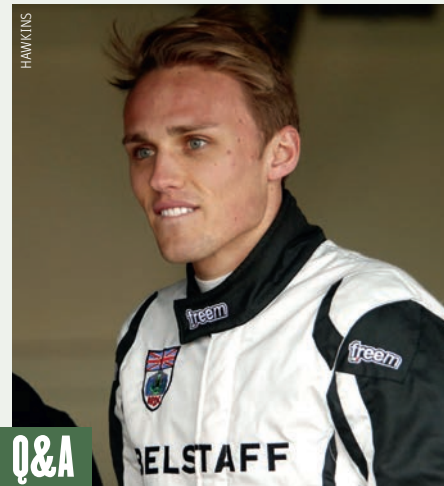
racer Barry Sidery-Smith's ex-works MGB (the Paddy Hopkirk/Andrew Hedges '64 Le Mans car) to victory from row three.

"I only got the call on Tuesday," said Ryan, whose remarkable kerb hop inside Ellis and Penfold on the apex of St Marys fired him onto Begbie's tail. That caught the Scot off-guard, for Ryan sailed past out of Fordwater. Yellow flags thwarted Ellis' outbraking plans into Woodcote, but third with fastest lap was a result as Hugenholtz's car burst into flames and Robin Longdon retired the ex-Leston Elite DAD10.

The injured Des Smail's "works driver" Richard Meins put Andrew Higginson's Austin A40 on pole for the tin-top thrash, then took the Sopwith dogfight to Andy Wallace in Nigel Webb's Jaguar Mk1. A first-lap kiss from Meins – "I thought he's seen me over the kerb" – cannoned onto the grass at St Marys, whereupon the 1988 Le Mans winner clawed back from fifth to regain the lead.

Meins, nursing a gearbox problem, repassed him but a wonderful outside run into Woodcote on the last lap sealed Wallace's first Jaguar win since 1990!

Among the Derek Bell Cup Formula 3 race's 'screamers' was Barry Sewell's Lotus 41 in which the promising Pagham pedaller won here in '66, but Simon Armer (March 703) had the race in the bag until Tim Kary tore a rear corner from his Brabham BT28 at Woodcote, having skated off on oil dropped by Mike Pascall's stricken ex-Tetsu Ikuzawa BT21. ▶



Q&A

MAX CHILTON

Drove the 1990 Nissan R90CK in which Mark Blundell took pole for the Le Mans 24 Hours in the Group C demo

Were you able to have a bit of a play with it?
I was surprised. I thought I'd go out at the back of the group and I was third car out. Obviously in a car I'd never driven, with brand-new slicks and cold temperatures, I was slightly worried. I didn't even take it easy on the first lap, it just felt there. I started to push and I got three or four laps before I managed to catch the others.

How does it compare to the sort of cars you've driven before?

There's not a huge difference to be honest. The gearbox is weird, I can't believe they never gated it so you knew exactly where to go! But the power was phenomenal, when you got the turbo at the startline it was like a rocketship. It's a step down from F1 but more than a GP2 I'd say, power-wise.

How much of the performance could you actually feel during the demo?

A fair amount. It's not my car! And worth an awful lot of money and I didn't want to push it too hard. But I had a clear track and any racing driver goes for it a little bit. The ground effect was huge, it's a shame we don't have that anymore. I would never have said the car was 25 years old.

Have you seen Mark [Blundell]'s pole lap?

I watched it briefly before getting in...

So what do you think of a full-blown lap of Le Mans in it?

Mega! I'd love to. It's hard because I felt slightly thrown in the deep end. But if you did lots of testing and you went to Le Mans with a works team, that would have felt mega.

More than what you expected?

Definitely. 100 per cent. I thought racing cars from 25 years ago couldn't do that. I knew F1 cars could but I didn't know there was such a fast Le Mans car.

Max Chilton was talking to Scott Mitchell



**Chilton enjoyed the
25-year-old Nissan**

► The safety-car interlude erased Armer's 3.8-second advantage, thus James King gratefully re-glued Tony Mantle's Chevron B17 onto his gearbox. When a locked brake into the chicane on the final lap sapped Armer's momentum, King zipped past to snatch victory by 0.018s! "He just made one error all day," said the American. Peter Thompson (BT21) was with them at the chequer, with Robs Lamplough (BT28), Ian Bankhurst (Alexis Mk8) and Thierry Gallo (Tecno) split by 0.7 in the tussle for fourth.

Twenty two early short-wheelbase Porsche 901s and 911s – including Rob Russell's GVB 911D which John Aldington lent to Vic Elford to rallycross and race – competed for the trophy honouring the aspirational model's importer. The marque's 1970 Le Mans hero Richard Attwood's number 23 sported a reverse of the iconic Porsche Salzburg livery but younger bucks set the pace.

Polesitter Andrew Jordan was uncatchable, although Mark Sumpter almost matched his best lap before spinning wildly at Madgwick. He fell from second to fourth behind the flamboyant Mark Bates and Phil Hindley, who Bates scythed past mightily into Woodcote.

With ERAs written out of the Pre-1940 Formule Libre set, Sean Danaher won the Earl Howe Trophy race, appropriately in a Maserati 8CM. The marque specialist's maiden victory on home soil was hard fought, for practice rival Eddie Gibbs bounced back from a shocking start – he was seventh at the end of lap one – in his monoposto Frazer Nash.

Gibbs was reprieved when a safety car covered the retrieval of Bo Williams' Bugatti T35 that had gyrated on oil at St Marys and been walloped by Heinz Bachman's hefty Buick Shafer 8, which almost collected Neil Twyman's Alfa Romeo 8C 'Muletto'. At the green, Gibbs pounced on Stephen Shoosmith's Bugatti T51 to land a surprise second.

Goodwood's best open V8 sports-prototype field seen in either era (topped by 10 McLaren M1s, eight Lola T70 Spydars, and pairs of Coopers and Hungaro-Canadian Chinooks) wowed enthusiasts as much as debutant Nick Padmore's pace shocked the establishment. The Historic F1 and F3 race



"The car was wheelspinning like crazy. Big power, no grip – it's the way forward" Nick Padmore

winner planted Welshman Phil Hall's T70 on pole, his 1m18.072s marker almost 0.9s inside Andrew Smith's 2010 outright lap record with a similar car.

New to the Team Surtees machine, Padmore made a pig's ear of the start however – "with too much power and my right foot shaking the car was wheelspinning like crazy" – arriving at Madgwick only fifth. Nick recovered to second, behind Jay Esterer's Chinook, which had left like a thunderbolt from row two, then watched the extrovert Canadian tame his bucking, writhing, steed like a rodeo rider until its engine broke.

Jon Minshaw's (ex-Sid Taylor/Denny Hulme

GERRY MARSHALL TROPHY: PRODUCTION SALOONS 1970-'82 (30 LAPS) 1 David Clark/Matt Neal (Chevrolet Camaro Z28)

49m16.394s (87.67mph); 2 Chris Harris/Chris Ward (Rover 3500 SD1) +2.039s; 3 Nick Swift/Andrew Jordan (Mini 1275GT); 4 Stuart Graham/Nigel Garrett (Chevrolet Camaro Z28); 5 Paul Pochciol/Nicolas Minassian (Ford Capri 3.0S); 6 Phil Perryman/Emanuele Pirro (BMW 530i); 7 Glyn Swift/Jason Plato (Mini 1275GT); 8 Tiff Needell/Peter Mallett (Rover 3500 SD1); 9 John Young/Steve Soper (Ford Capri 3.0S); 10 Patrick Watts/Jan Cowley (Mazda RX7). **FL** Needell 1m29.619s (96.40mph).

QUALIFYING RACE (10 LAPS) 1 Garrett 15m30.440s (92.85mph); 2 Clark +9.861s; 3 Nick Swift; 4 Richard Meins (Ford Capri 3.0S); 5 Pochciol; 6 Chris Snowdon (Alfa Romeo GTV6). **FL** Ward 1m30.550s (95.41mph).



GRAHAM HILL TROPHY: GT CARS 1960-'66 (20 LAPS) 1 Emanuele Pirro/Shawn Lynn (AC Cobra) 30m25.994s (94.63mph);

2 James Cottingham/Joe Twyman (Shelby American Cobra Daytona Coupe) +6.591s; 3 Jamie McIntyre/Bobby Verdon-Roe (Iso Bizzarrini A3C); 4 Andy Wolfe/Rick Hall (AC Cobra); 5 Richard Meins/Rob Huff (Jaguar E-type); 6 John Young/Chris Ward (AC Cobra); 7 Karsten Le Blanc/Nigel Greensall (AC Cobra); 8 Craig Davies/Jason Plato (Chevrolet Corvette Sting Ray); 9 Wolfgang Friedrichs/Simon Hadfield (Aston Martin DP214); 10 Nigel Williams/Andy Newall (Jaguar E-type). **FL** Hall 1m26.614s (99.75mph).

DEREK BELL CUP: 1000cc F3 1964-'70 (14 LAPS) 1 James King (Chevron B17)

23m42.439s (85.03mph); 2 Simon Armer (March 803) +0.018s; 3 Peter Thompson (Brabham BT21); 4 Robs Lamplough (Brabham BT28); 5 Ian Bankhurst (Alexis Mk8); 6 Thierry Gallo (Tecno 69). **FL** Armer 1m25.929s (100.54mph) Establishes **RECORD**.

