### FREE POSTER FORMULA FORD AT 50 SPECIAL



**PLUS FERRARI AND WILLIAMS STAR AT GOODWOOD** 



**Proud sponsors of** 

### **James Grint**

(MSA British Rallycross)

### **Kyle Hornby**

(Renault UK Clio Cup)

### Ruben Del Sarte

(Ginetta Junior Championship)









Slater and Gordon (UK) LLP is authorised and regulated by the Solicitors Regulation Authority.

### Slater Gordon

Lawyers

Slater and Gordon provide specialist legal services for both personal and business needs.

0808 175 8000 slatergordon.co.uk

Family | Employment | Estate Planning, Wills and Probate | Property Business Legal Services | Serious Injury and Clinical Negligence



### Hamilton: his future, Vettel... and Ferrari?

### LEWIS HAMILTON IS THE SECOND MOST SUCCESSFUL

Formula 1 driver of all time in terms of wins, and has a good chance of taking another world title with Mercedes this season. So what next?

That's one of the questions Ben Anderson asks the triple world champion in this week's cover interview. Understandably, Hamilton's answer is equivocal, but he does concede that he has wondered how much longer he wants to stay in F1.

If he does stay, will he see out his career at Mercedes? It's entirely possible, but the other team that could fit the bill — both competitively and financially — is Ferrari. Hamilton's hero Ayrton Senna hinted that he could end his career at the famous Italian squad before his fateful move to Williams, and it would seem quite fitting if Lewis were to do so, particularly after so many battles against the team in red.

One of those is still raging, of course, and there are three grands prix packed into July, including the British round. Where Hamilton and Sebastian Vettel stand when F1 goes into the summer break will be key. Let's just hope their wheel-to-wheel battles take place at proper racing speed, rather than behind a safety car...

One category that has always provided close and exciting action is Formula Ford and we celebrate its 50th birthday this week with a special supplement. Many of the sport's greats have come through the category that began with an engine from the humble Ford Anglia, and it continues to thrive today, in various forms.







### COVER IMAGE Wolfgang Wilhelm/

Daimler AG

### **COVER STORY**

- 12 Lewis Hamilton interview
- 23 Ben Anderson: Lewis and Ferrari

### PIT+PADDOCK

- 4 Fifth Column: Nigel Roebuck
- 6 F3 could face breakaway series
- 8 DTM stars injured at Norisring
- 10 In the paddock: Alex Kalinauckas
- 11 Feedback: your letters

### **REPORTS AND FEATURES**

- 24 WRC: Neuville on top in Poland
- 28 Formula E: preparing for the unknown
- **40** Goodwood Festival of Speed report

### **RACE CENTRE**

32 European F3; DTM; Formula Renault Eurocup; MotoGP; NASCAR Cup; World Rallycross

### **CLUB AUTOSPORT**

- 57 No government funding for Circuit of Wales
- 58 WRT Audi for Spa British GT
- **60** Reynard returns to Formula Ford 2000
- 61 Humble Pye: the voice of club racing
- 62 National reports: Brands Hatch; Silverstone; Knockhill; Rockingham; Harewood; Croft

### **FINISHING STRAIGHT**

- 70 What's on this week
- 72 From the archive: 1983 Italian GP
- 74 Motorsport memory: Villeneuve in F1

### FREE INSIDE

### **FORMULA FORD SUPPLEMENT**



It's half a century since the world's most populous racing category burst into life. Our supplement documents an amazing 50 years.

### NIGEL ROEBUCK

# A man admired rather than loved

### JUST AS I STILL STRUGGLE TO TAKE ON

board that Bernie Ecclestone is no longer running Formula 1, so it's difficult to believe that the ties between Ron Dennis and McLaren are now officially severed. After being put on 'gardening leave' by his fellow shareholders last autumn, Dennis could have accepted a few hundred million for his shares, and gone quietly, but the streetfighter in him — never far from the surface — won the day, and he sued the company with which he had been synonymous for so long.

It was ill-advised, and somewhat lacking in dignity, but Ron invariably put principle — or what he saw as principle — ahead of anything else. If he thought he was in the right — something from the cradle he believed to be the case in all matters — he invariably passed up the opportunity to keep shtum.

I remember an Autosport Awards evening in London 20-odd years ago, when Dennis was interviewed towards the end. Time has blurred the memory of what was his beef of the moment with the powers-that-be — there was always something — but after receiving his award he started to change the subject, and

the tone of the evening. "I know I probably shouldn't bring this up, but..." he began, and Gerhard Berger, sitting next to me, groaned: "Don't do it, Ron, don't do it..."

He did, of course, because he couldn't help himself, and although this was neither the time or place for a sour discourse on Formula 1 politics, he went on at some length. Only when the huge room eventually began to slow-handclap did he reluctantly desist.

As quite often with RD, you knew why he was upset about this or that, and had some sympathy for him, but that would be washed away by towering arrogance. "We make history — you just write about it," he said to us at the McLaren motorhome one day. I don't think any journalist present ever forgot that.

To no-one's surprise, save perhaps his own, Dennis failed in his legal action against McLaren late last year, and once that had happened it was surely inevitable that sooner or later the other shareholders — Mumtalakat (always known in the business as 'the Bahrainis') and Mansour Ojjeh — would buy him out. Now, after 37 years, Dennis no longer has any connection with McLaren.





He is, I think, one of the strangest people I have ever known — complex, obsessive, socially gauche, in equal measure kind and ruthless, gregarious and aloof. It may be said that down the years he has been admired more than loved, an impression amplified by talking with past McLaren drivers, but not even his most earnest detractor could deny that his achievements have been remarkable.

The team Dennis took over in 1980 was becalmed, but within four years it was dominant, and if this were not down to Ron alone, more than anything else it was his drive and vision that transformed McLaren into a powerhouse. Over time Niki Lauda, Alain Prost, Ayrton Senna, Mika Hakkinen and Lewis Hamilton all won titles with the team.

Although Dennis would probably take issue, most would contend that his major failing was what amounted to a genius for falling out with people, most notably Daimler Benz, at one time a very significant investor in McLaren as well as its longtime F1 'engine partner', and Ojjeh, whom Ron had coaxed away from Williams.



Beyond their professional association, the two men became close friends, and their eventual falling out — for more than business reasons — stunned the paddock.

Formula 1 has never been short of driven people, but Dennis was more compulsive than most. "When you're growing up," he once said to me, "embarrassments tend to stick, and there are some moments - in my case, fewer than five in my entire life - which really register. When I was about seven, for example, I remember watching a male ballet dancer on TV, and saying, 'I could do that, if I wanted to'. My brother and sister laughed at me, but I had this 'I'll show you' thing even then. In the same way, I remember going to a coffee bar in Woking, and saying to my friends, 'I'm going to go into motor racing'. Of course there were peals of laughter, but again it was 'I'll show you', and it's never left me..."

Nor will it, one imagines, but for all his quirks and mannerisms, Ron Dennis has been a colossus of the sport, and history will remember him so. At last weekend's Festival of

### "For all his quirks, Ron Dennis has been a colossus of the sport, and history will remember him so"

Speed at Goodwood, there he was among the great and good, participating in the tribute to Bernie Ecclestone organised by Lord March.

One way and another, deja vu hung heavy in the air, a sense of changing times, and it was personified by an awkward hug between Ecclestone and Chase Carey: one thought of boxers touching gloves.

In a recent chat with Bernie, I mentioned that last autumn the assumption was that he would work with Liberty for a while. "That was what I thought, too," said Bernie, "because it was what they'd asked me to do, for three years. Then Chase asked me to meet him, and after telling me they'd completed the deal with

CVC, he said, 'We'd like you to step down as chief executive — because I want to occupy that position'. It was something I hadn't really thought about — but quite obviously they had, because within half an hour they had a document ready for me to sign!"

Surely, I said, bearing in mind that your contacts are unequalled, and all the deals currently in place were done by you, would not a 'handing over' period have been logical, with Liberty keeping you on board for a while?

"Yes," said Bernie "but... the Americans say they don't need help, so we'll see. It's their car now, isn't it? They bought it, and they want to drive it. I just hope they don't crash..."

# DEBATE - CONTROVERSY - OPINION



FORMULA:

### Berger threatens brea

DTM CHAIRMAN GERHARD BERGER SAYS that he is ready to organise a 'breakaway' Formula 3 Euro Series if the FIA does not take the existing F3 European Championship in what he perceives as the best direction for the category.

Formel 3 Vermarktungs, a subsidiary of DTM promoter the ITR, has organised the FIA's F3 European Championship since Berger brought it back in his former role as president of the governing body's Single Seater Commission. Initially it ran mainly in conjunction with the F3 Euro Series in 2012, before replacing the Euro Series from '13 onwards.

Since the FIA found an agreement to rebrand the GP2 Series as Formula 2 for 2017, there has been much speculation over the future of the third rung of the single-seater ladder. Currently the sport finds itself in the incongruous situation where Formula 1, F2 and the GP3 Series run together, while GP3's rival, European F3, runs hand in hand with the DTM at six of its 10 rounds. It is already well known that the FIA wants F1, F2 and F3 to run together on grand prix weekends in future, with the GP3 name being axed.

This took a further twist in May when the FIA presented a new single-chassis, single-engine concept for the next generation of F3 cars to the Commission's Technical Working Group. The current generation of cars and engines are homologated until the end of 2019, but this could be moved forward to the end of '18, to

coincide with the finish of the existing GP3 car's three-year period. Sources also indicate that F2 and GP3 series boss Bruno Michel would prefer the existing F3 category to be scrapped altogether and replaced by a continuation of the GP3 concept, under the F3 name. With F2 and GP3 both controlled by F1 rights holder Liberty Media, this is a very real prospect.

Berger was asked by the European F3 teams for a meeting at the recent Hungaroring round, and told Autosport last weekend at the Norisring that he is ready to go ahead with a revival of the F3 Euro Series name if that's what it takes to continue the category.

"Let's assume they are going to do GP3 with the Formula 3 name but GP3 regulations," he said. "No problem. We'll take the [F3] cars as they are and we will give them the platform."

Berger has also been angered by stories that Michel has offered two of the existing five European F3 teams free GP3 chassis in a bid to tempt them over the fence for 2018. "We'll see who invests in GP3," he said. "Maybe one team that gets everything for free from Bruno Michel is going to move, maybe two teams, but I know two or three teams that would move over to Formula 3, so that would even it up.

"We would fill it [F<sub>3</sub>] up and no problem. By the way what I want to say is very clear: we are pushed very much by the manufacturers to do this. Mercedes is very strong behind it, Volkswagen too, even more so than in



# Vettel let off by FIA after apologising WORLD CHAMPIONSHIP LEADER SEBASTIAN Vettel has apologised for his deliberate collision with Lewis Hamilton in the Azerbaijan Grand Prix, and has escaped further sanction by governing body the FIA.

Azerbaijan Grand Prix, and has escaped further sanction by governing body the FIA The Ferrari driver apologised to the FIA in private on Monday, then issued a statement in the evening that marked the

first time he admitted to any wrongdoing.
"During the restart lap, I got surprised by
Lewis and ran into the back of his car," wrote
Vettel in a message to fans published on his
website. "With hindsight, I don't believe he
had any bad intentions. In the heat of the
action I then overreacted, and therefore I
want to apologise to Lewis directly, as well as

to all the people who were watching the race.

I realise that I was not setting a good example. "I had no intention at any time to put Lewis in danger, but I understand that I caused a dangerous situation. Therefore, I would like to apologise to the FIA. I accept and respect the decisions that were taken at today's meeting in Paris, as well as the penalty imposed by the stewards in Baku [a drivethrough penalty that cost him the win]."

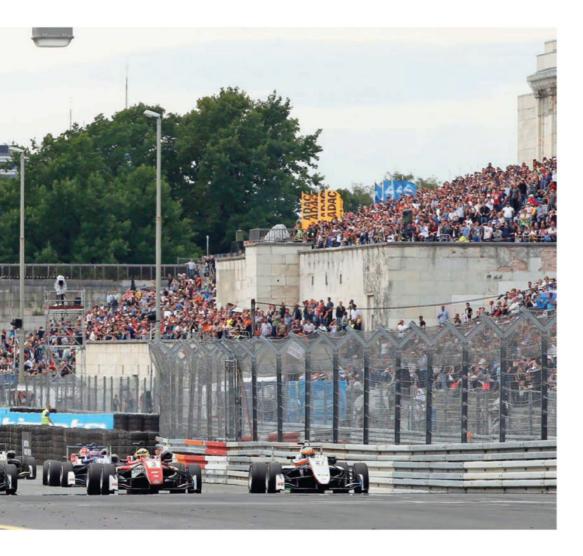
A statement from the FIA claimed that after a detailed look at the incident Vettel had taken full responsibility for what happened and apologised. As a result of this, and a commitment from the four-time champion to commit personal time to educating young race drivers, the FIA has elected against taking the matter further.

"In light of these developments, FIA president Jean Todt decided that on this occasion the matter should be closed," said the statement. "Nevertheless, in noting the severity of the offence and its potential negative consequences, Jean Todt made it clear that should there be any repetition of such behaviour, the matter would immediately be referred to the FIA International Tribunal for further investigation."

To review the incident, the FIA pulled together a panel that included deputy president for sport Graham Stoker, general secretary for sport Peter Bayer, F1 race director Charlie Whiting and deputy race director Laurent Mekies.

JONATHAN NOBLE





### kaway F3 Euro Series

"If we find a

good way, I will

always do what

is best for F3"

the past. I think everything is there."

While an F3 Euro Series would not be officially recognised as F3 by the FIA, which has pressured other series in the past into dropping the F3 name if they do not operate within the category's framework of technical regulations, Berger said that the rights to the name 'Formula 3 Euro Series' are registered by the DMSB, German motorsport's governing body. "Nobody can forbid us to do this," he pointed out. "The teams would like to do it, the platform is here and the manufacturers are behind it.

manufacturers are behind it. Nothing is missing."

But Berger reiterated his desire to work hand in hand with his friend, FIA president Jean Todt, who personally requested Berger to take the presidency of the Single Seater Commission. He wants to put it to Todt that

the interests of F3 would best be served by a fifty-fifty division with, say, five rounds supporting F1 and F2, and the other five with the DTM, whose manufacturers have historically put strong support into the F3 drivers' careers.

"The only thing I would like much better is to give Jean the chance to find the best possibilities," he said. "Then if we find a good way, I will always do what is best for Formula 3. It's always better for the sport doing things together with them; it's never the optimum

solution to run parallel to another series.

"Today I would say that Formula 3 is the most important formula in the past years in bringing drivers into Formula 1 or bringing drivers into DTM and then through there into Formula 1. If you look at Lucas [Auer, Berger's nephew, who is likely to test soon for Force India], he would be the next one who has at least a feed back to F3 [where he raced in 2013-14]. This has to be supported and protected. I would love to see Formula 3 for a long time with the DTM, and as

long as I am here I will support it, but at the end of the day it's the decision of the FIA."

It's early days yet, but the important thing for purists is that Berger's and the ITR's determination should protect the current F3 concept of open competition on chassis and engines, which has a DNA

stretching back seven decades. How ironic that, in the event that the FIA's F<sub>3</sub> championship adopted GP<sub>3</sub>-style regulations by moving under Michel's control (something Berger says is "destroying the Formula 3 history"), we would end up with the same situation as have now: one series for what we currently know as GP<sub>3</sub> cars; another for what we know as F<sub>3</sub> cars; but with each operating under a different name to the one they have at the moment.

MARCUS SIMMONS

**SPA24HOURS** 

## PORSCHE TO MOUNT FULL WORKS SPA 24 ATTACK

PORSCHE WILL ENTER A factory car in the Spa 24 Hours for the first time since 2013 as it ramps up its commitment to the GT3 division.

The German manufacturer has linked up with LMP1 driver Timo Bernhard's Team 75 Motorsport squad, a regular in the ADAC GT Masters series, to field a solo Porsche 911 GT3-R in the Belgian enduro on July 29-30. The car will be raced by works drivers Laurens Vanthoor, Kevin Estre and Michael Christensen.

Porsche has also committed to a full assault on the Intercontinental GT3
Challenge, which combines the existing enduros at Bathurst, Spa and Sepang with the new eight-hour event at Laguna Seca in October.

"It is clear that at big races like these, you have to give extra support to your customer teams, because everyone else is doing it," said a Porsche spokesman. "We will be doing Laguna and Sepang with local teams; we won't be flying Manthey out to Sepang like last year."

Porsche lies second in the IGC manufacturers' points after January's Bathurst 12 Hours, in which it supported Walkinshaw GT3 and Competition Motorsports.

BMW DTM driver Tom
Blomqvist will make his Spa
24 Hours debut with Rowe
Racing. The 23-year-old
(below) will share one of its
factory M6 GT3s with fellow
DTM racer Bruno Spengler and
Nicky Catsburg. He made his
seasonal Endurance Cup
debut with Rowe at the Paul
Ricard 1000Km last month.

**GARY WATKIN** 





DTM

# Paffett and Rockenfeller hurt in Norisring smash

FORMER DTM CHAMPIONS MIKE ROCKENFELLER and Gary Paffett were hospitalised after an accident at the Norisring last Sunday, with Audi star Rockenfeller fracturing a metatarsal in his left foot and Mercedes ace Paffett escaping with bruising.

The crash happened just hours after Honda protege Tadasuke Makino broke his right wrist and a finger during the weekend's final Formula 3 European Championship race in a collision with Harrison Newey.

Paffett had attempted to overtake Audi's Jamie Green on the run to the Turn 1 hairpin, but the back end of his car stepped out and spat him into the barrier on the inside of the track, spinning him out of control towards the first corner and into Rockenfeller's RS5. The Mercedes impacted square-on with the driver-side door of

Rockenfeller's car, which fell off after the hit.

Rockenfeller and Paffett were both taken to the Klinikum Sud hospital in Nuremberg as a precaution, Paffett complaining of arm pain.

"We're happy that nothing more serious happened to Mike and also to Gary in this really horrible-looking accident," said Audi motorsport boss Dieter Gass. "This proves once again how high the safety standards are in the DTM." It is unclear whether Rockenfeller will be fit in time for the next round at Moscow Raceway on July 22-23.

Meanwhile, Hitech GP driver Makino will be out of action for at least eight weeks as he needs an operation to insert a plate in his wrist, meaning he will miss the Euro F3 rounds at Spa and Zandvoort.

JACK COZENS AND MARCUS SIMMONS

**WORLD RALLY CHAMPIONSHIP** 

### Poland set for axe after safety fail

RALLY POLAND IS NOT EXPECTED to remain as part of the World Rally Championship next season after last week's event suffered significant safety failings.

The Mikolajki-based event received a warning about safety in 2015 and there appears little appetite to return to the event following further problems — including a fire engine being driven the wrong way down a stage and only stopping when it met a rally car head-on. The police have begun an investigation locally into how that happened, while the FIA has started its own examination.

FIA rally director Jarmo Mahonen told Autosport: "How could this happen with the fire truck? My information is that he nearly ran over the policeman... We were very lucky nothing happened, but this does not belong to rallying. It's been a very



busy weekend for Michele [Mouton, FIA safety delegate]; it's been a weekend for us to survive."

One stage was cancelled and stages generally ran late while Mouton worked to try to get the fans into a sensible place ahead of the start.
Rally Poland spokesman Andrzej
Rorowczyk felt it unfair to judge the

Borowczyk felt it unfair to judge the event on the fire-engine incident. He said: "It was an idiotic human error."

DAVID EVANS

### IN THE HEADLINES

### **AUER TIPPED FOR FORCE INDIA TEST**

Mercedes DTM ace Lucas Auer is strongly tipped to make his Formula 1 test debut at the Hungaroring on August 1-2. The 22-year-old Austrian, nephew of Gerhard Berger and currently second in the DTM standings, has been linked with a runout with the Force India squad.

### **SERRA GETS MORE RUNS WITH ASTON**

Brazilian Daniel Serra will remain in the factory Aston Martin line-up for the majority of this year's World  $\underline{ \ \ } \ \ \, \text{Endurance Championship after winning the GTE Pro class}$ at the Le Mans 24 Hours last month. He is set to share the #98 Vantage GTE with Jonny Adam and Darren Turner in all but one of the remaining races. The Aston has been given a double break under the new automatic Balance of Performance system for the Nurburgring WEC round on July 16. The GTE Pro class entries will run 20kg lighter and with a 1mm bigger air-restrictor than at Spa in May.

### **VILANDER SWOOPS IN FOR BIRD**

Toni Vilander has been recalled to the AF Corse factory Ferrari WEC line-up for the Nurburgring. The Finn, who won the WEC GT title in 2014, has been brought in alongside Davide Rigon to replace Sam Bird, who will be competing in the clashing New York Formula E round.

### **MERHI JOINS LMP2 SUPERSUBS**

Former grand prix driver Roberto Merhi will return to the Manor LMP2 team to replace Formula E driver Jean-Eric Vergne at the 'Ring. Ben Hanley and Filipe Albuquerque will stand in for absent FE racers Alex Lynn and Nicolas Prost at the G-Drive and Rebellion squads respectively.

### **SMITH REPLACES SMITH**

British Touring Car Championship racer Jeff Smith will be replaced by son Brett in the Eurotech Racing Honda team for the remainder of the season. Smith Jr, the current leader of the Mini Challenge, will partner Jack Goff. Smith Sr sustained chest and shoulder injuries in last month's qualifying pile-up at Croft.

### YELLOLY SCORES FIRST CARRERA WIN

Briton Nick Yelloly broke his duck in the German Carrera Cup at the Norisring last Saturday with a high-pressure win from series leader Dennis Olsen. Yelloly, who joined the Carrera Cup in 2016 with Project 1, qualified second and fended off the Norwegian throughout (below) to become the first British winner in the series since Sean Edwards in 2013. "Dennis was super-quick," said Yelloly. "There was a little bit of contact in the middle of the race, but I just had to put my car in the right place." Yelloly was second in race two to Olsen, and holds the same position in the points. "I'm going for the title," he added. Project 1's engineer is Richard Selwin, a director of former GP2 champion team iSport Engineering.



### F1 PREVIEW

### **Austrian Grand Prix July 7-9**



### RED BULL RING

LENGTH 2.683 miles NUMBER OF LAPS 71 2016 POLE POSITION Lewis Hamilton 1m07.922s POLE LAP RECORD Lewis Hamilton 1m07.922s (2016) RACE LAP RECORD Michael Schumacher 1m08.337s (2003)



### TYRE ALLOCATION

HARD MEDIUM SOFT SUPER-SOFT ULTRA-SOFT INTERMEDIATE

















WET

**UK START TIMES** 

### **LIVE ON SKY SPORTS F1** FRIDAY

**FP1** 0900 **FP2** 1300

SATURDAY

**FP3** 1000 **QUALIFYING** 1300

SUNDAY

**RACE** 1300

**BBC RADIO 5 LIVE** 1300

**HIGHLIGHTS ON CHANNEL 4** 

**RACE** SUNDAY 1745

### PREVIOUS WINNERS

Lewis Hamilton 2016 Mercedes 2015 Nico Rosberg Mercedes 2014 Nico Rosberg Mercedes Michael Schumacher Ferrari 2003 Michael Schumacher Ferrari 2002 David Coulthard McI aren 2001 2000 Mika Hakkinen McLaren 1999 Eddie Irvine Ferrari Mika Hakkinen McLaren 1998 Jacques Villeneuve Williams

### THEMES TO WATCH

### **RED BULL IN THE HUNT**

Daniel Ricciardo won in Baku. where Max Verstappen almost outqualified the Ferraris. The Renault engine is stronger, so can Red Bull challenge again?

### **FORCE INDIA FIGHTING**

For two races in a row the Force India pair have had controversy. They hit each other last time out, so what next for Sergio Perez and Esteban Ocon?

### **HONDA'S BIG UPDATE**

Honda tested an updated 'spec 3' engine in Baku and will make it available to both McLarens. Will the extra grunt power them to more points?



### Life on the streets

Could more 'casual' city races help Liberty with its plans to expand the number of races and destinations in a season? Or would they be dull...

### By Alex Kalinauckas, Assistant Editor



### EVEN BEFORE THE AZERBAIJAN GRAND PRIX

descended into glorious chaos and controversy, the Baku city circuit had provided plenty of thrills and spills.

The low-grip track challenged drivers — there were plenty of stunning slow-mo shots of near-misses with the barriers — the difficulties they had with tyre warm-up led to a dramatic qualifying session and Charles Leclerc and the Formula 2 field produced two exhilarating support races.

And it all took place on a track within sight of shops, hotels and homes: a city centre.

Speaking at the recent FIA Sport Conference in Geneva, Formula 1 CEO Chase Carey described "a long list of places" that had expressed an interest in hosting a grand prix event and Liberty Media's management has discussed expanding the calendar to 25 races, with a "destination city" in the United States top of its list of priorities for new venues.

The emergence of Formula E has shown that it is possible to host motor racing events in cities with plenty of success — although the residents of Battersea probably wouldn't

agree — since the allelectric series joined the motorsport ranks in 2014.

City races are a good way for F1 to reach a reasonably captive audience. Surely Liberty has more chance of enticing

### "Baku is using its race to create revenue without forking out for a track"

new fans to attend the races and therefore watch subsequent events if it can bring the action closer to their homes. City racing makes the dilemma of choosing transport options to get to a grand prix — taking your own car risks traffic trouble, while using utilitarian methods to get to venues often miles out of the way can be time consuming and costly — more straightforward. People attending these races may be persuaded to extend their tours into longer holidays — a big incentive for host economies — or conversely find it easier to drop in and jet out again if they are on a short-haul trip.

It would also make it easier for Liberty to create the festivallike events Carey and co have talked about if all their assets — particularly the stars, the drivers and their cars — didn't have such long distances between fan events and the actual racing.

An argument against city racing is that in the past they have tended not to produce great racing. Monaco, with its close barriers, lack of straights and low average speed, is an obvious example, but that event's privileged status as F1's 'blue riband' and its glamorous nature gives it a permanent place on the calendar. The Valencia circuit that hosted five grand prix events

between 2008 and '12 is a much stronger example of how city tracks sometimes don't work, as its races were often bland and processional. Baku too did not provide much action in its first year, and Singapore is sometimes a slog — and a particularly long one at that given how the race often gets near the two-hour time limit.