LES LESTON CUP: BRITISH MARQUE SPORTS 1960-'66 (11 LAPS) 1 Chris Ryan (MGB Le Mans) 18m07.272s (87.41mph); 2 Rod Begbie (TVR Grantura MkIII) +1.870s; 3 Robin Ellis (Lotus Elite); 4 Will Penrose (TVR Grantura MkIII); 5 Jeremy Cooke (Lotus Elan S2);

6 Richard Evans (MGB). **FL** Ellis 1m36.643s (89.40mph).

SOPWITH CUP: 1950S' SALOONS (12 LAPS)

1 Anda Wallace (Jaguar Mk1) 20m16.562s; 2 Richard Meins (Austin A40) +0.796s; 3 Les Ely (Jaguar Mk1); 4 Oliver Bryant (Jaguar Mk7); 5 Matt Green (Austin A35); 6 Brian Arculus (Hillman Minx). **FL** Meins 1m38.847s (87.40mph).

JOHN ALDINGTON TROPHY: PORSCHE 911S (13 LAPS) 1 Andrew Jordan 20m40.834s

(90.51mph); 2 Mark Bates +12.514s; 3 Phil Hindley; 4 Mark Sumpter; 5 Santiago Orjuela; 6 Chris Harris. **FL** Jordan 1m34.126s (91.79mph) Establishes **RECORD**.

EARL HOWE TROPHY: PRE-'55 FORMULE LIBRE (11 LAPS) 1 Sean Danaher (Maserati 8CM) 20m20.926s (77.84mph); 2 Eddie Gibbs (Frazer Nash Single-Seater) +0.807s;

3 Stephen Shoosmith (Bugatti T51); 4 Duncan Pittaway (Bugatti T35); 5 Fred Wakeman (Frazer Nash TT Replica); 6 Stephen Gentry (Bugatti T51). **FL** Gibbs 1m39.138s (87.15mph).

BRUCE MCLAREN TROPHY: PRE-'66 CAM-AM & GROUP 7 PROTOTYPES (15 LAPS) 1 Nick Padmore (Lola-Chevrolet T70 Spyder)

20m05.325s (107.52mph); 2 Chris Goodwin (McLaren-Chevrolet M1B) +8.726s; 3 Alex Buncombe (Lola-Chevrolet T70 Spyder); 4 Tony Sinclair (Lola-Chevrolet T70 Spyder); 5 Chris Drake (McLaren-Chevrolet M1B); 6 Nick



Adams (Lola-Chevrolet T70 Spyder).

FL Padmore 1m18.217s (110.46mph) Outright Circuit **RECORD**.

HAWTHORN TROPHY: 1950S FRONT-ENGINEED F1, F2 & FLIBRE CARS 1950-'55 (13 LAPS)

1 Barrie Baxter (BRM P25) 20m59.734s (89.16mph); 2 Marc Valvekens (Aston Martin DBR4) +28.746s; 3 Simon Diffey (Maserati 250F); 4 Mark Hales (Maserati 250F); 5 Alexander Boswell (Ferrari 500/625A); 6 David Wenman (Connaught A4). **FL** Hales 1m33.885s (92.02mph).

SALVADORI CUP: SPORTS PROTOTYPES 1955-'60 (14 LAPS) 1 Sam Hancock (Lister-Jaguar Knobbly) 21m09.517s

(95.28mph); 2 Shaun Lynn (Lister-Jaguar Knobbly) +0.589s; 3 Darren McWhirter (Tojeiro-Jaguar); 4 James Wood (Lotus-Climax 15); 5 Roger Wills (Lotus-Climax 17); 6 Christian Gasel (Jaguar D-type XKD504). **FL** Hancock 1m28.103s (98.06mph).

Tony Wood (l) and Jochen Mass walked away from nasty Salvadori Cup shunt

PARAVANI/XYNAMIC



Barrie Baxter's BRM took big Hawthorn win

BLOXHAM/LAT

McLaren F1 demo was crowd pleaser

BLOXHAM/LAT



Sean Danaher sets off for Earl Howe win

BLOXHAM/LAT

T70) led briefly, before slithering back to third, with 2014 Revival winner Chris Goodwin (ex-works M1B) and Alex Buncombe (ex-David Hobbs T70, a '65 Whitsun Trophy starter) in his wake. Minshaw kept Padmore honest before an excursion at St Marys wrecked his car's nose. With Padmore free, Goodwin settled for an honourable second, ahead of Buncombe and Jade ace Tony Sinclair, debuting Grant Reid's T70.

"Big power, no grip – it's the way forward," exclaimed Padmore, having erased the lap record officially. Goodwin, also under the old target, is already relishing a rematch in September. "Nick did a great job, so I'll have to go quicker," he said, having outrun Buncombe by 2.4 seconds. "That was pretty scary stuff, these cars are not very forgiving," sighed the Nissan sportscar racer.

The withdrawal of Hawthorn Trophy poleman Michael Steele (Connaught C-type) opened up the 1950s GP car showcase. Dramas for Maserati 250F pilots Mark Hales and Simon Diffey smoothed Barrie Baxter's path to record a consummate victory in his pale green BRM P25, way clear of Belgian Marc Valvekens' Aston Martin DBR4.

Hales had crumpled the nose of Nick Mason's Maser in a frenetic opening lap that ended John Pearson's BRM P25 challenge at St Marys. Diffey, Valvekens and Niamh Wood (Cooper-Bristol) arrived behind Baxter, but Diffey spun and stalled as Pearson drove away next time round. Simon bump-started his engine and a remarkable recovery to third ensued, aided by Hales spinning. Mark harassed Diffey before falling away with tracking askew. Alex Boswell's Ferrari 500/625A finished fifth after a dice with David Wenman (Connaught A4) whose race had started in 17th.

The Salvadori Cup curtain-closer for 1950s' sports-prototypes had an unexpectedly tight finish, Sam Hancock prevailing over Shaun Lynn in a full-blooded Lister-Jaguar battle despite a big thwack from the tyre wall at the kink before St Marys, which scarred his mount from end to end. "I'd committed to the corner when I found oil, but luckily hit the wall broadside. With the steering deranged I was then fighting the car and Shaun – a memorable first win for Sam Thomas Racing!"

TREVOR TAYLOR TROPHY

The Taylor Trophy Formula Junior race – for the rear-engined drum-braked set this time – lost a favourite when master-cylinder problems trailed Revival 500cc and FJ winner Sam Wilson's Volpini-Lancia before a qualifying time could be set, but was the corker everybody hoped for.

Five marques occupied the first two grid rows with Ivo Goeckman's Jolus, Andrew Taylor's Cooper T56, former UK champion Robert Barrie's Lotus 18, Stuart Roach's Condor S2 (destined not to start with a broken camshaft) and James Hicks' Caravelle Mk3 (built by his father Bob to Richard Utleys design in '61) ahead of Dan Collins in the 18 that Colin Chapman bought in Finland and Iain Rowley, making Mike Waller's ex-Lionel Mayman Kieft really motor.

Lurking at the back of the 26-car grid, though, was Andrew Wilkinson's Ron Tauranac-designed Lynx Mk3, which completed one lap before its gearbox's internals "chewed themselves up". With five and a half hours before the programmed race time, friends Andy and Jamie Bracher dug out Andrew's spare 'box at home in Somerset and met him en route. With customary FJ paddock camaraderie, it was in with 30 minutes to spare!

Wilkinson made a swift start, carving through the pack

to be 11th at the end of lap one. Seventh next time round the sleek black machine was seventh two laps in and the combo's inexorable rise continued. Having passed Crispian Besley's ex-works Cooper T56 and Alex Morton's Ausper T3 in quick succession, Wilkinson picked off Taylor, Barrie and Goeckman imperiously on successive laps to lead by lap 8.

The German – taken by surprise when the ultra-low black car slipped under his radar, retaliated when Wilkinson missed a gear at Lavant having passed Anthony Goddard's Tojeiro over the blind brow – lost the lead for good at the kink before St Marys on the penultimate lap. "That was incredible. When you start at the back it's a challenge, but I wasn't expecting to reach the front, let alone so soon," said Andrew as the magnitude of his achievement and a one-two for Australian cars sank in. Taylor, Barrie and Collins were way behind at the chequer.

TAYLOR TROPHY: DRUM-BRAKED FORMULA JUNIOR 1959-'61 (14 LAPS) 1 Andrew Wilkinson (Lynx-Ford Mk3) 21m24.912s (94.13mph); 2 Ivo Goeckmann (Jolus-Ford) +1.923s; 3 Andrew Taylor (Cooper-Ford T56); 4 Robert Barrie (Lotus-Ford 18); 5 Dan Collins (Lotus-Ford 18); 6 James Hicks (Caravelle-Ford Mk3). FL Wilkinson 1m28.344s (97.79mph) RECORD.



Wilkinson (left) charged from the back to win

BLOXHAM/LAT

BLOXHAM/LAT



'You have the right to remain un-silenced'

60

Among the more unusual cars competing at the Goodwood Members' meeting was a Morris Minor police car. **BEN ANDERSON** was the man behind the wheel in the Sopwith Cup thrash

“Now then, now then!” quips double British Touring Car champion Jason Plato, as the Chris Snowdon Racing team pushes the turquoise-and-white Morris Minor 1000 into the Goodwood Motor Circuit collecting area. “What do we have here?” is the only pertinent repost.