But every now and then these venues produce a scintillating race. Valencia's final grand prix in '12, where Fernando Alonso won from 11th on the grid, Lewis Hamilton and Pastor Maldonado collided late on and Michael Schumacher claimed his final F1 podium, is a good example of this. Singapore last year had a nail-biting finish as Daniel Ricciardo charged up behind Nico Rosberg, and Baku just provided more F1 action than some whole seasons have done in years gone by.

Plus, there are plenty of permanent Tilkedromes that have been built to the tune of millions in recent times that have failed to provide much action or exciting races — think Abu Dhabi, Korea and India.

Carey also spoke of the need for races to have their "own

culture" and he's right — 25 F1 races in 25 cities would not be a good thing. But if the extra races Liberty desires could be filled with urban events — possibly on shorter deals to allow variation and easier financial

agreements — then that might present an opportunity to lock down the traditional tracks that are popular with existing supporters, while at the same time taking the series into untapped markets in a bid to reach new fans. But of course, the magnificently moustachioed American would not be drawn into hypothetical predictions of when F1 would reach a 25-race calendar and indeed not all those new races may turn out to be city-based events.

Baku is using its race as way to attract tourists to 'the City of Winds' in a bid to find new revenue streams for a country that had previously relied on its oil reserves. It's a tried and tested tactic for many race hosts but if potential new promoters can retain fans in their cities, spending money in their amenities, without having to fork out for a new permanent track that might stand empty for the rest of the year then a city race makes much more sense.

Being realistic, Carey knows Liberty isn't likely to take F1 "racing down Fifth Avenue in Manhattan" but it is serious about branching out into new areas to maximise the potential of its new investment. City racing offers it that opportunity.

# 

### Formula 1's greatest also let the side down

While there seems to be little doubt that Sebastian Vettel acted foolishly during the Azerbaijan Grand Prix, the outpouring of outrage in last week's Autosport is somewhat misplaced.

To describe Vettel's actions as 'not world-championship behaviour' seems to overlook, arguably, worse discretions by others widely regarded as the greatest F1 world champions namely Michael Schumacher and Ayrton Senna. Schumacher collided with Damon Hill at Adelaide in 1994 thereby deciding the championship, and then with Jacques Villeneuve at Jerez in 1997, although on that occasion he was disqualified from the championship for causing a deliberate crash.

The notorious battles in Japan between Senna and Alain Prost in 1989 and '90 decided the championships through collisions far more blatant than Vettel's bumper-car petulance, with Prost describing Senna's actions in '90 as 'disgusting'.

F1 is a high-pressure, high-cost business and if drivers sometimes push the boundaries it is hardly surprising. But don't mistake it for anything new.

**Patrick Sewell** Nottingham

### **Punish Vettel properly**

I've been watching Formula 1 for 30 years and I don't normally put forward my views, however I have to that say

the events in Baku make a mockery of the FIA road safety campaign.

Here we have a four-time world champion losing his cool through sheer rage - this is no different to a road-rage event on the street. In my opinion a 10-second stop/go does not even come close as punishment to fit the crime. At the very least Vettel ought to have been excluded from the race, made to apologise in public and made to start from the back at the next two races.

This is no way to set an example. My three-year-old son watches most races with me and was trying to emulate the wheelbanging with his Lego F1 cars after the incident!

I have nothing against Vettel, he is a fantastic driver, but the cynic in me thinks if this had been a driver from a so-called lesser team, he would have had the book thrown at him.

So come on FIA, it's about time an example was set by giving out a retrospective penalty.

**Nasair Hussain By email** 

### One day too many

I can't help but feel that the FIA and Silverstone are losing the plot. It wasn't long ago that there was talk of shortening the GP weekend to two days (which I wouldn't want as I like my GP Friday), but now we're up to 'four' days.

Anyone who is willing to pay £40 to



When champions collide... the aftermath of Suzuka 1990

watch the F2 and GP3 sessions on offer really does have more money than sense, but we now have a two-and-a-half-hour gap on Friday (barring 10 minutes) between the two F1 sessions. Why the one-and-a-half-hour Thursday sessions can't fit into that gap, I don't know.

Alternatively (whisper it softly), you could cut the F1 FP sessions to one hour each. Just an idea.

**Gary Harland** Byemail

### **Sculpture fails to hit heights**

The Goodwood sculpture was a disappointment. They used to be innovative. With it being a tribute to Bernie, I expected it to be a sculpture of a big pile of money...

**Richard Hargrave** Hitchin

### **Get debris under control**

Having seen a number of recent races blighted by carbonfibre debris, isn't it about time front wings etc were made from a more resilient, shatterproof material, and perhaps with more stringent impact tests to stop large pieces detaching from the monocoque?

Personally I can't understand how the current situation is allowed to continue.

**Richard Walker Byemail** 

### HAVE YOUR SAY, GET IN TOUCH

**Autosport editorial** 

Autosport Media UK Ltd 1 Eton Street Richmond TW9 1FF



autosport@ autosport.com



# HAMILTON'S NEXT CHAPTER

Autosport got the chance to sit down with the triple world champion – and he had a lot to say

> By Ben Anderson, Grand Prix Editor

**y** @BenAndersonAuto

Photography by







now for four years and the longer you work with each other the better you get to know each other. The way I have seen him in the last weeks is really in a great mood and great spirits. He has closed the chapter of last year – that is how it seems to me, and his work with the team has been exceptional. We seem to be in a very good place there \$9

ercedes team boss Toto Wolff spoke about Lewis Hamilton in these ebullient terms when the wraps came off his team's 2017 Formula 1 car at Silverstone in February. It sounds like just the sort of statement you'd expect to hear from an F1 team chief heading into a new season — talking up your star driver; trying to draw a line under difficult moments of the recent past.

But in this case Wolff's words ring true. There is something different about Hamilton this year. He is not a man transformed or reborn — that would be going too far. He is the same stunningly-fast world champion driver, with the killer racing instinct, that he was last year, and the year before, and when he first joined Mercedes in 2013. But he's not exactly the same.

He has evolved — as we all must do to remain at the top of our game. But it's not only that. He seems more relaxed, more comfortable in his own skin. It seems he's enjoying racing in F1 more than he has for some time, and as a consequence is enjoying more success — and enjoying that success more too.

The first eight grands prix of 2017 have represented Hamilton's best start to an F1 season since he last won the world championship in 2015. On the bare face of it that doesn't seem like much of statement, for of course it simply means that Hamilton has started this season much better than the last. But that simplicity disguises its significance.

F1 in 2017 is very different from anything Hamilton has experienced during his four previous seasons at Mercedes. It is much faster and harder now, Mercedes is no longer









Above: Anderson puts a question to Hamilton

Far left: Wolff believes Hamilton is on top form

Left: Ferrari fight has galvanised Mercedes

dominant, and for the first time in a long time Hamilton is fighting someone other than his team-mate in his quest to become world champion again.

The identity of his Mercedes team-mate has also changed for the first time, with arch-rival and reigning champion Nico Rosberg's shock retirement last December paving the way for Valtteri Bottas to join the Mercedes works team.

Internal relations grew tense, to say the least, as Rosberg and Hamilton fought their exclusive battles for the world championship between 2014 and '16. There were on-track clashes, internal recriminations, both drivers unhappy at various points with the rules of engagement, and with how the Mercedes management dealt with these challenging scenarios.

With Rosberg gone, those tensions have gone with him, and it seems that the cloud has lifted from Hamilton's mind. He can now focus outward, on a new battle with Sebastian Vettel and a resurgent Ferrari, rather than worrying about the inner

### COVER STORY/HAMILTON INTERVIEW







Things with Rosberg started well (above) and Hamilton finished ahead in 2013 (middle), but things got more and more tense in '16 (right)

turmoil created by the uniquely claustrophobic contest he endured with Rosberg. Mercedes is Hamilton's house now, and he is clearly enjoying seeing his home in a new light.

"It's strange because when it [Nico's retirement] was announced there was a lot of tension, because obviously they [Mercedes] didn't have another driver — they were really put on the back foot," Hamilton tells Autosport, as we discuss this latest chapter of his F1 career at Mercedes' Brackley base.

"I think some people [in Mercedes] were gutted, but the team has moved on and Valtteri has settled in really, really well. I think there is a harmony in the team which we've not had in the time I've been here. It's fantastic for the working relationship."

'Harmony' is the key word there. Hamilton is clearly revelling in the fact that Mercedes has (at least for now) shed the politics that dogged his seasons alongside Rosberg. Hamilton is often compared to his racing hero Ayrton Senna — even more so now that he is a triple world champion and has recently beaten Senna's tally of 65 career F1 pole positions.

But Hamilton is no political animal in the Senna mould. As former Mercedes technical chief Paddy Lowe says, Hamilton is "a real gentleman and a very fair racer", whereas Senna, who Lowe worked with briefly at McLaren in 1993, was "ruthless" out of the car in a way Hamilton is not.

The removal of Rosberg from Hamilton's immediate orbit, coupled with the expansion of the championship fight beyond exclusive Mercedes boundaries, has energised Hamilton and the team around him.

"I'd say this year, because we are fighting another team, the passion in the team is greater than ever," Hamilton explains. "They all miss winning — they don't want to be beaten by that other team. Before we've not really had that competition with another team, so the battle has been within. It's difficult, everyone was kind of conflicted because you want one of the cars to win, whereas now you want both cars to win.

"Considering this is a team that has won as much as we've won over the past few years, you would think they would be a bit more blasé about it, but the drive, the energy, the passion for what we're doing right now is the greatest I've ever seen, so I'm really riding that energy. I've been round [the factory] today and you can really feel the guys are pushing — 'We're working on this, working on the new update package, how can we beat the Ferraris?' And that's a cool conversation to have."

What we cannot yet know is whether this is simply the honeymoon period for a renewed marriage, one where Mercedes and Hamilton have reconciled their differences and where newcomer Bottas has yet to become the sort of consistent internal threat Hamilton faced from Rosberg.

Perhaps there will be darker days ahead for Hamilton,

Bottas and Mercedes. Unless there is clear demarcation between the number-one and number-two driver — something Mercedes seems determined to avoid — perhaps a degeneration in team-mate relations is inevitable...

From rows over engine modes in early 2014; to Rosberg's infamous escape-road moment in Q3 in Monaco, to Hamilton's and Rosberg's on-track clashes at Spa '14, Suzuka and Austin '15, and Barcelona and Red Bull Ring in '16; the swapping of their car crews at the start of '16; the multitude of engine reliability failures that afflicted Hamilton but not Rosberg last season; Mercedes meddling in the Abu Dhabi title decider when Wolff expressly said the team would not.

"From friendship to rivalry, from rivalry to controversy, from controversy to animosity," as Wolff describes it.

Baggage, built up over time, increasingly difficult to handle.

"It was definitely a testing time for both of us," says Hamilton of that rivalry with Rosberg. "For Nico, it was hard for him. A new driver's come to the team and I beat him in the first year and he had to make a lot of sacrifices, worked very hard to manage more time in the simulator, or whatever it may be, to constantly try to find ways of improving pace. He worked incredibly hard.

"I think there are things we learned from each other,





66 The drive, the energy, the passion for what we're doing is the greatest I've ever seen, so I'm really riding that energy >>

in terms of work ethics, and we just went from strength to strength each year generally. Last year, I think he was driving at his best, and it was gonna be a close race, but obviously it didn't turn out to be as close as I hoped with the failures I had.

"But generally we kept to ourselves. The only time it really got tense was when we had either a collision, or something odd happened on track. They were the real spikes, but otherwise it was fairly contained I'd say.

"I generally get past things quite quickly, but in the heat of the moment often they were difficult – they were difficult for the team, and it was really dependent on the reaction of either Nico or me. But we always managed to somehow get through it."

Those difficult moments are firmly in the past now. Wolff talks about Hamilton coming back "a different person" after the 2016 winter break, during which they met at Wolff's Oxford home and cleared the air. Wolff says Hamilton has "become a team member in an authentic way" and, although he stops short of declaring Hamilton Mercedes' team leader, it does look as though the departure of Rosberg – whose own term at Mercedes began with the German manufacturer's return to F1 as a works entity in 2010, so predated Hamilton's arrival by three years – has allowed Hamilton to naturally assume something approaching that status.

Mercedes says it misses the input of Rosberg, who was noted for his methodical, intelligent, technical approach, underpinned by a strong knowledge of engineering. Mercedes has endured trouble in the early races of 2017, struggling for consistency on Pirelli's new ultra-soft tyre. But Hamilton rejects the idea that Rosberg's departure has somehow deprived Mercedes of the technical direction it needs to develop the Wo8 into a more consistently potent weapon.

"The technical input is no different to any other driver," Hamilton counters. "Valtteri's technical input is exactly the same as Nico's technical input. Without doubt he [Rosberg] was a very smart individual, but there's only a certain amount a driver can input to a car, and just because you didn't go and study engineering doesn't mean you know less about the car.

"It's about feelings and about how you interpret what's actually happening with your car and how much work you've got to do with the engineers and designers to understand what you have, tool-wise, to utilise. Being that he was here longer, growing with the team, he learned some of the tools [before I did]. When I arrived there were things, FRIC [front and rear interconnected suspension] for example – it took me ages to understand how to work with FRIC, but he started with it.