This sort of bizarre exchange is typical of AUTOSPORT's weekend at the 73rd Members' Meeting. The reason being that we are here to race a police car. Yes, you read that right, a police car.

Not just a 1950s saloon that looks like a police car; an actual bone fide former servant of justice...

“I'm not sure exactly which constabulary it served in, but it definitely did!” explains Goodwood consultant Julius Thurgood, who was responsible for unearthing this particular gem, in order for musician Chris Rea to join Thurgood's burgeoning Historic Racing Drivers' Club. Oh yes,



Leading a horde of fellow 1950s saloons

HAWKINS

we forgot to mention; this particular police car also belongs to a popstar!

“I know Chris through our mutual chum Jeffrey Pattinson, the founder of the Coys Auction House and the Coys Historic Festival,” explains Thurgood. “Chris is a big Ferrari nut – they're his first love – but he's also a very down-to-earth guy, who eschews luxury motorhomes and

corporate entertainment, and just wants to be one of the lads when he's racing.

“He always wanted to come and do one of my races, so we put him out in one of my Academy Austin A35s at Snetterton at the end of last year, and he thoroughly enjoyed it. The HRDC carries no pretence and nobody bothers him, so he gets to enjoy being 'just another racer'.



Minor miracle: the old police car made it out

"Afterwards he told me: 'I've got to have a car'. So, he went away and thought about it, came back to me and said: 'The only car I want is a Morris Minor'. I think he realised that if he had an A35 or an A40 it might signal that he would be out to win at any cost. He just wants to be Chris — Mr Rea — so a Morris Minor would be the most inconspicuous car he could find for the HRDC."

Well, it would have been Julius, had you not decided to restore Mr Rea's 'Moggie' Minor to its former glory. AUTOSPORT could not have stood out more if we'd tried at Goodwood. The only thing missing, really, was a siren...

Having found this example rusting away "somewhere in North Wales" (the car has raced previously but not for some years), Thurgood entrusted it to the expert team of Sports 2000 and Alfa Romeo specialist Chris Snowdon, who aficionados of the recently revived Members' Meetings will know also races his own 1981 Alfa GTV6 in the headline 'Gerry Marshall Trophy' Group 1 Touring Car event.

"Our jaws dropped when we first took the sills off and saw the rust!" says Snowdon. "We retained the engine and gearbox, but the rest of it is almost like a new car. It took the equivalent of



Anderson tried the outside on an Alfa...



...and then a lunge up the inside...



...before making it stick at the chicane

"It took a month of full-time work and 10 days' welding to knock it into shape" Julius Thurgood

about a month of full-time work — and 10 days of welding alone — to knock it into shape."

The work started last November and was finished only just in time for the Members' Meeting. Snowdon shook the car down at Thurgood's pre-event track day, just before the Australian Grand Prix, then had to replace some engine and gearbox seals to fix an oil leak. Other than that, the car has not run at all in anger for several years.

"It's a bit tail-happy and a bit over-braked, but we've got high hopes for it," says Snowdon, as AUTOSPORT gets acquainted with the racing saloon of 'PC Rea 6149' (this faux police constable ID is painted on the doors in reference to Rea's 2005 song 'Somewhere Between Highway 61 & 49'). Rea should be racing this reborn 'Panda' car himself in the Sopwith Cup, but ongoing health problems have sidelined him.

"I have the most ridiculous set of emails from Chris, discussing the fact this was an actual police car and whether it should be restored as that," says Thurgood. "And what the registration number should be, what the race number should be (999 of course), and whether it should have a light on the top!

"It sends out the right note for Chris, because it says: 'I'm in this for fun'"

'Fun' is the perfect word to describe this machine. It's never going to be a competitive proposition at a high-speed circuit like Goodwood, because it lacks the sheer grunt of the Jaguars and is probably twice the weight of an A40, but it is an entertaining car. It is an entertainer's car. Perfect for Goodwood, then.

Laughter was AUTOSPORT's reaction when we first laid eyes it. But we also couldn't help but fall for its unique charm. It drew plenty of smiles and admiring glances from the public throughout the weekend, though we still fail to grasp how the police actually managed to catch criminals in such a car. All the smart crooks would surely have used Mk1 Jags as getaways...

Nevertheless, this Minor has enough get-up-and-go to haul its pilot into a robust midfield battle with an Alfa Romeo Giulietta, which ends in the Minor's favour after some panel bashing at the chicane. The Alfa driver doesn't come to see us afterwards. He's probably wise enough to know you never get anywhere arguing with the police...

As we pull into parc ferme, Thurgood is busy texting Rea updates on the car's progress. "He would have been here if he could have been here, and I'm really upset that he couldn't," Thurgood explains. "But I said we should just get the car out there and do it anyway.

"Chris was very worried that people would think he's just some rich bloke who can't be arsed, but I hope the car being out and racing will inspire him."

When he does finally get behind the wheel, it will certainly put a smile on his face. Get well soon 'PC Rea' 🍀

J.BLOXHAM/LAT



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HIGH-AIRBOX PARADISE

The centrepiece track demonstration at the Goodwood Members' Meeting was a stunning display of 1970s high-scooped grand prix machinery. Here are just a few of the highlights

JARIER RETURNS TO SHADOW

French ace Jean-Pierre Jarier was reunited with the Shadow DN5 in which he took two pole positions in 1975. He showed he has lost none of his attacking spirit at the age of 68, as his grassy moment while passing the ex-Graham Hill Shadow proved (below).

"It takes me back 38 years to when I was young," said Jarier. "I've remembered the same feeling that I had when I was racing the car. I'm very happy to be here even though the French rugby team lost!"

The rare ex-Jarier Shadow-Matra DN7 also appeared.



HAWKINS



J.BLOXHAM/LAT

PIRRO IMPERSONATES LAUDA

Five-time Le Mans 24 Hours winner Emanuele Pirro drove an ex-Niki Lauda Ferrari 312T. "This is a dream car for me," he said. "It's a really beautiful car to drive. Because it is quite short I was expecting quite a nervous car, but on the contrary, the car is so nice. The sound of the engine is so nice and crisp. I would love to go back in time and race it."



BLOXHAM/LAT

HAWKINS



BLOXHAM/LAT

TYRRELL 007

The Tyrrell 007 was the car that marked the start of the post-Jackie Stewart era. It won two grands prix in 1974, and this ex-Patrick Depailler example drew plenty of attention from the crowd.

VANDOORNE IN A McLAREN M23

McLaren junior and GP2 title favourite Stoffel Vandoorne drove this immaculate ex-Emerson Fittipaldi McLaren M23 on both days.



HAWKINS

Q&A

STOFFEL VANDOORNE GP2 CONTENDER

You don't get to drive an ex-Emerson Fittipaldi McLaren M23 every day...

Yeah, it's always a great experience to drive one of McLaren's historic cars. At first, you don't really feel comfortable, because everything is so old you can almost see the ground and you don't really feel safe in it. But after a couple of laps, you get used to it and it's great fun.

Is the feel of the car similar to a modern car or does it take time to get used to the way it gives you feedback?

It does take a while. It's difficult in just a few laps to get to the limit of the car and they are worth quite a lot, so

you don't want to mess around and crash. You take your time but once you get to know the car, it drives well and it has a good amount of grip. It's a bit more rough than a modern car – today everything is very smooth and precise, but with the older car there's more vibrations, the driving position is different and the pedal feel is not the same. A lot has changed.

How much were you able to push?

It's a demo, but it was the first time we've been allowed to get on with it a bit. I took it easy at the beginning but then started pushing and it was great fun. I was nowhere near the limit probably, but getting closer!

For a professional driver, what's it like to be able to do something with no pressure like this? That's what the weekend is all about, to let the crowd enjoy the old cars and it's nice to be here with McLaren and the old mechanics. They are so passionate about it and it's great to see there is so much interest.

F1 RARITIES: TOKEN AND TROJAN

The Token RJ02 and Trojan T103 were among the most unusual cars on display. Examples of these started just nine world championship races in 1974.



HAWKINS

THE SOUND OF THE MATRA

The 1972 Matra-Simca MS120C was probably the most distinctive car on track, not just because of its French racing blue colouring, but because of the piercing shriek of its V12 engine.



BLOXHAM/LAT

The new BTCC Honda Civic

Worth the wait?

Honda's much-vaunted Civic Type-R finally broke cover last week, but will the late start hurt its 2015 British Touring Car Championship campaign? **SCOTT MITCHELL** found out



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Honda's 2015 British Touring Car Championship challenger belatedly started its pre-season testing programme last week, but the team is confident the compromise will pay off now the Civic Type-R has hit the track. The car that has been chosen for the Team Dynamics-run operation's return to a hatchback Civic in the BTCC broke cover at Brands Hatch last week with 2015

drivers Matt Neal and Gordon Shedden both at the wheel.

Bad weather limited its debut to half a day's running and a problem the next morning compromised day two, but three-time champion Neal declared this inaugural test a success before the second Type-R was completed in time for both drivers to run at the series' official media day at Donington Park on Tuesday this week (March 24).

Neal performed the majority of the running in the new car at Brands, while Shedden took on back-to-back runs in the outgoing Civic Tourer estate.

WHAT DIFFERENCE DOES THE TYPE-R MAKE?