"There are some drivers who can probably lead a team 🕨

Clashes (Spain, left) and failures (Malavsia. middle) made last season tough, but Hamilton is enjoying working with his new team-mate Bottas (below)







# 66 That's really where I've grown – understanding how to be the best team player I can be \$9

more than others, in a sense of development of a car, but I don't think there are drastic differences between drivers in that sense. We are all able to move the car in a particular way."

At the very least, the difficult years paired with Rosberg appear to have given Hamilton a new appreciation for a driver's relationship with his team and that "sometimes there will be difficult moments", as Wolff puts it.

Armed with fresh perspective, Hamilton seems to have redoubled his efforts to integrate further with the Mercedes structure. This is something all the truly great drivers do. As the focal point for the team's competitive efforts, even the best need to be more than 'just' superb drivers to truly thrive in F1.

"Every time I come I go see a different department, which is invaluable," says Hamilton, who loves what he calls the "real racing vibe" of the warehouses and offices that populate the site of Mercedes' F1 headquarters in Northamptonshire.

"There are new people joining all the time. It's incredible to go around and see people and ask what they're doing — get to know them, because there are so many people and I think it means a lot to them. And I think it means more to me to see them. When I'm racing, to say thank you to everyone I can put [them] in my mind — I know who they are and what they're doing, and just how hard they are working. I've done it for years, but it's just a thing that I'm trying to do more and more."

You get the sense that Hamilton, now 32, has matured greatly during his time with Mercedes. He has morphed from young prodigy into multiple champion thanks to Mercedes' competitive standing, but Hamilton also seems aware of his wider responsibilities to the form of racing that has made him so rich and famous. As F1's most notable and popular driver, he, more than any other individual in grand prix racing, has the power to connect with fans and power brokers, and reach beyond F1's usual boundaries.

It is clear that Hamilton is more comfortable in his own skin these days. Partly this is the inevitable process of growing wiser with age, finding your voice and knowing better your own mind. But this is also a product of environment, and part of Hamilton's original rationale for leaving McLaren for Mercedes in 2013 was to 'fly the nest' of his youth and forge his own path.









Far left: losing the title in Abu Dhabi finale was painful

Left: Hamilton is relishing the fight with rejuvenated Vettel

Bottom left: Lewis believes he has learned a lot since his McLaren days

Below: enjoying his third world crown in 2015



"How I always explain it is like when you move to your first apartment, get your first bill, you pay your first bill and realise you haven't got the money to pay your first bill," says Hamilton, who describes Mercedes as a "great environment to work in".

"And moving from McLaren, which was very much my home, to a place where I didn't have any family to back me — my dad or management wasn't there to sort of wingman me — to take that step on your own and embrace and really use all the skills learned over the years and come in and see if you can take the reins and really be a leading part of the team, I think it went well.

"Driving the car, the core is the same as always — you're just building the knowledge and experience — [but] I've definitely grown a lot over those five years. Year upon year, you are constantly learning about the individuals you're working with.

"It is a vital relationship, but it's not just with one guy anymore. It's with a lot of guys — there's a core group where I'm having to be massively hands-on. There's five or six of us, and that relationship's important.

"Year upon year, you learn of new ways in making that relationship work better, so as a driver that's where really I've grown from strength to strength I'd say — growing as a team player, understanding more and more how to be the best team player you can be."

As well as a renewed capacity to absorb setbacks, this is the aspect of Hamilton in 2017 that has so impressed his team boss, and it's clear that striking out on his own at Mercedes for these past four and a half years has helped Hamilton leave behind some of the inconsistencies and wild outbursts he was prone to in his latter McLaren days.

Rosberg flashpoints aside, Hamilton rarely gets involved in on-track scrapes, seems to roll with the off-track psychological punches much better, and certainly doesn't seem the type who would tweet his squad's sensitive set-up data should his team-mate unexpectedly beat him in qualifying...

Hamilton says his time at Mercedes has helped him to know himself better. "Growing into your comfortable ways and knowing your comfort zone; knowing who you are, knowing how you work best, how to get yourself working to your best — and recognising your faults and what could trigger them, all these different things," he says. "I'm in a really good place in that respect. I can only imagine I'll continue to learn and continue to grow."

It is vital that Hamilton performs at his very best this year, because Ferrari has eroded most of Mercedes' previous competitive advantage, which means he is now embroiled in a dogfight for the world title with four-time champion Vettel.

Hamilton has spoken often of how hard he has to push to carry the fight to his rival, as momentum has swung back and forth between the two over the early races. They have finished one-two in four of the eight races held so far this season and have won all but two between them. The current score is even at three victories apiece.

Each of the races in which they have finished one-two has



### DOES HAMILTON HAVE RACING AMBITIONS BEYOND F1?

FERNANDO ALONSO'S recent sojourn to the Indy 500, following on from Nico Hulkenberg's winning trip to the Le Mans 24 Hours in 2015, inevitably prompts questions to other top F1 drivers about whether they would consider a motorsporting life outside grand prix racing.

Alonso has clearly shifted his focus towards trying to win a 'triple crown', as the likelihood of his taking many more F1 titles recedes amid the ongoing disaster of McLaren-Honda's reformation.

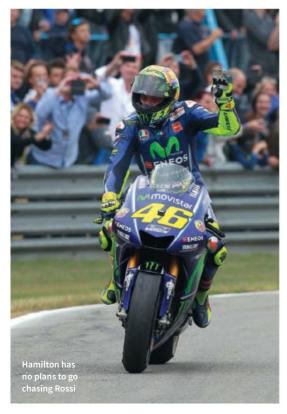
The fact that Hamilton is in perpetual title contention at present renders the point rather moot, but does he nevertheless have racing interests beyond F1?

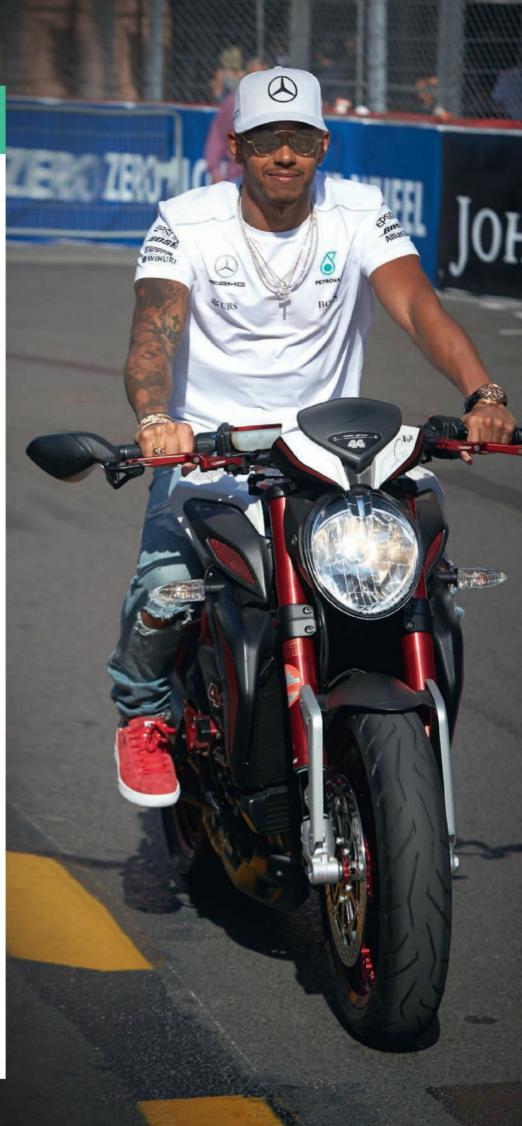
"Currently I don't," says Hamilton, who feels ultimately he can "dabble in anything I want to" should he develop an interest. "I'm not interested in Indy. My heart is solely with this [F1]. The Formula 1 car I think is still the greatest car. I love rally, but I don't see myself doing it. Not even Le Mans – there is no other form that tickles my fancy.

"I love Moto GP, but I have never ridden a fricking bike around a race track! It is not like going to Indy where Fernando can just jump in and easily be at the front, if I got on a bike I'm going to break something – and I'll get up and probably break something again!

"I've got to do thousands and thousands and thousands and thousands of laps before I could even get even a couple of seconds off Valentino Rossi's time. Do I really want to give that time? I don't know.

"There's lot of other things that I'm good at though, so we shall see. But one thing's for sure, when I stop, I'm going to miss racing like nothing else. It's going to be horrible. I can't even imagine how Nico's dealing with it."







been settled by less than 10 seconds, and the average gap between them in qualifying is just 0.101%. That Hamilton has taken six pole positions to Vettel's one suggests Mercedes has the fastest car, though Ferrari's has generally been more consistent and very strong in the races.

Whether Mercedes' battle for regularity is down to Ferrari's move over the winter to clarify F1's suspension regulations — which forced Mercedes and Red Bull to alter their designs — or a difficult winter test where bits of the Wo8 broke under load, the fact that the car became overweight as a result, plus the challenge of making extra-powerful diffusers work on what is now F1's longest car, or a combination of all of the above, what is clear is that the battle between Hamilton and Vettel is pushing each to new heights.

After their duel for victory in May's Spanish Grand Prix, which Hamilton won by less than 3.5s, Hamilton compared their fight to the finals of grand-slam tennis tournaments, in which the greats of the game are pitched head to head, every mistake punished mercilessly. Hamilton has rarely had to work as hard on track as he is doing this year.

"All I know is Vettel is on a championship-winning road: one-two-one-two-one-two," says Hamilton, who describes Vettel as a "fantastic" driver and "massively strong mentally", though of course he was less than impressed with Vettel's "disrespectful" driving behind the safety car during the most recent race in Azerbaijan, suggesting his rival had "disgraced himself" with his petulant, emotional reaction to Hamilton's safety-car-restart tactics.

"That car, everywhere they put it, it works. It's a bit like our car in previous years, so it'll be interesting to see how that flows for the rest of the season.

"I think for us, it's just about understanding our car. There is clearly a comfortable window, a small window, and it is understanding that [and] just making sure that we are constantly putting it in the window.

"I think if we constantly put it in that window, we'll bring the fight to them, every weekend, but that is currently the big question, what everyone is studying, to find out how we get that consistency."

So, has the nature of this battle with Vettel, with a car that isn't always working as it should, forced Hamilton to raise his game to stay in the fight?

"I don't think so," he says. "It's just different. I don't

# 66 It hurts just as much now as it did when I was eight years old when I don't win 99

think I have had to raise my level, I think I've just had to be at my best, every weekend. Barcelona, I had to be at the level that I know I can be and nothing below, nothing less. He drove basically a perfect race. That meant I had to do a perfect 'plus' race."

Whichever one emerges from this fight on top of the pile at the end of the season, presuming their respective team-mates don't suddenly reverse the emerging order, Hamilton or Vettel will add to what already amount to deeply impressive personal legacies. Vettel is searching for a fifth world title to add to the four consecutive crowns he took with Red Bull between 2010 and '13. Hamilton is gunning for his fourth, though he already has more wins (56-45), poles (66-47) and podiums (109-92) to his name than Vettel does.

In similar fashion to the so-far-frustrated ambitions of



always held Senna's tally of three championships in mind as an ultimate ambition. But, having achieved that landmark in 2015 and already surpassed Senna in all other statistical measures, what next?

He is already Britain's most successful F1 driver ever, so does he harbour ambitions of surpassing Michael Schumacher — winner of seven world championships and 91 grands prix? Does Hamilton want to become the most successful F1 driver of all time?

"I've generally never had the desire to reach Michael's number, because it just felt astronomical at times," Hamilton says. "But who knows? I ponder how long I'm going stay, then I have a race like Barcelona and I'm like, 'I love this so much!', and then I have days where I feel like it's probably not going to be a massively long time that I'm going to be here.

"I'm in a period right now where I can't imagine my life without racing — I'm going to miss it so much [that] I'm going to keep going — but it's just back and forth.

"Of course I want to win more championships, I'm more driven. It hurts just as much now as it did when I was eight years old when I don't win. The hunger is there. My heart is 1000% there still. As long as I have that, I feel like I can go on for some time."



Hamilton, Raikkonen, Plato, Sutton...

### Are you our next Champion?



Renault Sport UK will hold a 'taster day' at Blyton Park, Lincolnshire on Tuesday 18 July for youngsters looking to join its exciting new Renault UK Clio Cup Junior championship.

Drivers aged 14 to 17 will have plenty of time to sample the excellent UK Clio Cup Junior race car ahead of the category's inaugural eight-round season which begins in September.

The eventual Champion will receive FREE registration into the senior Renault UK Clio Cup – a prize valued at around £18,000 (see prize structure below).

They will also join the likes of F1 greats Lewis Hamilton and Kimi Raikkonen, touring car stars Jason Plato, Ashley Sutton, Andy Priaulx and Le Mans 24 Hours winner Jonny Adam in an illustrious Hall of Fame of Renault Sport UK champions...

Full championship registration costs just £1600 + VAT. These open on 3 July 2017.

### Contact

Renault Sport UK Motorsport Manager Will Fewkes: Tel +44 (0)7894 317477 / Email will.fewkes-extern@renault.co.uk

### **Prize Structure**

- Champion: FREE registration to 2018 or 2019 Renault UK Clio Cup – value c.£18,000
- 2nd place: £2000 towards a 2018 Renault Sport UK championship registration
- 3rd place: £1000 towards a 2018 Renault Sport UK championship registration
- Race win: a set of Michelin tyres for a Renault Sport UK championship in 2018

Rounds	Date	Circuit	Friday testing
1&2	9-10 Sept	Snetterton, Norfolk	£190 + VAT
3&4	23-24 Sept	Brands Hatch, Kent	£195 + VAT
5&6	14-15 Oct	Pembrey, Carmarthenshire	£170 + VAT
7&8	18-19 Nov	Brands Hatch, Kent	£195 + VAT







### What next for Lewis?

Hamilton's Mercedes contract is up at the end of next year. He says he wants to stay. But would it be better all round if he were to see red?

### By Ben Anderson, Grand Prix Editor



### LEWIS HAMILTON HAS ACHIEVED SO MUCH IN HIS

Formula 1 career already that it's difficult to foresee what greater heights he could aspire to.

Winning two more world championships with Mercedes would take him to five, which would ensure he surpassed contemporary rival Sebastian Vettel's current tally of four and make Hamilton statistically the most successful driver on the current grid by every relevant measure.

It would also neatly take him to the end of his current contract with Mercedes, which lasts until the end of 2018. Before then, he must decide what he does next.

Of course, Nico Rosberg's shock retirement at the end of last season, having recently signed a two-year contract extension with Mercedes, proves anything can happen. But Hamilton seems more consumed by racing than Rosberg ever was, and F1 appears to have migrated back towards the sort of DNA that enthuses Hamilton.

"That's a difficult one," he says when asked how he sees his future post-2018. "You can't know. Are you married?" he asks.

Autosport's writer confirms recent matrimony. "I'm not in a relationship, I don't plan to get married anytime soon, but you just don't know what is down the line."

### "It's super cool. I'm a fan of Ferrari as a team, I'm a fan of their cars"

If he does decide to extend his F1 career beyond 2018, he should seek to do it with Ferrari rather than Mercedes. Racing for the Scuderia is special. Speak to any driver who has been fortunate enough to do so and they will tell you.

Despite the acrimonious circumstances of his departure, Fernando Alonso only has positive things to say about his time there. He didn't win the world championships he craved, but he loved the experience — because it's Ferrari, it means more than anywhere else.

Kimi Raikkonen is delighted that he won his one and only world championship with Ferrari for the same reason. Racing for the Italian icon is transcendental.

Hamilton is a spiritual guy. He gets what Ferrari means to motor racing and to Formula 1 specifically. He describes Ferrari as "a super, super cool thing" and says "I'm a fan of Ferrari as a team, I'm a fan of their cars".

What's more, he's open minded to the possibility of driving for Ferrari one day too. You can bet it's the only other F1 team he could realistically see himself racing for other than his current one.

Which makes complete sense when you think about it. Hamilton is a Formula 1 megastar. He is a major celebrity whose popularity transcends the boundaries of grand prix racing. He is F1's most recognisable and popular figure, a walking giant. There is no other team that could fit his profile, nor currently match his competitive standing either.

He doesn't fit the age profile of Red Bull, which grows its own talent and in any case competes in the energy drink market with Monster Energy, for whom Hamilton has just launched his own special 'LH44' blend having entered into a personal deal with the brand this year.

He's already flown the McLaren nest, which is now in too much of a mess to be a credible alternative, and all the other teams on the grid would represent a major step backwards. Ferrari is Hamilton's only viable alternative to Mercedes.

Not since Nigel Mansell's eventful dalliance with the Scuderia in 1989-90 has an Englishman driven for F1's most prestigious and successful team. Mansell's time at Maranello turned him into a cult hero — 'Il Leone' to the tifosi — and that

would be a wonderful final chapter for Hamilton to add to his own career.

"All I can say is, right at this minute, I really, really love being in this team," Hamilton says. "I feel more connected to this team than I

ever have. I feel we're on a parallel journey together. I've been with Mercedes since I was 13 so it is hard to imagine being anywhere else.

"There's a special vibe there [at Ferrari], but what I saw looking down from the podium in Barcelona, actually Ferrari don't have anything we don't have. That special thing, that I see Vettel have when he is on the podium, when I was on that podium I felt that from them [Mercedes].

"I think, if I want, the future with Mercedes is there — because I've been with the family for years. And the thing is, when you're with Mercedes, when you stop with Mercedes, you're with the family for the rest of your life.

"You don't have that anywhere else. You don't have it at any other team. There's loyalty and a real, real family here, so that would be difficult to leave. I love being here, so I don't really have any plans for being anywhere else."

Maybe not right now, but who knows what the future may hold? A red future for Hamilton would be a wonderfully evocative next chapter for his own career — and for Formula 1. \*\*



ledge /slɛdʒ/ verb To make offensive remarks to an opposing batsman in order to break their concentration. Does it work? Maybe. Actually, this is Ott Tanak we're talking about. He's impervious to such talk in the same way Rodney Marsh's attempts to unseat Ian Botham fell on deaf ears. But Thierry Neuville was intent on giving it a go, and his third victory of the season was empowered by an impressive range of one-liners. Thankfully, nothing as acerbic as Marsh's opener: "How's your wife and my kids?" Beyond the chat, one thing is certain:

Beyond the chat, one thing is certain: Neuville's back. Yes, he won for Hyundai in Corsica and Argentina. But he relied on a Citroen failure on the French island and a Welshman slapping a bridge in South America to ease his passage to the top step of the podium.

In Poland he needed nothing of the sort. Neuville came, saw and conquered with the kind of masterly display we have come to associate more readily with Sebastien Ogier.

The Frenchman wasn't himself on round eight and his trip to the Polish lake district was typified by a post-event stewards' decision to fine him €2000 for a bit of shifty driving on a roundabout near the Goldap stage.

Success in Poland demands complete commitment, but the roads, running through fields more often than forests, encourage a degree of lunacy not really seen on any other round. Last year's winner, Andreas Mikkelsen, admitted that was part of the appeal. "You can go a bit harder," he said. "This is the

Neuville's on a wave, and closing the gap to points leader Ogier one place where you look at the road and think, 'Yeah...' When there are less trees around, you definitely take more speed."

Poland does, however, have two faces. The first is that pedal-to-themetal approach that delivers the sort of breathtaking, flat-chat gravel racing we saw on the first loop. But the face changes on the second lap of the same roads. Once the full field has passed over the sodden soft gravel, the nature of this event changes — in places — beyond belief.

The ruts have to be seen to be believed and the cars are regularly turned into high-speed toboggans. As much as with the speed, it's a driver's approach — both mentally and physically — to these conditions where this event is won or lost. Neuville faced up to the speed and faced the ruts down.



### ANOTHER FINNISH STAR ROOKIE

LAST TIME OUT, THIS COLUMN WAS ALL ABOUT A spectacular young Finn in his rookie season in a 2017 World Rally Car. This time around this column's mostly about a spectacular young Finn who made his debut in a 2017 World Rally Car in Poland.

Esapekka Lappi's so last week; the new Finn on the block is Teemu Suninen. The M-Sport driver's debut was every bit as meritworthy as his Toyota-driving countryman's powerstage win on Rally Italy last month.

Suninen is spectacularly understated. Don't get me wrong – he's in no way monosyllabic, but he just tends not to get overly excited about things. The paddock was going mad for his seventh-stage scratch, but by the end of the event all he could focus on was dropping a place with a spin in the final test – his only mistake of the weekend, by the way. But, by such exacting standards are champions made.

And the 23-year-old certainly has that look about him.

Talking of fast Finns, Toyota's Jari-Matti Latvala looks to have finally put his 2009 Polish nadir out of his mind. Eight years ago, Latvala thought his career was over when he crashed on the powerstage in Mikolajki, costing Ford a one-two. He still remembers it like it was yesterday and it still haunts him.

"A few years ago," he said, "I retired on the final stage of this event. This year, I am fastest on the final stage. Maybe I turned a page with this rally..."

One man who certainly turned a page and started writing a new chapter of his career was Ole Christian Veiby. The Norwegian beat fellow Skoda Fabia R5 driver – and WRC2 series leader – Pontus Tidemand with a hugely impressive and capable drive in Poland. You wouldn't believe it was his first season in the series. This remarkable rookie-season thing seems to be a running theme with the youth of today.



L PICS: McKLE

"The most important thing is to have confidence in the car," said Neuville. "You need to feel the car beneath you and trust completely in what it's doing. I have that with my car."

There was a danger of reading too much into Neuville's every word, but the overtone was that nobody else had a relationship between man and machine remotely close to what he was enjoying. That confidence showed itself with the promise of a 10-second lead on Friday night. When it didn't come — he was only 3.1s up on Tanak ahead of the final day — he had a perfectly reasonable explanation. He'd had a puncture.

"Yeah," said Tanak, engaging with the Belgian, "and I had a problem with no rear wing..."

"But I also had heavier rain in the final stage," was the final-word reply. "I had two problems, you had one." It was all very good-natured, but the underlying niggle was there. Just as it was with Neuville's continued insistence that he could go that bit harder if he really needed to. Obviously he was cracking on a bit, but Tanak wasn't really stretching him.

And then came Sunday morning and a mindbendingly quick run through the final day's opener for Tanak. Neuville was 13 seconds up on his nearest rival when the #2 Ford Fiesta WRC stopped the clocks almost five up on him. Three stages to go and the lead was gone.

One stage later and Tanak was gone. Braking a touch too late for a fourth-gear corner, the back of the car nudged a bank and slapped into a ditch. Game over.

Neuville wasn't going to let this opportunity pass. He informed the waiting media at the end of the stage that he had predicted Tanak's exit.

Young Finn Suninen has the makings of a future World Rally champion "Somebody," he said, "told me they had seen him in the first stage of the day and he was over the limit in there. I had a feeling I had done a good stage, but he took this time; I'd already been 13s faster than the guy behind and Ott put another four-point-something on me. I was sure if he continued like this he could make a mistake. He did."

Listening to that on the radio, M-Sport team principal Malcolm Wilson smiled thinly.

"Bloody Neuville," he said. "I tell you what, that boy creases me up. Hasn't he got some words... I'm going to get him back for that. There's no need for him saying what he said about Ott."

Wilson's smile broadened magnanimously for one who'd just lost a possible fourth win from eight rounds. "He's bloody smart though," said Wilson. "I know what he's like: always >>>

### WRC/RALLY POLAND

got something to say. He's got so much confidence right now. But what he's got to figure out is that he can upset some drivers with some of those words. But that's water off a duck's back for Ott. He's just not interested in any of that. And anyway, did you see his moment?"

The world has now seen Neuville's moment – the one where the Hyundai got crossed up in the air and landed with the left-rear in the bank. At that moment, regardless of what anybody says, you're a passenger relying on Lady Luck to decide whether she's going to pitch you into a roll or send you straight on your way again.

Was that a moment, Thierry? "Where I knocked the tyre off the rim? It was OK. I just carried on..."

And carried on narrowing the gap to championship leader Ogier. Just 11 points separate the pair now – the smallest margin at this stage of the season since 2009. But even that is a cause for frustration to Neuville. The gap between P1 and P2 could have been even closer.

He added: "When we came through the powerstage I said to Nicolas [Gilsoul, co-driver], 'Shit, we missed two points by one second.' I should have pushed.

"Ogier could have been much more behind [in the final classification], but the other drivers gave him the chance to be on the podium again."

With that last line delivered, a chance to ask him about this more flat-out psychological approach. "It's part of the game," he said. "But in the end I try to beat the guy in the stages rather than outside of the stages. It's a good atmosphere in the WRC. We are not racing and crashing into each other's cars."

There was a pause as he considered what he'd just said, before the most mischievous of grins: "Maybe we need to wait and see what it's like at the end of the season!"

Whether it works or not, there's no sign of the sledging stopping. Not while Neuville's riding the wave he's on right now.

Missing a win in Poland once is tough; twice could be perceived as bad luck; but dropping this one for the third time in succession was careless. As his own harshest critic, Tanak won't care what other people think, but his Rally Italy win of last month will help soothe some of the hurt.

But that failure will only serve to stoke the fire for Rally Finland at the end of this month. The Jyvaskyla event is one of the jewels in the WRC crown, and Poland only served to polish that gem. There's more than one driver ready to take Neuville down a peg or two on rallying's fastest rollercoaster.

Ogier will definitely be among them. The lack of form from the Frenchman was one of the talking points of last week. And the reigning champion and championship leader appeared, at times, utterly bereft of the explanation so widely demanded by a watching world not used to such off-days. Halfa-minute-plus went south when he smacked a rock and punctured in SS12, compromising himself tyre-wise for the rest of the mid-afternoon.

He joined his engineer on a nightly basis to pore over data, then took every ounce of M-Sport knowhow and tried to apply it to the Fiesta's set-up. Bottom line? He wasn't comfortable in the conditions.

First loop on Friday, he was at the races. Friday afternoon, first time through the ruts, he was taken apart, confidence shattered and questions raised. Ogier never recovered. He's a precision driver, a fingertip wheelman. And he hates running in the ruts. Friday afternoon was rut-central and, what's worse, the rally-car-carved tramlines were full of water. You know how trucks can wear the asphalt on the inside lane of the motorway? Then, in torrential rain, those grooves fill with water and fill us with fear when we drop a wheel in them? Well, imagine that tenfold.

Ogier's one of the world's best and is well blessed to cope with this, but Markko Martin was on hand to offer an insight into the practical side of these conditions.