The Type-R, which will run an uprated Neil Brown Engineering-prepared VTEC engine, is understood to have outpaced its predecessor on the second day. After a significant effort in adapting to the bigger Tourer, Dynamics now has to get its head around a return to the older hatchback shape.

Led by technical director Barry Plowman, who has been an integral part of the team's set-up since the 1990s, much has been made of the team adopting the Type-R. In fact, it was so important that the pre-season testing programme was compromised to accommodate it.

But what does it mean? Plowman is bullish about the potential of the



car, stating it "is going to win races". The front end has been reworked significantly, or as Honda puts it, is "quite dramatically different", with an extensively refined bodywork set and larger apertures at the front to allow better breathing for both the engine and brakes.

While the nature of the NGTC regulations mean there aren't any "ground-breaking developments", Honda insists it has been working on trying to optimise every single area by minute degrees.





TRACKSIDE VIEW: GARY HAWKINS

Long-serving Brands Hatch photographer Gary Hawkins grabbed the first pictures of Honda's new racer during its track debut last week, and kept a close eye on it when it finally left the pitlane.

"It looked good from the word go, considering the weather was cold," noted Hawkins, whose vantage points were Paddock Hill Bend, Druids and Surtees. "The main problem would have been getting the tyres warm, because it was wet in the morning and dried out in the afternoon.

"On day two they didn't run in the afternoon, because they had something to sort on the car. But when it did run, straight away, within 12 laps, the car looked really good, especially under braking, and the turn-in was very progressive. At Druids you could see how planted it was on the brakes and on turn-in.

"It looked incredibly stable through Surtees, which is the best corner to



watch in terms of high-speed performance, and the car looked mega through there, and on the brakes into McLaren too. You could see how much pitch it's got, just with a base set-up. They just need to balance it now.

"And it was reliable. Generally you don't see new cars going out and doing 10 laps straight away. Usually it's one lap, come in, then another couple, then in

again. Neal was immediately racking up a lot of laps.

"It's tough to compare it with the other cars that were there, like the BMR Volkswagen or Triple Eight MG, unless they are side-by-side, but it just looks right. Looking at Shedden in the Tourer, you wouldn't have thought the cars were a year apart and one was having its first-ever run."

Tourer with its weight distribution and aero, so it's learning a wee bit.

"It started off very nervous to drive, but it now feels a heap better. We've made progress on the second day; it was quite challenging to hang on to initially, but now we've got a good car we can race.

"It's now quicker than the Tourer, which after the second day's running we're pretty pleased with."

MAKING UP FOR LOST TIME

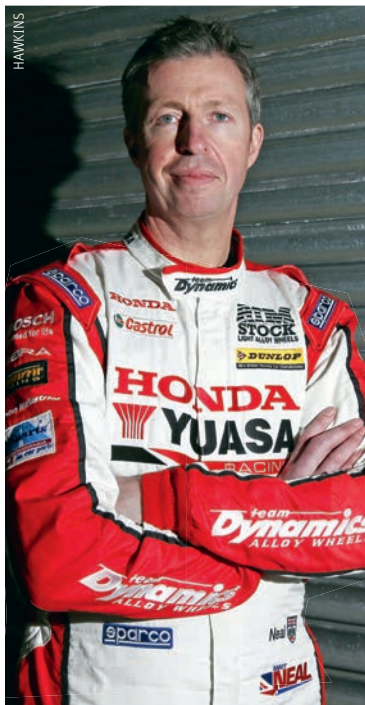
While Honda was pleased with the rollout of the Type-R, Neal admitted that the delay in starting test was not ideal for the team. The first test took place two and a half weeks before the first round of the season, and the second car was only ready in time for the media day.

Running has been at a minimum, at a similar level to the Welch Motorsport Proton, but Neal insists that the benefits Honda will gain on and off the track will make the wait worthwhile.

"It was quite challenging but we've now got a good car" MATT NEAL

It was well known that the Tourer, with its longer shape, had better aerodynamic characteristics. That was one of the major plus points from the switch to the estate car. Returning to a hatchback should, in theory, hurt it, but Honda claims it has reduced the drag as well as increased its downforce in switching to the Type-R.

"The aerodynamics, engine and basic dynamics of the car have all changed," says Neal (left). "We've got quite used to running the





NASCAR XFINITY

Kevin Harvick took a dominant victory in the 300-mile race at Fontana. It was his 46th win in the second-tier category, making him the third most successful driver in its history. Harvick crossed the line over three seconds ahead of Brendan Gaughan, who made great progress in the closing stages of the race to charge from eighth after the final restart to take the runner-up spot ahead of polesitter Erik Jones. Ty Dillon, who finished 14th, leads the points standings ahead of Chris Buescher after five rounds.

BRASILEIRO DE MARCAS

Ford Focus driver Cesar Bonilha and Honda Civic pilot Vicent Orige shared the victories in the opening round of the Brazilian tin-top series at Goiania. But ex-IndyCar racer Vitor Meira leads the standings thanks to second and third places on his category debut driving the JLM Racing Civic that Ricardo Mauricio took to back-to-back titles. Rubens Barrichello, driving a Renault Fluence, inherited the lead of the first race when both Meira and Orige had to start from the pits. But Bonilha soon chased him down, and Barrichello ended the double-header with a fifth and eighth place.

CONTINENTAL TIRE GT

Robin Liddell and Andrew Davis took their Chevrolet Camaro Z/23.R to victory in the Sebring 12 Hours support race. But it was a close-run thing, with Liddell having to hold off pressure from new team-mate Lawson Aschenbach to the finish, ending up just four-tenths ahead when he crossed the line. Aschenbach's team-mate Matt Bell had led the first part of the race, but at the final round of pitstops he went a lap longer than Davis, which allowed Liddell to jump ahead thanks to his outlap.

NEW ZEALAND FF1600

Rookie Taylor Cockerton swept to the New Zealand Formula Ford 1600 championship by winning all three races in the final round at Hampton Downs. The 17-year-old student had a tough start to the season but then started winning almost every race in his Mygale. Michael Scott was second and Caleb Cross third.

HA'IL RALLY

Yazeed Al-Rajhi stormed to an emphatic fourth victory in the Ha'il Nissan International Rally in Saudi Arabi. The Hummer driver was the class of the field from the start alongside German co-driver Timo Gottschalk and reached the finish with a winning margin of nearly 70 minutes over local Rajah Farhan Al-Shammeri (Nissan Pick-up). Khalaf Joan finished third in a Toyota.



Ricardo Mauricio (90) claimed victory in the V8 Stock Car opener

V8 STOCK CARS GOIANIA (BR), MARCH 22 RD 1/12

Mauricio and Girolami win all-star opener

RICARDO MAURICIO AND NESTOR GIROLAMI

Girolami won the opening round of the Brazilian Stock Car V8 Championship at Goiania.

The two-driver race attracted a strong field of international drivers, but from third place on the grid ex-Formula 3000 man Mauricio passed Marcos Gomes for the lead one lap before pitting to hand over to his Argentinian team-mate. Girolami then set a string of fastest laps en route to a comfortable win.

Since Girolami had been unable to practice in dry conditions, he had a fresh set of tyres, which helped keep the Chevrolet Sonic in the lead despite initial pressure from Australian ace Mark Winterbottom,

who took over from Gomes.

Allam Khodair and DTM star Antonio Felix da Costa claimed a heroic third place after a recovery charge. At the start, Khodair was squeezed by Thiago Camilo and dropped to eighth, recovering to fourth despite an electronic glitch hindering the gearshifts.

Eventually, Khodair and da Costa prevailed in a battle with the Chevys of Caca Bueno and Jose Maria Lopez. Lucas di Grassi, sharing a Sonic with Camilo, came home fifth.

Atila Abreu and Nelson Piquet Jr, who started from pole thanks to the ex-Formula 1 racer's pace in qualifying, had a troubled race. Piquet led the first four laps, but a

problem with the left-rear wheel bearing held him back before he eventually had to retire when the brakes on that corner caught fire.

Even so, it was a brilliant performance from Piquet against a star-studded field.

● Lito Cavalcanti

RESULTS

Race 11 Ricardo Mauricio/Nestor Girolami (Chevrolet Sonic), 35 laps in 52m32.719s; 2 Marcos Gomes/Mark Winterbottom (Peugeot 408), +6.892s; 3 Allam Khodair/Antonio Felix da Costa (Chevy); 4 Caca Bueno/Jose Maria Lopez (Chevy); 5 Thiago Camilo/Lucas di Grassi (Chevy); 6 Max Wilson/Vitor Meira (Chevy). **Points 1 Mauricio, 12;** 2 Gomes, 11; 3 Khodair, 10; 4 Bueno, 9; 5 Camilo, 8; 6 Wilson, 7.

NASCAR SPRINT CUP FONTANA (USA), MARCH 22 RD 5/36

Keselowski puts on fresh boots to triumph

DESPITE 10 CALIFORNIAN DRIVERS

starting the race at Fontana, it was Brad Keselowski, from the small city of Rochester Hills, Michigan, who came from nowhere for a shock win.

He led the in-form Kevin Harvick after a second green-white-chequered restart, pouncing on the lead with a move worthy of the 'Mr Where Did He Come From?' nickname fans once gave Harvick.

Keselowski took four fresh tyres when most others took two on the final round of pitstops under

caution. The fresh tyres gave him the boost he needed to work his way to the front of the field having been on the bubble of the top 10 for most of the 400-mile race.