"When you go into those ruts," said Martin, "it's like putting the brakes on,

Tanak let another Poland victory slip through his fingers

Flummoxed Ogier struggled in Poland's ruts

First on the road through Saturday

there's so much water to shift."

and Sunday, Citroen's Craig Breen was in complete agreement with this assessment. Those conditions sapped pretty much every ounce of confidence the Irishman possessed and left him head in hands on more than one occasion.

Hayden Paddon's co-driver, Seb Marshall, could see exactly where Ogier was coming from. Shortly after celebrating his first world championship podium and a career-best second place in Paddon's Hyundai, Marshall gave a typically comprehensive debrief on the ruts. "They're horrible," he said. "The movement in the car just feels so unnatural and, as a co-driver, you just don't know when to expect it. It's moments like that when I'm really glad if we're in a busy place and I've got a lot of notes to read. We had one two-wheel moment when we were spat out of the ruts and you just think, 'Oh, shit...'

It would take a lot more than that to take the edge off the biggest moment of his career, one that came at the end of a pretty decent week and a bit.

"Before coming out here I did the full five days at Glastonbury, albeit as the most sober person there," he said. "Now we have a Brit leading the Tour de France and the Lions won."

Ah, the Lions' rugby performance,





24-21 against New Zealand. No escaping that one, Paddon...

"I heard the score when I was on the startline for the Goldap stage on Saturday morning," said Hyundai's resident All Blacks fan. "That got me a bit more fired up and we won the stage. In fact, we won three that day."

Rugby banter aside, it was fantastic to see Paddon back on form. He rarely had the best of the conditions (not entirely sure who did...), but the confidence and the steel were back in the South Islander.

And there were smiles around the corner at Citroen too. On the face of it, round eight offered little more cheer than another Kris Meeke crash had in Sardinia three weeks before. But delve deeper, debrief the engineers and talk to Andreas Mikkelsen. Recriminations about whether or not the changes made for Poland should have come sooner or whether the French firm should even be in this position at all need to be confined to the bin. Such arguments are a waste of time. The message from the service park's red corner was one of looking forward and bouncing back. There's no denying there was plenty of cloud around in Poland last week, but there was more than the hint of a silver lining for Yves Matton and his men.

Now, count the days until take-off in the land of 1000 lakes. \*\*

RESULTS ROUND 8/13, RALLY POLAND, JUNE 29-JULY 2								
1	ThierryNeuville(B)	Nicolas Gilsoul (B)	<i>Hyundai Motorsport</i> · Hyundai i 20 Coupe WRC	2h40m46.1s				
2	Hayden Paddon  (NZ)	Sebastian Marshall  (GB)	$\textit{Hyundai Motorsport} \cdot \textbf{Hyundaii} 20  \textbf{Coupe WRC}$	+1m23.9s				
3	SebastienOgier(F)	Julien Ingrassia (F)	<i>M-Sport WRT</i> · Ford Fiesta WRC	+2m20.8s				
4	Dani Sordo  (E)	MarcMarti(E)	<i>Hyundai Motorsport</i> · Hyundai i 20 Coupe WRC	+2m47.4s				
5	Stephane Lefebvre (F)	GabinMoreau(F)	Citroen Total · Citroen C3 WRC	+3m11.8s				
6	TeemuSuninen(FIN)	$\mathbf{Mikko}\mathbf{Markkula}(FIN)$	<i>M-Sport WRT</i> · Ford Fiesta WRC	+3m16.8s				
7	Mads Ostberg (N)	Ola Floene (N)	<i>M-Sport WRT</i> · Ford Fiesta WRC	+3m39.6s				
8	Elfyn Evans (GB)	Daniel Barritt(GB)	<i>M-Sport WRT</i> · Ford Fiesta WRC	+4m39.1s				
9	Andreas Mikkelsen (N)	Anders Jager (N)	Citroen Total · Citroen C3 WRC	+4m43.5s				
10	Juho Hanninen (FIN)	KajLindstrom  (FIN)	<i>Toyota Gazoo Racing WRC</i> · Toyota Yaris WRC	+4m53.7s				
ОТН	IERS							
11	Craig Breen (IRL)	Scott Martin (GB)	Citroen Total · Citroen C3 WRC	+11m56.5s				
16	Valeriy Gorban (UA)	Sergei Larens (RUS)	<i>Eurolamp WRT</i> · Mini John Cooper Works WRC	+17m28.4s				
20	Jari-Matti Latvala (FIN)	Miikka Anttila (FIN)	<i>Toyota Gazoo Racing WRC</i> · Toyota Yaris WRC	+28m01.0s				
30	Jourdan Serderidis (GR	R) Lara Vanneste (B)	Jourdan Serderidis · Citroen DS 3 WRC	+45m34.4s				
R	Ott Tanak (EST)	Martin Jarveoja (EST)	<i>M-SportWRT</i> · Ford Fiesta WRC	SS21-accident				
R	Esapekka Lappi (FIN)	Janne Ferm (FIN)	<i>Toyota Gazoo Racing WRC</i> · Toyota Yaris WRC	SS4-acc damage				

### DRIVERS' CHAMPIONSHIP

1 Ogier 160; 2 Neuville 149; 3 Latvala 112; 4 Tanak 108; 5 Sordo 82; 6 Evans 57; 7 Paddon 51; 8 Breen 43; 9 Hanninen 30; 10 Meeke 27.

### MANUFACTURERS' CHAMPIONSHIP

1M-SportWRT261;2Hyundai Motorsport237;3ToyotaGazoo RacingWRC144;4CitroenTotal109.



STAGE TIMES			
STAGE	FASTEST	LEADER	SECOND
SS1 SSS Mikolajki Arena 1 1.55 miles	<b>Evans</b> 1m44.4s	Evans	Neuville +0.8s
SS2 Chmielewo 1 4.05 miles	Neuville 3m22.9s	Neuville	Latvala +0.7s
SS3 Wieliczki 1 9.92 miles	Latvala 7m33.0s	Latvala	Ogier +2.1s
SS4 Swietajno1 12.18 miles	Latvala 9m47.3s	Latvala	Tanak +3.7s
SS5 Stare Juchy 1 8.39 miles	Neuville 6m54.8s	Latvala	Neuville +4.5s
SS6 Chmielewo2 4.05 miles	Stage cancelled		
SS7 Wieliczki2 9.35 miles	Suninen 7m47.9s	Latvala	Tanak +2.3s
SS8 Swietajno 2 12.18 miles	Neuville 10m03.3s	Tanak	Latvala +1.0s
SS9 Stare Juchy 2 8.39 miles	Neuville 7m07.4s	Neuville	Tanak +1.5s
SS10 SSSMikolajkiArena2 1.55 miles	<b>Evans</b> 1m44.3s	Neuville	Tanak +1.3s
SS11 Baranowo 1 9.66 miles	Latvala 8m02.2s	Neuville	Tanak +2.6s
SS12 Pozezdrze1 13.20 miles	<b>Tanak</b> 10m39.8s	Tanak	Neuville +3.5s
SS13 Goldap1 9.17 miles	Paddon 7m24.1s	Tanak	Neuville +3.1s
SS14 Kruklanki1 12.17 miles	Neuville 10m08.5s	Neuville	Tanak +1.3s
SS15 Baranowo2 9.66 miles	Neuville 7m47.9s	Neuville	Tanak +3.0s
SS16 Pozezdrze2 13.20 miles	Paddon 10m23.4s	Tanak	Neuville +14.4s
SS17 Goldap2 9.17 miles	Paddon 7m20.8s	Tanak	Neuville +6.1s
SS18 Kruklanki2 12.17 miles	Neuville 10m02.1s	Neuville	Tanak +2.5s
SS19 SSSMikolajki Arena 3 1.55 miles	<b>Evans</b> 1m44.4s	Neuville	<b>Tanak</b> +3.1s
SS20 Orzysz1 6.93 miles	Tanak 6m10.3s	Tanak	Neuville +1.8s
SS21 Paprotki1 11.61 miles	Neuville 8m58.1s	Neuville	Paddon +1m03.3s
SS22 Orzysz2 6.93 miles	Neuville 6m02.6s	Neuville	Paddon +1m13.0s
SS23 Paprotki2(Power Stage) 11.61 miles	Latvala 8m57.5s	Neuville	Paddon +1m23.9s



# Known

Next weekend Formula E heads to New York for the first time. It's a new circuit in a new city — and some teams even have new drivers. So, how are they getting ready?

### By Scott Mitchell, Autosport Plus Editor

**y** @ScottAutosport

ere's one for you: how does a team prepare for a race that has never happened before, on a circuit that may well prove to be a one-off, with a rookie driver and track information that's not released until about three weeks before the event?

Very carefully is the answer.

Especially when you have a new driver to boot. Next weekend Formula E will descend on New York for the first ever major race in the Big Apple.

It's the crown jewel of an impressive collection of races for the electric single-seater championship that has proven many doubters wrong since its inception in 2014.

The 13-corner track, situated at the Brooklyn Cruise
Terminal, was revealed last September — almost 10 months
before the race itself. But constant tweaks and changes —
including the significant decision to reverse the direction of
the circuit — means teams only took 'delivery' of the final track
map from the series in late June. It meant Alex Lynn, DS Virgin
Racing's New York debutant who is standing in for the absent
Jose Maria Lopez, drove his first virtual lap on Monday, June 26.
The race weekend takes place over July 15-16...

Lynn and his old GP2 team-mate Pierre Gasly, who is replacing Sebastien Buemi at the leading Renault e.dams team for his own first FE appearance, will face an intense schedule in New York. But there's also plenty that needs doing before then — and in a very short period, too. By the time they pack their bags and travel to New York, Lynn, at least, will have considerably more virtual mileage under his belt (and he'll also have driven the real car a couple more times as well).

That all begs a number of questions. How prepared can a driver be with such limited knowledge? When a track's not been driven on before, how does a team learn? And in a series like Formula E, where battery use, lifting-and-coasting and energy harvesting is so crucial, how can teams gather the data required to ensure it does not get caught out on strategy?

"That's why I'm happy I've been in this role for a long time," says Lynn, who has been a development driver for DS Virgin since January, and shook Lopez's car down in Mexico when the Argentine was travelling back from Toyota's LMP1 launch on the eve of the World Endurance Championship pre-season test.

"It's been a lead up to this and my debut could have been



Mexico when it clashed with the test. Even then I was ready to do a good job. Every sim session and track test has been a lead up to this weekend.

"I feel prepared. I feel in my mind like nothing's going to be a shock. I've been to many races, I've sat in every debrief, I've been in the sim, I've seen them in the sim. I've done as much as I can to prepare myself to do the best job possible on the day."

But what is it exactly that Lynn and the team have done so much of to get ready? Guesstimations are largely left in the past these days as simulation tools become more and more advanced. Leaving things to chance when there is the opportunity to trial hundreds of different set-up solutions is the motorsport equivalent of declaring that Britain has 'had enough of experts' while trying to win an argument about Brexit.

It's more than just the electric-powertrain element of FE that lends itself to in-depth preparation and data analysis. Teams are collecting data all the time, battery and powertrain technology is ever-advancing and the circuits are either barely used or completely new, so there is little or no pre-existing data.

Because the important hardware of Formula E cars is locked for the season, thanks to the homologation of the powertrains (motor, gearbox and inverter), software is where the gains are made. This is achieved through intense simulation, and that's not just in relation to driver-in-loop simulators.



For optimum engine performance even in extreme conditions.

To find out more, visit www.pli-petronas.com/petronas-syntium





www.pli-petronas.com



PETRONAS Syntium with °CoolTech™
Now available at Halfords instore & online

The more homework you do, the more prepared you are for the coming event. The more analysis you do after the race, the more you learn and the more you apply for the next one.

Simulation is key to this. It's one of FE's more complicated, and fascinating, battlegrounds — especially as the newfor-2016/17 steering wheel offers greater display functionality. More options are available in-car at any one time, which means a greater reward for more software R&D and coming to each event with more tailored mapping.

The simplest answer, to quote one DS Virgin engineer, is the team only needs one clean lap in the sim to get a baseline for energy strategies. One lap! That hardly seems detailed. But that is really just the start. Take the first week in the simulator for New York — after initial morning runs from Lynn and his team-mate Sam Bird, one member of the team locks himself away in another room and starts plotting out the key energy management details that underpin strategy in Formula E. What is the usage-per-lap target? How much energy can be harvested under braking? What should the harvesting ratio be between software mapping and manual harvesting from the regen paddle in the cockpit? Where is best to lift and coast?

While that is going on Lynn continues in the sim, getting to grips with this all-new circuit, working out where to push and what impact braking with the regen paddle will have. The team has time in the simulator booked for four consecutive days — so that initial reference for the engineers to work from really is just the tip of the iceberg. By the time team and driver are finished they really will be as ready as possible for race weekend — one engineer reckons energy references gleaned from the simulator





are accurate down to around 2%. No wonder small changes to the track once the action starts, like removing kerbs for example, can have a profound impact on race strategy.

The simulator is of less use for set-up, but tweaks can still be made. Ultimately race experience will be key here, because there is a lot to be gained and lost by putting the right or wrong foot forward — in Formula E practice, qualifying and the race all happen on the same day, so there's little time to recover.

The downforce/drag dynamic is key because drag is a killer on FE cars, which are power limited at 170kW in the race (227bhp). Plus, a low-drag set-up will mean higher straightline speeds, and more speed at the top-end of the straight is a plus when it comes to strategy, as the motor will not need to work as hard. Low drag means less downforce, and that needs to be offset by the pursuit of mechanical grip — mainly front and rear rideheights, front and rear anti-roll bars, and damper stiffness.

There are a number of conventional racing areas where the team could trip up, and that's before you combine those challenges with a bumpy, low-grip, never-before-seen/used circuit, surrounded by walls, and a field with the strength in depth that Formula E has - it's filled with ex-F1 drivers, LMP1 aces and impressive young talents.

As Lynn puts it: "The competition is so high that one mistake or one parameter wrong, you don't get the car into the right window, you won't be competitive."

Above: New York is crown jewel in Formula E schedule; teams only received final track map late last month

Left: Lynn's sim time, plus long-term development driver role, means he reckons he's as prepared as it's possible to be

### Lynn finally gets his chance

ALEX LYNN'S DS VIRGIN RACING role is, in one way or another, effectively his third chance at breaking into Formula E. He took part in Jaguar's driver shootout at Donington Park in pre-season, and when he was unsuccessful he came close to securing a development role with Renault e.dams, thanks in part to his close relationship to the DAMS half of that operation from GP2.

With DS Virgin though, Lynn has got his break. It could have come sooner – Jose Maria Lopez was a late arrival in Mexico City thanks to a World Endurance Championship pre-season test clash – but for the British driver all that matters is the opportunity is here now. He replaces Lopez for the New York City doubleheader because the Argentine is on Toyota LMP1 duty at the Nurburgring WEC round.

Lynn's DS Virgin agreement is a multi-year one, but he insists he is "not especially" treating New York as an audition for a 2017/18 race seat.

"Everyone has known about the clash for a long time so I did see it as an opportunity to get a chance to race," he says. "It's only just been confirmed but it's something I've been looking forward to for a long time now.

"I feel in a good place in general. We've done a fair amount of sim work now and



by the time I get to the race I'll be comfortable in the car."

In addition to shaking down Lopez's car in Mexico, Lynn has completed three days of testing in the team's 2017/18 development mule. The Briton is also combining his fledgling FE duties with a WEC LMP2 drive and IMSA SportsCar Championship DPi outings. What ties all of his programmes together is an

opportunity to win in each respective discipline – and FE will be no exception, with Lopez and Sam Bird having challenged for victory at several races this season.

"Whether it's racing a sportscar or Formula E I would like to be attached to big manufacturers that want to win big championships and big races," says Lynn, who was on LMP2 duty at

Le Mans for G-Drive.

"That hasn't changed since last year. I want to race every weekend I can. One thing I've really enjoyed and I'm very privileged to have, is every car I've driven this year has had the capability to win every race I've entered.

"That's what's so important to me as a racing driver, that's what really gets me excited."

# **UROCUP • MOTOGP • NASC/** JROPEAN FORMULA 3 • DTM • FRENAULT EI



FORMULA 3 EUROPEAN CHAMPIONSHIP NORISRING (D) JULY 1-2 ROUND 5/10

MAXIMILIAN GUNTHER CELEBRATED HIS 20th birthday last Sunday by moving into a useful 34-point lead in the Formula 3 European Championship at his home track, just as the series goes into a break of almost four weeks. The Mercedes DTM junior's fan club, family and assorted Bavarian well-wishers were out in force, sporting yellow 'MAXG' caps, and a win on Saturday plus two conservative podiums on Sunday gave Gunther a haul of points, while title rivals Joel Eriksson and Callum Ilott floundered.

Then came the celebrations: Gunther's Prema Powerteam squad presented him with a birthday cake, which, in time-honoured German slapstick fashion, ended up in his face.

But it wasn't just Gunther cheering last weekend, as Lando Norris put in an absolutely sensational drive from an early fifth to win the second race, justifying the 'Norrisring' quips that had been much anticipated in the run-up to the event. And it was the West Country boy's Carlin team-mate Jehan Daruvala who triumphed in the finale; the Mumbai teenager

earned a deserved maiden F3 win.

There was a host of starring cameo roles too. In fact, it was neither Prema nor Carlin that seemed to have the edge on one-lap pace. Through Friday's free practice and opening qualifying, it was Van Amersfoort Racing's Pedro Piquet who looked to have an advantage. Piquet's style is always smooth, but this time he also seemed to be on it — beautifully controlled, with high minimum speeds, through the track's crucial hairpins. He topped FP1 and FP2, and was third in first qualifying, missing out on pole by 0.015 seconds while not getting a tow, as poleman Jake Hughes and front-row partner Norris most definitely did.

"The points I needed to improve were new tracks, and getting up to speed quick," explained Piquet, now midway through his second season racing in Euro Formula 3. "I did it here and it's something I need to focus on — to be quick from the beginning."

By the time of second qualifying after the opening race, it was Hitech GP, which had been mired in the midfield in free practice, that was on top. Ralf Aron, boosted by the fastest lap in race one, claimed the quickest time, although he benefited from a tow. Hughes completed a one-two for the Silverstone-based squad — and



### GLANCE

### RACE 1

- 1 Gunther Prema
- 2 Piquet VAR
- 3 7hou Prema

### RACE 2

- 1 Norris Carlin
- 2 Hughes Hitech GP 3 Gunther Prema

### RACE 3

- 1 Daruvala Carlin
- 2 Gunther Prema 3 Norris Carlin
- P39 RESULTS





he was running completely on his own, so the lap was very impressive. "I'm really proud of the engineers and mechanics, because none of us was in the top 10 in free practice but we worked it out, and it was mega," grinned Aron.

But in the races it was Carlin that appeared to have the best car. Yet to provide a Euro F3 champion, the Farnham team is gradually ticking off the boxes on the cynics' chart of 'tracks Carlin needs to prove it's good at' this year.

In race one, Norris (for whom starts are still a problem) dropped from second to fourth over the opening lap, then picked off Piquet and Gunther to move in on Hughes. As Norris slipstreamed him, Hughes moved to cover the inside on the run to Turn 1, and appeared to get a little loose at the rear end as he hit the brakes, but not so much that he wouldn't have made the corner. Norris, right behind, was caught out, and his tap on the rear end of the Brummie's car sent it into a wild spin, before Hughes smashed backwards into a tyre wall. Gunther and Piquet gleefully nipped by, pushing Norris to third. He recovered second from Piquet, but a 20-second penalty for the incident dropped him out of the points.

From fourth on the grid for race two, Norris dropped to fifth, then worked his way past Piquet, Gunther and Hughes, before eroding

the 1.6s lead Aron had built up. After a thrilling chase, even trying to pass in the chicane, Norris got the Estonian into the final Dutzendteich hairpin with six laps remaining. When Aron tried to fight back on the following lap, he damaged his front wing and eventually fell to fifth behind Hughes, Gunther and Daruvala.

It was a brilliant display by Norris, who'd looked a bit scratchy in practice and not vet acquainted himself with any apexes, while team-mate Ferdinand Habsburg was pinpoint accurate. By Q1, his lines were sweet as a nut, and his racing - while it had ended in disaster with Hughes – was feisty and ambitious, trying moves where few others dared.

"Hitech is pretty fast in qualifying," acknowledged Norris, "but our race pace has allowed me to make up for a slight lack of qualifying pace. I just feel more comfortable in the races. People struggle here with overheating brakes quite a lot. That's what we've tried working on in preparation for this weekend, even at previous rounds."

In race three, Norris dropped from sixth to seventh at the start, but eventually worked his way up and past the Aron-Hughes battle for third. Up front, Gunther pressured Daruvala, but the German points machine isn't the most aggressive racer and Daruvala, never seriously threatened, made not a single mistake.

Prema could also lay claim to a pace advantage in the races. Gunther's weekend was one of solidity, while Ilott's wasn't, but the Brit did claim fastest lap in races two and three, the latter even with a bent pushrod. Other than that, it was a disaster for Ilott, who's now 70 points behind Gunther, A clatter from Habsburg sent him spinning at Turn 1 in the opener, and Aron crunched into his front end, forcing Ilott to pit for a new front wing. He rejoined a lap down, and earned a five-place grid penalty for the second race when he collided with Kevvan Andres Soori. That was compounded in second qualifying, where he struggled with brakes and traffic.

For pre-weekend series leader Eriksson it was almost as bad. His Motopark team found a broken damper just before first qualifying, replaced it, but didn't get time to tune it. He started from the back row and charged to fourth, but more handling problems plagued the rest of his weekend. The team even earned itself €3000 of fines for its quad bike being ridden at high speed the wrong way up the pitlane in Q1, and then in the fast lane. Certainly, no-one was in the mood for birthday cakes there.

MARCUS SIMMONS



### BMW ends win drought with double

NORISRING (D) JULY 1-2 **ROUND 4/9** 

MUCH HAD HAPPENED IN THE years between BMW's last Norisring win before Bruno Spengler's victory last Saturday. The series' original form had shut down, before being relaunched; Pascal Wehrlein was born, raised and won a DTM title; a new version of the routemaster bus had even been produced.

A slightly tenuous link you might argue, but like the proverbial red buses, BMW waited 25 years for one win before two came along in quick succession.

While Saturday's milestone result established the weekend as a success for the Munich marque, Sunday's race provided the drama. Second-place starter Robert Wickens took the lead from Spengler in a frenetic start, but it was Lucas Auer who caught the eye, leaping from sixth to third before pitting early on and emerging with a clear track.

By the time an early cycle of stops had largely been completed, that gave him a net lead ahead of the RBM BMW of Maxime Martin, who was helped by a rapid turnaround in the pits.

Martin gradually reeled in the Mercedes man, but it took a safety car period – after Rene Rast and Wickens got together at the Turn 1 hairpin — to create his chance to get by. With the field lining up side-by-side for the restart, leader Loic Duval (who hadn't served his mandatory pitstop) did a decent job of fending off Auer, but hadn't banked on Martin getting involved. With a slither of clear track at Turn 1, Martin gladly rolled his M4 DTM in to snatch the lead.

That move wasn't crucial, but it did mean he led at a second restart, with the race then red-flagged after a scary shunt involving Gary Paffett and Mike Rockenfeller. Paffett had attempted to pass Audi's Jamie Green on the run to Turn 1 when the rear of his Mercedes C63 stepped out, sending him nose first into the inside barrier and back towards the first corner where he collected the unfortunate Rockenfeller. Both drivers were out on the spot, but remarkably Paffett escaped with only bruising. Rockenfeller fractured his left foot.

Auer made the best of the single-file

### AT A GLANCE

1 Spengler BMW 2 Martin BMW 3 Ekstrom Audi

### RACE 2



1 Martin BMW 2 Auer Mercedes 3 Mortara Mercedes

P39 RESULTS



restart more than half an hour later (following barrier repairs) and yanked the lead back from Martin at the hairpin, but never looked capable of shaking off the BMW and instead fell prey to a retaliatory attack from his lunging rival at the same spot on lap 41 of 66. Martin had his wits about him at the hairpin and stuck to the inside thereafter, which proved to be enough as Auer fell back into the clutches of the chasing pack.

If their private battle got close, the fight for third was supreme. Marco Wittmann was baulked as he tried to pass Auer through the Scholler S on the penultimate lap, allowing Mattias Ekstrom to get a run and sling his Audi up the inside before the final hairpin.

Third looked like it was Ekstrom's on the last lap, only for Wittmann to try an ambitious move into the final corner. That served only to delay him and Ekstrom, though, as the pair made contact, with Edoardo Mortara gladly sweeping up the inside and outgunning them to the line to secure his first podium since switching to Mercedes.

Race one, held in more challenging conditions, was ironically a more tepid affair. In damp conditions, Spengler burst through the pack at the start and took the lead by Turn 1 and, as a dry line appeared, the long victory drought came closer to being ended – with Spengler eventually easing clear from secondplaced Martin after finding his feet on dry tyres. Cue plenty of celebrations: for BMW, having taken its first win at the circuit since Steve Soper's 1992 success and its first win of the season, and Spengler – who grabbed his first win in four years.

**JACK COZENS** 



### Ticktum takes win, Palmer toils

FORMULA RENAULT EUROCUP HUNGARORING (H) JULY 1-2 ROUND 5/10

DAN TICKTUM SCORED HIS MAIDEN Formula Renault victory in the opening race of a Eurocup triple-header, where Gabriel Aubry also notched up his first two series wins.

Driving for category newcomer Arden, Ticktum has struggled to match the frontrunners in dry qualifying sessions so far this year, but he's proven his talent when the weather has been wet.

The Red Bull junior got onto the front row on a drying track at Silverstone, leading to his one and only podium prior to arriving in Hungary, where he would claim pole in a rain-soaked first qualifying session.

But the weather was hot and dry come the corresponding race later on Saturday, and Ticktum had Sacha Fenestraz — who had set the pace through dry-weather running on both Thursday and Friday — alongside him on the front row. The Briton was able to keep the Josef Kaufmann Racing driver at bay throughout though, including at two safety car restarts.

American rookie Neil Verhagen provided Red Bull with a double boost by finishing third after passing Aubry, who would go on to star on Sunday.

For the first time this year, the R-ace GP team did not win a race, and its dominance of the title fight with Will Palmer and Robert Shwartzman was threatened by the form of Fenestraz.