He out-muscled Kurt Busch on the final restart and sealed the win when Busch ran wide trying to come back at him into Turn 4 – sending the man who had taken pole position and led a race-high 65 laps into the wall. This relegated him to third behind a charging Harvick, as the champion stretched his run of

top-two finishes to eight.

Third place for Busch matched his 2014 Fontana finish, though, and that was the precursor to a win at Martinsville a week later.

Denny Hamlin led 56 laps, but a penalty from NASCAR for having an uncontrolled tyre in his pit box ruled him out of contention in the last quarter of the race while running third. Joe Gibbs Racing team-mate Matt Kenseth broke an axle as his car was dropped off the jack while he was leading.



Keselowski celebrates in the traditional way

RESULTS

1 Brad Keselowski (Ford Fusion), 209 laps in 2h58m18s; 2 Kevin Harvick (Chevrolet SS), +0.710s; 3 Kurt Busch (Chevy); 4 Paul Menard (Chevy); 5 Ryan Newman (Chevy); 6 Dale Earnhardt Jr (Chevy); 7 Joey Logano (Ford); 8 Martin Truex Jr (Chevy); 9 Jimmie Johnson (Chevy); 10 Jeff Gordon (Chevy). **Chase grid 1 Harvick, 2 wins/225 points;** 2 Logano, 1/197; 3 Keselowski, 1/163; 4 Johnson, 1/159; 5 Truex, 0/192; 6 Earnhardt, 0/164; 7 Newman, 0/162; 8 Kasey Kahne, 0/159; 9 Menard, 0/152; 10 Aric Almirola, 0/138; 11 AJ Allmendinger, 0/137; 12 Casey Mears, 0/132; 13 Matt Kenseth, 0/127; 14 Denny Hamlin, 0/125; 15 David Ragan, 0/124; 16 Jamie McMurray, 0/120. 16 Biffle

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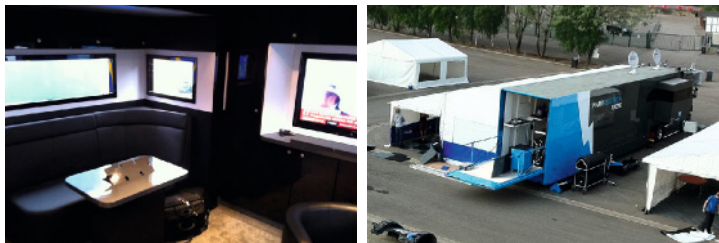


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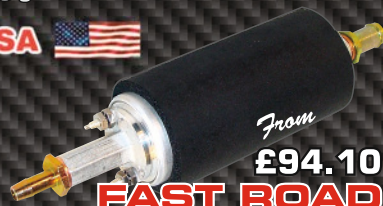


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The screenshot shows the AUTOSPORT MOTORSPORT JOBS website interface. At the top, it says '18 jobs available in motorsport'. Below this, there are search filters for 'Job title, company or location' and 'or choose a category'. There are two job listings visible: 'Engineering Manager' for 'Company: Docking & Company Ltd' and 'Various Vacancies' for 'Company: Hoja'. Each listing has a 'View Job Details' button. The website also features a search bar and a 'Search' button.

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Haggerty (right) will race in BRDC F4



Haggerty gets Ecosse F4 drive

Scottish FFord champion lands support from new young-driver scheme

SCOTTISH FORMULA FORD 1600 champion Ciaran Haggerty will race in BRDC Formula 4 this year after receiving support from a new young-driver initiative founded by Ecurie Ecosse.

The Ecurie Ecosse Young Driver Initiative has been set up to help up-and-coming drivers from Scotland. Haggerty will race in BRDC F4 under the Ecurie banner in the series, with Graham Brunton Racing running the car.

"It's pretty amazing, and a real honour to be part of Ecurie Ecosse," said the 18-year-old, who impressed in Formula Ford Festival and Walter Hayes Trophy outings on top of his title success.

"We are not here to make up the numbers, I really want to go for it. It's a natural progression from Formula Ford to F4, I learned a lot from FFord with car control. It teaches you how to drive on the

ragged edge. I've had a couple of tests in the car at Knockhill. They went really well and I got in some good mileage. It felt really good and I was comfortable in the car right away. It should be a good year."

FRANCHITTI SUPPORT

As well as receiving support from Ecurie Ecosse, Haggerty has also been mentored by four-time IndyCar champion Dario Franchitti.

"I think he's got a lot of talent, he's very inexperienced," said the triple Indianapolis 500 winner. "He's very, very determined. I think he's the right guy to lead the initiative. I think he's very good."

Ecurie Ecosse team principal Hugh McCaig added: "We are promoting Scottish drivers in Scotland after we lost David Leslie. We felt there was a void. I think Ciaran Haggerty is a great talent and we have given him a chance."

Ecurie Ecosse is also supporting Adam Mackay this year. The 17-year-old finished third in Scottish Formula Ford in 2014 as top rookie.

Mackay will return to the series this year with Brunton's Ray squad and is targeting the championship.

"It is a huge opportunity to be involved with such a big name in motorsport with so much heritage behind it," said Mackay. "Not many people can say they've had this sort of chance so I'm looking forward to making the most of it."

Franchitti added: "I think we've got two very, very good drivers. Hopefully they can do their talking on the track, and we'll see what they can do."

MORE F4 CONFIRMATIONS

Mexican Fernando Urrutia will also join the grid this year. The 2014 PanamGP Spring Series runner-up will partner Akhil Rabindra at Douglas Motorsport, having finished sixth in last year's Winter Series for Sean Walkinshaw Racing.

Hillspeed has announced Indian rookie Ameya Vaidyanathan will join Sebastian Lanzetti and Al Faisal Al Zubair in its line-up.

Karter James Reveler is also understood to be in contention for a BRDC F4 drive with new team 23 Racing, which would bring the 2015 entry to at least 18 drivers.

MATT BEER
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AMBITIOUS YOUNG DRIVERS

who start out in regional Formula Ford 1600 don't do so because they think it's the textbook first step to a professional racing career (you won't see many talent scouts in the Festival or Walter Hayes Trophy paddock – which is their loss as they'd love it); they do so because it's the only viable starter category for their budgets.

When you're scraping together the thousands needed to race FF1600, you know the tens of thousands needed for the next step up are unlikely to ever be in your grasp – but that doesn't stop the perennial hope of catching a backer's eye.

Scottish champion Ciaran Haggerty had already earned the patronage of Ryan Dalziel and Dario Franchitti, and the Ecurie Ecosse scheme that will bring him into BRDC Formula 4 is the chance regional club racing's young stars dream of.

But the best thing about Hugh McCaig's latest talent investment is its long-term nature and the fact that a ropeladder down to FF1600 is retained with Adam MacKay's chance and the involvement of Graham Brunton Racing across both series.

This is a big year for FF1600's latest renaissance. The BRSCC's revamped National championship and Festival plans, plus James Beckett's growing Super Series and WHT, count on category momentum increases.

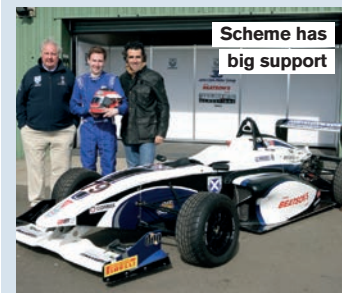
If Haggerty can prove that FF1600's best can still hold their own at a higher level – as Matt Howson, Peter Dempsey, Andy Meyrick, Wayne Boyd, Scott Malvern, Chris Middlehurst have done – the regional FFord scene will benefit. Time to find out if what you learn in a Ray GR14 can help you thrive in an MSV F4-013.

Haggerty impressed in FF1600 last year



JAKOB EBREY

Scheme has big support





Motorbase will run third Vantage in 2015

British GT

Jackson to race Motorbase Aston Martin

BRITISH TOURING CAR RACE winner Mat Jackson will drive a Motorbase Aston Martin Vantage in British GT this season after the team's tin-top programme was thrown into doubt last week.

The 2008 BTCC runner-up has been at Motorbase since 2010, and has been retained by David Bartrum's outfit for this season even though it is

set to miss at least the first half of the season with budget issues.

Jackson's full programme will instead be partnering Aston regular Phil Dryburgh in a third Motorbase V12 Vantage, which he has already tested at Oulton Park.

"I am really excited about this because the cars are amazing," he said. "I am still smiling after my first test.

"It might take a little time to adapt, because it is a completely different technique of driving. I have done lots of mileage in supercars because I work as a tester for McLaren's road cars, but racing GTs requires a different mindset.

"I have to learn to work as part of a team and not be selfish, like you are in the BTCC. Every driver wants a manufacturer deal and those simply

don't exist in the BTCC anymore, but there are chances in sportscars.

"I would love to expand the programme and race all over the world, but that is not on the radar at the moment."

It is unclear what Jackson will do when Motorbase rejoins the BTCC grid. The Knockhill BTCC round clashes with British GT at Snetterton.

Formula Renault NEC

Gill graduates to Formula Renault NEC with Fortec

BRITISH RACER ALEX GILL WILL graduate to the Formula Renault Northern European Cup with champion squad Fortec Motorsports this season.

The 17-year-old finished fourth in last year's Formula Renault BARC Championship with the Daventry-based outfit, scoring a single victory.

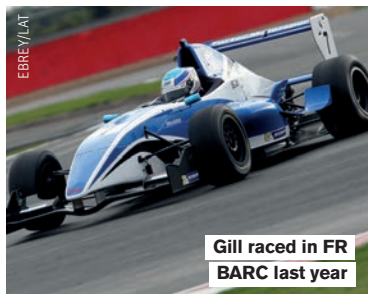
Gill tested the team's MSA Formula car at Rockingham last week, but has already tested the two-litre Renault machine, in Valencia last December. British drivers have won the last three Formula Renault NEC titles.

"This is a really good opportunity for me," said Gill. "I showed I was quick compared with the championship's established drivers in Valencia.

"There will be six drivers with Fortec

this year, and I want to make sure that I'm the quickest. I'm targeting a top three finish this year. There will be experienced NEC drivers and those dipping into odd rounds from the Eurocup.

"If I can drive well against those Eurocup racers, I'll be happy."



Gill raced in FR BARC last year

Renault UK Clio Cup

Ginetta champ Mitchell joins Clio Cup with SV Racing



Mitchell won title in 2014

REIGNING GINETTA JUNIOR champion Jack Mitchell will step up to the Renault UK Clio Cup this season with SV Racing.

Mitchell, who beat MSA Formula driver Lando Norris to the 2014 Junior crown, tested with Danny Buxton's team over the winter.

He will drive a fourth SV Racing Clio and is confident about the switch.

"It's a big jump, but the team has given me a great car and I now feel I have got to grips with it," said Mitchell.

"The racing in the Clio Cup is more intense than I've experienced, but my time in the Ginettas has provided me with strong foundations that will allow me to get stuck in."

The team has also announced a third car in the Ginetta GT4 Supercup with Stephen Young, a Formula Palmer Audi champion, at the wheel.

He will make his Supercup debut at SV Racing and will dovetail this with appearances in the V8 Masters series in South Africa.

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British GT

BTCC squad AmD Tuning expands to run Porsche 911

BRITISH TOURING CAR OUTFIT

AmD Tuning will expand into the British GT Championship this year.

Team boss Shaun Hollamby will return to driving full-time for the first time since 2010 and will be partnered by sportscar racer Graham Coomes.

The team had been evaluating an entry into GT racing for some time, but has now purchased the Porsche 997 GT4

that Team Parker Racing ran last year. Hollamby and Coomes have tested the car at Snetterton ahead of the season beginning over the Easter weekend.

It is part of a major expansion for the West Thurrock-based team, which will expand to run two cars in the BTCC this year, including one for Lewis Hamilton's young brother Nicolas.

"I really love running the team but I love motor racing and the best way to experience it is driving," he said. "We've been trying to get a GT3 programme together for a few years now, but for one reason or another it always fell through.

"I decided to bite the bullet and get our own car. The Porsche was an ideal candidate because we work with it as a tuning company.

"I'll be disappointed if we don't get on the podium by the end of the year."



AmD has bought ex-Parker Porsche

British GT

Overseas ace Plowman to make British GT debut

FORMER LMP2 CLASS WINNER

Martin Plowman will make a one-off appearance in the British GT Championship at Oulton Park.

The 2013 Le Mans class winner will drive in next month's series opener with the UltraTek Lotus team.

The Briton will be racing on home soil for only the fourth time in his career, having spent his formative years in the Italian Formula Renault championship. Plowman has been brought in to replace James Nash alongside Jamie Wall in the team's GT4-class Lotus Evora.

Plowman is under the same management umbrella as Nash, who will be racing in the first round of the Blancpain Sprint Series at Nogaro on Bank Holiday Monday.

The 27-year-old said: "It's just a one-off and it came out of the blue, but

it's great for me because it will give me more seat time in a GT car before the start of the Blancpain Endurance Series."

Plowman will race a Nissan GT-R Nismo GT3 for the German MRS team in the series.

He spent last year competing in various championships in America, including drives in IndyCar and the United Sportscar Championship – in which he has continued to race this year.



Plowman is an LMP ace

VW Cup

Champion Giddings returns

BRITISH GT4 CO-CHAMPION

Jake Giddings will return to defend his crown this year after switching to newcomer JWB Motorsport.

Giddings, 20, will again drive an Aston Martin Vantage GT4 and will be

partnered by series rookie Kieran Griffin, who joins the championship after racing for JWB in the Aston Martin Challenge last year alongside brother Liam.

"It's reasonable to accept that we might take a couple of rounds to find our feet but I'm feeling very motivated to help push them forward throughout the year," said Giddings.

"Kieran has plenty of talent, as demonstrated last season, although the quality and quantity of this year's GT4 field has improved on 2014."

Team boss Nick Beaumont is targeting podiums this year and has ambitions to step up to GT3 in the future.



Giddings is back

HUMBLE PYE

The voice of club racing



Patrick Head's T38 was entrusted to Lyndsay

BLOXHAM/LAT

"HEAD SR WON A 100KM RACE AT GOODWOOD IN '57"

So many aspects of last weekend's Goodwood 73rd Members Meeting were memorable, but the opportunity to meet legendary racing car designer Patrick Head in the commentary box, and in the paddock afterwards, was my undoubted highlight. Patrick visited the circuit as a lad when his father Colonel Michael Head was racing and was there this time to oversee the completion of a personal odyssey which started at last September's Revival Meeting. Things didn't go to plan.

That occasion marked the return of the Cooper-Jaguar T38 in which Head Sr – who topped the list of period BARC Goodwood Members Meeting race victors with Chris Lawrence and Doc Merfield, on nine apiece – was a regular winner in 1956-'7. On Whit Monday '57, indeed, he won a 100km sportscar race at the circuit. Frenchman Laurent Philippe, who owns the car now, loaned it to Williams Grand Prix Engineering co-founder Patrick, but it was crashed during timed practice when Ben Shuckburgh was caught out approaching the chicane.

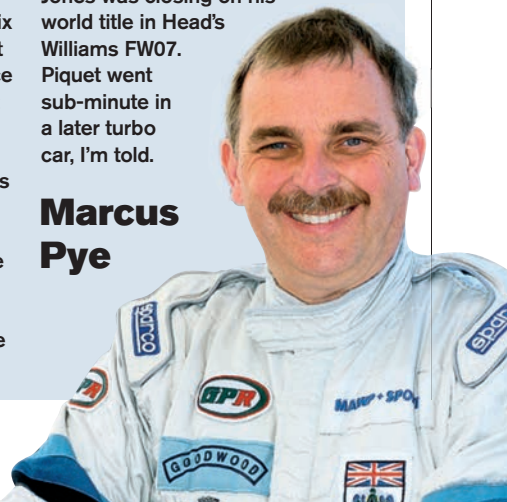
"I was terribly upset," said Patrick, "but CKL Developments has made a beautiful job of repairing the damage and the car is back, looking better than it did." This time HOT 95 was entrusted to six-time Goodwood Revival winner Ludovic Lyndsay, who brought it home in the midfield in the Salvadori Cup race.

At one point Ludo was captured on the big screens, gyrating at Lavant. "As it was spinning he told me he was saying 'sorry Patrick, sorry Patrick,' but no harm was done."

I was fascinated to touch upon Head's time at Lola, where he and another highly talented young future Formula 1 designer, John Barnard, were involved in the evolution of the T290 series. Chris Craft proved the T292 by winning the '73 European 2-litre championship in Martin Birrane's Crowne Racing entry. But I was staggered when Patrick recalled my interest in Delta FF2000 cars, successors to his Starfire and Sark designs, and thrashing around in them at Goodwood...

Seeing the high-airbox F1 cars reminded me of being trackside one day when Nelson Piquet and Hector Rebaque were testing Brabham BT49s. I clocked Nelson lapping in the 63s bracket but by then Alan Jones was closing on his world title in Head's Williams FW07. Piquet went sub-minute in a later turbo car, I'm told.

Marcus Pye



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In brief

Hall eyes car move

Former British karting champion Connor Hall is closing on a move into this year's MSA Formula Championship after testing with the Falcon Motorsport squad. The 16-year-old, who won the Super One Rotax MiniMax title in 2013, tested a BRDC F4 car with Hillspeed at Snetterton in December. He ran with Falcon at the MSA Formula official test day at Silverstone last week.

Knockhill to Monza

Former Renault Clio Cup UK racer Finlay Crocker will take part in three SEAT Eurocup rounds this year. Crocker will race at Silverstone, the Red Bull Ring and Monza, having completed a test at Donington. He will also compete in the Knockhill-based Scottish Sports and Saloon Championship.

Reade books Mini gig

Ex-British Formula Ford racer Luke Reade will race in the Mini Challenge this year in a Dale Racing-run F56. The Kent-based driver contested the final rounds of the 2013 Formula Ford season, but has no other experience of car racing. The 21-year-old has completed three tests in the Mini.

Jordan returns in Clio

Andy Jordan will return to the Michelin Clio Cup Race Series after a disjointed campaign last year that was littered with bad luck. The Bridgnorth driver will race for Finesse Motorsport and is targeting the title. Jordan will also contest the Britcar 24 Hour race at Silverstone in April.

Two rounds for Hunt

Freddie Hunt, the son of 1976 Formula 1 world champion James, is currently only booked in for the first two Renault UK Clio Cup rounds. The 27-year-old, who has commitment clashes with some rounds, hopes to raise the budget to contest the second half of the season.

Cullen joins as Porsche sets sights on 30-car grid

Ryan Cullen is the latest GP3 refugee to join the Porsche Carrera Cup GB grid, which is set to feature a record 29 cars this season. Last week's media day featured 23 drivers testing – a series high – and the

championship's entry list features another six. The record race entry is 27. It caps a remarkable recovery for the Carrera Cup, which featured seven cars in 2013 and managed a dozen at most rounds last year.

Allen will join Maximum



VW Cup

Allen moves to VW Cup

FORMER MINI CHALLENGE champion Lee Allen will make his Volkswagen Racing Cup debut this season. The 2010 champion will drive a Scirocco for Stewart Lines' Maximum Motorsport squad after competing in the Dutch Supercar Challenge in 2014.

"This wasn't really on my radar for this year," admitted Allen, "but the championship looks good and

the competition is tough."

Allen will face fierce competition from reigning champion Joe Fulbrook, who is seeking a record-breaking fourth crown, as he returns with AWM.

Fulbrook will have a new two-litre engine in his Golf for this season.

Another driver joining the series is Simon Deaton. The former Euro Saloons and Time Attack racer will partner Allen at Maximum.

DICK HARVEY 1943-2015

DICK HARVEY'S DEATH, 12 YEARS

after a stroke changed his life, has robbed club racing of an unsung hero. The Darvi Formula 750 cars he created with brother Jon and Mick Harris have won 15 750MC championships, with Harvey's '87 crown a career highlight.

When the 750F's Austin 7-derived Reliant units became too fragile, Harvey – brilliant at engine and gearbox preparation as well as chassis design and construction – championed the 1108cc Fiat engine as a replacement. History proves it to have saved Britain's oldest club-racing championship.

Dick's funeral will be held at Amersham Crematorium's Milton Chapel at 1345 next Monday, March 30 (family flowers only). AUTOSPORT extends its condolences to Jon, sister Mary and the Harvey family.

Free Lites drive is on offer



Rallycross

RX shootout planned for young drivers

A NEW RALLYCROSS TALENT search has been launched for MSA licence holders that will result in a free drive for the winner on the World Rallycross Championship package.

Drivers have been invited to register for a shootout at Lydden Hill ahead of

May's World RX event. Ford Olsbergs MSE will provide three RX Lites cars for up to 15 finalists.

Judges include Robert Reid of the MSA Academy and British Touring Car champion Andrew Jordan, with the winner receiving an RX Lites Cup drive

in October's World RX round in Turkey.

"This is a fantastic initiative," said Reid. "Rallycross is fast becoming a credible career path. The MSA Academy already reflects its growing status with rallycross prospects joining young racers and rally crews on the scheme."



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THIS WEEK

LETTERS • ON TRACK • TV PICKS • FROM THE WEB • AUTOSPORT.COM

What you think of the motorsport news of the past week



Audi knows the way back is through hard graft

Audi shows Red Bull the way

The 'Audi's (r)evolution' feature last week has made me question Red Bull's little paddy even more. Audi lost the WEC last year (yes, they still won Le Mans but the overall prize was lost) and, rightly, they were disappointed as any team would be, just as Red Bull must have felt last year. For me this is where the similarities end.

Whereas Dr Ulrich has used this to inspire the team to work harder to regain the title,

Dr Marko has thrown the rattle out of the pram and threatened to quit F1 if measures aren't put in place. Yes, it isn't fun when you have a bad season, but it just brings into question the dedication of Red Bull. Yes, you aren't doing as well as you were, but you should be working 10 times as hard to get it back, not just throw in the towel.

Alex MacDonald, by email

Did we hear Red Bull saying this sort of stuff when they were in the middle of winning four world championships? Grow up, work harder and stop whinging. We all thought you were made of better stuff than this!

John Reekie
By email

Didn't notice anyone from Red Bull suggesting that an equivalence factor be invoked when Caterham and Marussia were miles off the pace last year. And neither did they call for it when their own Mr Vettel was running away with the championship during their good years.

Kit Spackman
Lydney, Glos

Hopefully Max Verstappen has put the naysayers to bed. If you're good enough, you're old enough.

If Valtteri Bottas is unfortunately not fit

for Malaysia, why couldn't we see Susie Wolff race the Williams? What a brilliant PR coup for Williams and F1, which I'm sure we could do with after the abysmal overall 'show' in Oz.

Maybe a deal could be done to get Jolyon Palmer in the Williams. After Felipe Nasr's excellent debut, you have to ask what could Jolyon have achieved in Oz?

Brian McCausland
Portishead, Somerset

So, the F1 season has not started with the exciting race everyone hoped for. Still, for the past few years the most exciting races of the F1 weekends have come from the GP2 series, with wheel-to-wheel battles throughout the field.

I fear it is about to become sanitised with the introduction of DRS. The incentive to overtake whenever the opportunity arises will go, with drivers content to play it safe and overtake at the designated passing

place. I only hope that if this happens, the organisers will be willing to remove DRS before the racing loses its interest, and the audience along with it.

Barry Armstrong
Cheshire

So another classic European GP, Germany, has been lost, and possibly next year the Italian GP as well, to be replaced with one in Azerbaijan. For a diehard motorsport fan – I have bought AUTOSPORT every week since 1972 – this is depressing and frustrating.

Until the governing body of our sport is able to run F1 again and protect its heritage and soul, decisions will be based only on profit and short-term advantage. I am not sure how this can be achieved, but if something isn't done soon the sport I've followed for 40 odd years will be lost.

John Thompson
Epsom

BIG NUMBER

335 Number of entries expected for this weekend's 750 Motor Club season opener at Donington Park.

MILESTONE

2015 TCR International takes its baby steps with this weekend's inaugural event, supporting the Malaysian Grand Prix.



WHAT'S ON TRACK IN THE UK

EVENT OF THE WEEK



750MC promises packed weekend

DONINGTON PARK 750 MOTOR CLUB

March 28-29

The 750 Motor Club can always be relied upon to produce meetings with well-supported grids, great racing and a true grass roots vibe. Its

season-opener at Donington Park will set the tone for what should be another strong season for the club.

On the bill is a wide variety of categories, including the MGBCV8 championship, the 750 Trophy, Roadsports and

Thoroughbred sportscars, as well as Locosts, 750 Formula, Bikesports and the BMW Compact Cup.

And for fans of Japanese cars, there's also the 5Club Mazda MX-5 series and the Honda Civic Cup.

SILVERSTONE BARC

March 28-29

Some of BARC's biggest series are showcased, including Classic FF1600.

OULTON PARK BARC

March 28

Oulton Park's first club event of the year stars Caterhams, Legends and Citroen 2CVs.

SNETTERTON MSVR

March 28

MotorSport Vision's 'season starter' is built around Radical Sprint and Enduro series.

Radicals underpin Snetterton package



STYLES



'Tin Snails' take to Oulton Park

BOURNE

KIRKISTOWN 500MRCI

March 29

The Northern Irish racing season gets underway with the Kirkistown Fiesta Festival.

MALLORY PARK MGCC

March 29

The MG Car Club's package of categories continues to draw strong entries. The racing gets started in earnest at around 1100, so expect a packed afternoon of action.

WHAT'S ON TRACK AROUND THE WORLD



St Petersburg opens the IndyCar season



Will Mercedes dominate Sepang?

MALAYSIAN GRAND PRIX

Formula 1 World Championship
Rd 2/19
Sepang, Malaysia
March 29
f1.com

TCR INTERNATIONAL

Rd 1/11

Sepang, Malaysia
March 29
tcr-series.com

INDYCAR SERIES

Rd 1/15

St Petersburg, Florida, USA
March 29
indycar.com

INDY LIGHTS

Rd 1/10

St Petersburg, Florida, USA
March 28-29
indycar.com/RoadToIndy

NASCAR SPRINT CUP

Rd 6/36

Martinsville, Virginia, USA
March 29
nascar.com



XPB IMAGES

V8 SUPERCARS

Rd 2/14

Symons Plains, Tasmania, Australia
March 28-29
v8supercar.com.au

SUPER TC2000

Rd 1/12

Junin, Argentina
March 29
super-tc2000.com.ar

VLN

Rd 1/10

Nurburgring, Germany
March 28
vln.de

FROM THE SOFA

WHAT'S ON TELEVISION

Q&A

MARTIN BRUNDLE

SKY SPORTS F1 COMMENTATOR

@MBrundLeF1

AUTOSPORT: With so much coverage across a Formula 1 weekend now, do you have to dig a lot deeper to create the material?

Martin Brundle: I have to remember that the two big shows where I need to be at the top of my game are qualifying and the race. I have to be careful I don't dilute my efforts. And there's no doubt about it, when you're creating content, you're not finding out information, so I have to really be careful to make sure I'm fully up to speed instead of just talking to a camera – I need knowledge, I need information. I'm a content man, I'm not a creative person. So what I find very exciting is having lots of bright young people around, who are not necessarily super knowledgeable on F1, but they look at it, they enjoy it and they just constantly question things.

AS: What's the secret to a successful grid walk?

MB: Never to think about it – I've never watched one – and just try to be natural. We have a unique opportunity there. No other sport can do that. A football commentator's not going to be able to interrupt David Beckham just before he kicks the ball, or Andy Murray just before he serves up at Wimbledon, yet we can wander on to



Racing a car is still more exciting than TV

the grid... I've interviewed Mika Hakkinen where he's got his balaclava on and he's just starting to put his crash helmet on, and then an hour and a half later he was the world champion. That kind of access is unique in sport.

"When we started, I was the only one on the grid"

AS: Do you have help from producers or spotters to pick people out?

MB: I don't always like it, but we do have a spotter now, and the reason we have to do that is because back in '97 when we started this, I was the only one on the grid. I remember in the early days, I had Michael Schumacher and Gerhard Berger, the three of us were chit-chatting on the grid live on camera. Now there's TV and radio galore and some of the drivers just got fed up with it so they won't talk to anybody. The drivers are your primary target. I've

been kicked in the shins, I've been punched by other TV crews, because they do it differently to me; they throw to and from a studio, whereas I go live for nine minutes come hell or high water and so I have to get my elbows out, which is absolutely not my personality at all, but it's become very competitive.

AS: How does the live TV buzz vary from when you were racing?

MB: I would say live TV, when you hear in your ear a countdown and then the words 'live on air', is about a third as exciting as sitting on the grid driving a racing car, and that's as good as I've found. It challenges me, the grid walk challenges me – that's the only thing I get nervous about with TV. I don't fancy sort of throwing myself off the top of a building with a parachute, so this is as exciting as it gets. *Martin Brundle was speaking to Lawrence Barretto*

TV pick of

Edited by Jack Benyon



MALYSIAN GRAND PRIX FULL UK LISTINGS

Sky Sports F1

Practice 1: Friday 0145-0350

Practice 2: Friday 0545-0800

Practice 3: Saturday 0545-0715

Qualifying: Saturday 0800-1030

Race: Sunday 0700-1030

BBC2

Practice 1: Friday 0155-0335

Practice 2: Friday 0555-0735

Practice 3: Saturday 0555-0705

BBC1

Qualifying: Saturday 0800-1030

Race: Sunday 0700-1030



NEDELL AND THE 'AUTOSPORT' FFORD

History

Thursday 2100-2200

Long before he became a Formula 1 driver, Le Mans and British Touring Car racer, or the presenter of *Top Gear's* less tabloid-dominating first incarnation and its *Fifth Gear* successor, Tiff Needell started his motorsport career with some help from this magazine, when we gave away a Lotus 69 Formula Ford 1600 in a competition in 1971. Four decades on, Needell bought the car back and raced it again – an adventure that he recounts on this week's *Fifth Gear*.



Brundle's grid walk is an F1 fixture

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ONE OF THE FEW MAJOR differences between AUTOSPORT's magazine and our website is that we cover MotoGP online – it's been a part of our output since 2007.

So that means a busy few days coming up on autosport.com, as this weekend's Malaysian Grand Prix shares the billing with MotoGP's season-opener in Qatar. We'll be carrying news and session reports from the two-wheeled world, and on Sunday evening we'll have live text coverage of the race alongside updates from IndyCar's first race of

the year in St Petersburg and the NASCAR Cup event from Martinsville.

Before that, make sure you check out our season preview, where we have enlisted the help of motorcycle racing legend Kevin Schwantz to pick out the main themes to look out for in 2015. He doesn't mince his words on the issues he feels passionate about, and he was more than happy to make some bold predictions for the season.

We enjoy bringing you coverage from the pinnacle of bike racing on our site, and who knows, maybe it'll make its way into the magazine one day.

the week



INDYCAR ST PETERSBURG - LIVE

ESPN
 Sunday 2000-2230

IndyCar's new aero kits may be pretty ungainly, but they're set to further spice up a series that was hardly short on action or competition already. There were 21 cars within nine tenths of a second in pre-season testing, and lap records are likely to take a pounding this year. But will all those winglets harm the airflow and the racing? The normally action-packed St Petersburg street race is our first chance to find out. The full season will be live via the BT/ESPN alliance in the UK.



MOTOGP QATAR - LIVE

BT Sport 1
 Sunday 1600-2015

Though these pages normally focus on four wheels, we do make an exception for MotoGP online and have no qualms about urging BT subscribers to spend their Sunday night watching the action from Qatar. Marc Marquez versus Valentino Rossi and Jorge Lorenzo was already thrilling, and now test results suggest Ducati is back in the thick of the fight, with returnee Suzuki also looking sharp. Get on the sofa early to enjoy the Moto3 curtain-raiser and Alex Marquez's Moto2 debut.



NASCAR MARTINSVILLE - LIVE

Premier Sports
 Sunday 1730-2200

The 0.5-mile paperclip is a quirky place even by NASCAR standards, from the giant grandfather clock trophy awarded to the winner to a tight layout that encourages incessant, bruising action. Both of last year's races achieved double figures for the number of different leaders, and the almost customary late-race caution always mixes up the order and creates a fraught finish. Dale Earnhardt Jr was the winner here in October last year, while 12 months ago it was Kurt Busch whose very battered car came home first.



SYMMONS PLAINS V8 SUPERCARS - LIVE

BT Sport and Motors TV
 Saturday 0400-0505/0615-0710
 Sunday 0350-0530

It's no surprise that an island home to the Tasmanian Devil also hosts a track that creates such feisty racing as the 1.5-mile Symmons Plains circuit. The long straights and the sweeping hairpin create great opportunities for overtaking. Last year Triple Eight duo Jamie Whincup and Craig Lowndes had some argy-bargy, with Lowndes coming off worst. Both have ground to make up as James Courtney and Fabian Coulthard lead the standings.

HOT ON THE WEB THIS WEEK

YouTube INDYCAR TESTING AT BARBER MOTORSPORTS PARK



SEARCH FOR: #BarberTest – Onboard with Stefano Coletti
 GP2 refugee Stefano Coletti rags his KV Racing Dallara-Chevrolet around Alabama's Barber Motorsports Park during pre-season IndyCar testing. The 25-year-old Monegasque makes his series debut at St Petersburg this weekend.

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BTCC oddities

Some quirky tin-tops have appeared down the years. **SCOTT MITCHELL** chooses his favourites

What defines an oddity in British Touring (or Saloon) Car Championship terms? It would be a terrible shame to limit it to one-off appearances, never to be

seen in the series again. Some real oddballs, by tin-top terms, stuck it out for a full season.

Regulation ambiguity was the biggest opportunity for something

rare to be thrown into the world of the BTCC, and the mid-80s and early noughties, when multi-class systems were used, meant a few surprise additions to their respective grids.

Restricting manufacturers to just one entry each seemed the fairest way to do it, although there are a few honorary mentions for marques that went the extra odd mile.



1 Peugeot 205 GTI

Peugeot UK fielded Mikael Sundstrom in a Group A 205 GTI twice at Brands Hatch in 1986. Wet weather allowed it to bag the sole non-Chris Hodgetts class win that season in the 1600cc car, and also claim an overall podium behind Andy Rouse's Ford Sierra and Rover driver Mike O'Brien.

2 Nissan HR31 Skyline

Introduced in late 1987, the Skyline GTS-R became the vehicle of choice in the Australian Touring Car Championship. But do you remember its sojourn to UK shores? Nissan Europe entered one for Win Percy at Donington Park, where it finished fourth and set fastest lap.

3 Maserati Biturbo

Entered by Pro Team and raced by former Alfa Romeo F1 driver Bruno Giacomelli in the 1987 World Touring Car Championship, the Maserati Biturbo made very little impact on the 1988 BTCC. Nick May earned a best finish of 14th as the Trident-run car failed to register a point.

4 RWD Vauxhall Cavalier

The Cavalier dominated the early days of Vauxhall's participation in the BTCC, though there was a passing Belmont in 1991. The real oddity is the rear-wheel-drive Cavalier from 1990. Chris Hodgetts drove it at Oulton Park but it was a troubled design and the FWD status quo was restored.

5 Audi A4

Quattro technology meant Frank Biela blew away all his 1996 rivals in a true series rarity: four-wheel drive. By mid-season the car was being given weight penalties to slow it and the technology was banned at the end of the year. It remains the only four-wheel-drive car to race in the BTCC.

6 Renault 5 GT Turbo

The French manufacturer was a household name in the British Touring Car Championship in the 1990s. Think of a random BTCC Renault and you'll probably quizzically suggest the 19. Wrong. In the mid-80s, several Renault 5 GT Turbos were entered for the British Grand Prix support race.

7 Holden Commodore

Alan Docking Racing entered a Commodore for Mike O'Brien for most of the 1987 season, and returned again in 1988. But the real special version was the SV, which ADR fielded in the final four rounds of '88. Tom Walkinshaw Racing also entered one as a one-off at the Birmingham Superprix.

8 Volvo 850 Estate

The much-loved 1994 Volvo 850 Estate remains the BTCC's best-known family-sized racer. The Tom Walkinshaw Racing-built car was not a disgrace in the hands of Swede and future Volvo BTCC champion Rickard Rydell, earning a best qualifying position of third and best result of fifth.

9 Ford Escort XR3i

The British Saloon Car ranks were depleted at times during the 1980s, opening the door for a few extra entries to boost numbers. One of the best examples: Brands Hatch racing instructors being entered in XR3is in 1986. The driving talent included BBC F1 commentator Ben Edwards.

10 Proton Satria

Stop thinking about the Proton Impian. The first of the Malaysian operation's cars to grace the BTCC was the 2001 Satria. Steve Wood's TH Motorsport car was part of the band of low-power production-class cars introduced when the series' main-class move to BTC rules struggled to take off.

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