Palmer had a torrid Saturday, with electrical issues in qualifying leaving him 22nd on the grid for race one, during which those problems struck again after he'd soared up 10 places in five laps — he subsequently fell back to 18th at the flag. Shwartzman could only manage seventh, but he still ate into Palmer's narrow standings lead.

In the earlier, dry, second qualifying session, Fenestraz had beaten Palmer to race two pole by half a second, but he would lose out to former Tech 1 team-mate Aubry at the start. Palmer also came past and held second until the end, 4.7 seconds behind winner Aubry, but ahead of his title rivals.

For race three, the roles were reversed: Aubry led from pole until Fenestraz lunged to the inside at Turn 1 at a restart, even though his rival had showed him the outside line.

Unfortunately for Fenestraz, he had already been handed a 10-second penalty for a jump start, which relegated him to eighth at the finish. Palmer took fourth in that encounter, leaving him five points ahead of Shwartzman, who came fifth and then second in Sunday's races, directly behind and then in front of Max Defourny.

Victory in race three would have propelled Fenestraz to the top of the standings, but at only 22 points behind Palmer and 17 adrift of Shwartzman he is very much making it a three-way fight for the title.

Ticktum, meanwhile, returned to the all-toofamiliar 10th/11th on the grid in second qualifying, but still managed to score points in both Sunday events with ninth place in race two and seventh place in race three to round off "a very good weekend" for the 18-year-old.

### PETE ALLEN

### **RESULTS**

Race 1 1 Daniel Ticktum 14 laps in 27m59.320s; 2 Sacha Fenestraz +0.916s; 3 Neil Verhagen; 4 Gabriel Aubry; 5 Alexander Vartanyan; 6 Henrique Chaves Jr. Race 2 1 Aubry 16 laps in 27m21.805s; 2 Will Palmer +4.710s; 3 Fenestraz; 4 Max Defourny; 5 Robert Shwartzman; 6 Max Fewtrell. Race 3 1 Aubry 15 laps in 27m20.281s; 2 Shwartzman +0.821s; 3 Defourny; 4 Palmer; 5 Yifei Ye; 6 Vartanyan. Points 1 Palmer 174; 2 Shwartzman 169; 3 Fenestraz 152; 4 Aubry 114; 5 Defourny 105; 6 Ticktum 70.

### IN BRIEF

### **MOTO2**

MotoGP-bound Franco Morbidelli took his sixth Moto2 win in nine races, tightening his grip on the points lead as main rivals Thomas Luthi and Alex Marquez both crashed out, with the latter sustaining a cracked vertebra in a particularly nasty fall. But Morbidelli was still made to work hard at the Sachsenring Miguel Oliveira, who came within 0.066s of a maiden win in Moto2. Francesco Bagnaia finished third.

### **МОТОЗ**

Joan Mir stretched his Moto3 championship advantage with a fifth victory of the year. He outfoxed nearest title rival Romano Fenati in a final-lap duel at the Sachsenring by passing the Italian at the penultimate corner. KTM underdog Marcos Ramirez kept up with the lead duo all the way to the finish, and was just two tenths behind Mir when he crossed the line to take his maiden grand prix podium.

### **EUROFORMULA OPEN**

Harrison Scott extended his standings lead with victory in the second race at the Hungaroring after battling back to finish ninth in race one. In that encounter, which was won by Campos Racing's Thiago Vivacqua, Scott recovered from 14th on the grid after losing his best qualifying time for track limit infringements. In race two, he held off Nikita Troitskiy in a race-long fight to score his sixth win of 2017.

### **INTERNATIONAL GT OPEN**

Imperiale Racing and BMW Team Teo Martin shared the wins at the Hungaroring, where a dramatic climax played out in race one. Thomas Biagi and Giovanni Venturini triumphed in their Lamborghini but only after the former battled past Valentin Pierburg to seize what had become first place following long-time leaders Miguel Ramos and Mikkel Mac colliding with a backmarker. In race two, polesitters Victor Bouveng and Fran Rueda eased to victory.

### **IMOLA 12 HOURS**

Dimitri Parhofer, Max Edelhoff, Horst Felbermayr Jr and Toni Forne claimed victory for Car Collection Motorsport aboard their Audi in the Imola 12 Hours. The #32 machine led at the event's four-hour mark, where the racing was paused until the following morning, and came home ahead of the #11 Scuderia Praha Ferrari 488 GT3.

### **BRAZILIAN STOCK CARS**

Daniel Serra took it all at Curitiba as the Eurofarma RC driver and 2017 Aston Martin Le Mans GTE Pro winner grabbed pole, led every lap of the race, set the fastest lap and scored a prize of one million Reais. The son of former F1 driver Chico Serra also took the championship points lead.

Marcos Gomes finished second, followed by Caca Bueno and Rubens Barrichello.

### Marquez keeps his streak alive

MOTOGP SACHSENRING (D) JULY2 ROUND 9/18

IT'S HARD TO THINK OF MANY examples in motorsport where a competitor just clicks with a circuit in the way that Marc Marquez does with the Sachsenring — and in this most unpredictable of MotoGP seasons, the Honda star's eighth straight win at the track in all grand prix classes had an air of inevitability about it.

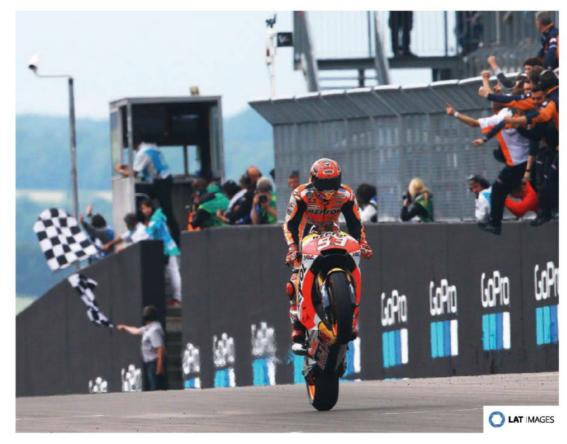
Before his triumph last weekend, Marquez's previous victory had come all the way back in April at Austin, the other circuit where he has maintained a perfect record since graduating to the premier class in 2013. It meant he had gone five races without winning, one shy of the longest losing streak of his career so far, something he had insisted was no big deal in the run-up to the event.

Equally, Marquez had said his past wins in Germany were by no means a guarantee of success this year, owing to the circuit's recent resurfacing, which compelled Michelin to bring extra front and rear tyre compounds and meant that Friday's practice sessions were extended by 10 minutes each.

In the end, though, it was the same old story: Marquez took his third pole of the season in torrential conditions on Saturday and then, 24 hours later, he kept up his perfect record of Sachsenring victories, which now stretches back to his days competing in the 125cc class in 2010.

But, for many of the 77,000 spectators present, the most extraordinary story of the race on Sunday was that of the man who came second: Jonas Folger.

Tech3 Yamaha rookie Folger had looked rapid all weekend on home soil, qualifying a respectable fifth, but in the



race he was utterly inspired, briefly taking the lead from Marquez on the fifth lap with a sensational move at Turn 12 that sent the crowd into raptures.

Although Folger's spell out front proved to be short-lived — Marquez retook the advantage when his opponent ran wide at Turn 1 on the 10th lap of 30 — he remained right on the reigning champion's tail until the closing stages, when he again arrived at Turn 1 too hot and allowed Marquez to escape for good.

In the end, Marquez's pace over the final three laps was too hot for Folger, whose tyres were finished, and the Spaniard had managed to pull clear by a little over three seconds when he crossed the finish line on the final lap.

Some eight seconds behind Folger was the second works Honda of Dani Pedrosa, who couldn't live with the pace of the leading duo but equally had the clear measure of those behind on his way to third place.

Marquez's second win of the 2017 season moved him to the head of the points standings

Both works Yamahas had endured a dismal time in qualifying. Assen winner Valentino Rossi and former points leader Maverick Vinales ended up ninth and 11th on the grid respectively after struggling badly in the wet. But in the dry conditions of the race they fared much better, and ended up dicing over fourth place.

In the end it was Vinales who got the better of Rossi after claiming to have learned from crashing last time out at Assen not to push for a position his machinery wasn't capable of. Likewise, fifth represented a solid return for Rossi on a weekend that had promised little after qualifying.

Following wins at Mugello and Barcelona for Andrea Dovizioso, and Danilo Petrucci's near-miss at Assen, it was a race the Ducati contingent in Germany will wish to forget. Alvaro Bautista was the marque's highest finisher in sixth, while Dovizioso came home eighth. Jorge Lorenzo sank to 11th after circulating as high as third early on, and Petrucci plummeted from second on the grid down to 12th by the flag.

Dovizioso therefore slipped from the lead of the standings to third place, six points behind Marquez and one behind Vinales, and Rossi is only 10 off the lead in fourth with nine races still to go.

But while this year's title battle remains impossible to call at the halfway point, the bookmakers at the Sachsenring will probably feel a little more comfortable offering short odds on a Marquez win the next time the MotoGP circus arrives in town.

JAMIE KLEIN



## **RESULTS** ROUND 9/18, SACHSENRING (D), JULY 2 (30 LAPS – 68.432 MILES)

POS	DRIVER	TEAM	TIME
1	MarcMarquez(E)	Honda	40m59.525s
2	$JonasFolger(\hbox{\tt D})$	Tech3 Yamaha	+3.310s
3	Dani Pedrosa (E)	Honda	+11.546s
4	Maverick Vinales (E)	Yamaha	+14.253s
5	Valentino Rossi (I)	Yamaha	+14.980s
6	AlvaroBautista(E)	AsparDucati	+16.534s
7	Aleix Espargaro (E)	Aprilia	+19.736s
8	$And reaDovizioso {\it (I)}$	Ducati	+20.188s
9	JohannZarco(F)	Tech3 Yamaha	+21.138s
10	CalCrutchlow (GB)	LCRHonda	+24.210s
11	JorgeLorenzo(E)	Ducati	+25.659s
12	Danilo Petrucci (I)	Pramac Ducat	i +31.540s
13	PolEspargaro(E)	KTM	+32.179s
14	$\pmb{\text{BradleySmith}}(GB)$	KTM	+36.453s
15	JackMiller(AUS)	MarcVDSHono	da +37.771s
16	MikaKallio(FIN)	KTM	+37.852s
17	Karel Abraham (CZ)	AsparDucati	+39.323s
18	TitoRabat(E)	MarcVDSHono	da +41.190s
19	LorisBaz(F)	Avintia Ducati	+59.850s
20	ScottRedding(GB)	Pramac Ducat	<i>i</i> +1m01.664s
21	AlexRins(E)	Suzuki	+1m01.695s
R	$And real annone {\scriptstyle (I)}$	Suzuki	24 laps-accident
R	Sam Lowes (GB)	Aprilia	12 laps-accident
EX*	Hector Barbera (E)	Avintia Ducati	9 laps

<sup>\*</sup>Disqualified afterfailing to serveride-through penalty

Winner's average speed 100.163mph Fastest lap Folger 1m21.442s, 100.829mph.

#### **QUALIFYING 2**

1 Marquez 1m27.302s; 2 Petrucci 1m27.462s; 3 Pedrosa 1m27.949s; 4 Crutchlow 1m28.089s; 5 Folger 1m28.210s; 6 Lorenzo 1m28.383s; 7 P Espargaro 1m28.402s; 8 A Espargaro 1m28.526s; 9 Rossi 1m28.669s; 10 Dovizioso 1m28.703s; 11 Vinales 1m28.823s; 12 Bautista 1m28.968s.

#### QUALIFYING 1

1 Petrucci 1m27.688s; 2 P Espargaro 1m27.695s; 3 Miller 1m27.967s; 4 Baz 1m27.979s; 5 Smith 1m28.015s; 6 Iannone 1m28.103s; 7 Kallio 1m28.285s; 8 Barbera 1m28.404s; 9 Zarco 1m28.444s; 10 Abraham 1m28.625s; 11 Lowes 1m28.659s; 12 Rins 1m29.504s; 13 Redding 1m29.578s; 14 Rabat 1m30.028s.

#### **RIDERS' CHAMPIONSHIP**

1 Marquez 129; 2 Vinales 124; 3 Dovizioso 123; 4 Rossi 119; 5 Pedrosa 103; 6 Zarco 84; 7 Folger 71; 8 Petrucci 66; 9 Lorenzo 65; 10 Crutchlow 64; 11 Bautista 44; 12 Miller 41; 13 Redding 33; 14 A Espargaro 32; 15 Baz 31; 16 Iannone 28; 17 Rabat 23; 18 Barbera 21; 19 Abraham 20; 20 P Espargaro 14; 21 Smith 8; 22 Rins 7; 23 Pirro 7; 24 Lowes 2; 25 Guintoli 1.

#### MANUFACTURERS' CHAMPIONSHIP

**1** Yamaha **83**; 2 Honda 79; 3 Ducati 59; 4 Aprilia 17; 5 Suzuki 16; 6 KTM 4.

# Stenhouse wins Daytona wreckfest

NASCAR CUP DAYTONA (USA) JULY1 ROUND 17/36

RICKY STENHOUSE JR PICKED UP HIS second career Cup win last weekend, scoring his second victory in a row on a restrictorplate track after his Talladega victory in May.

The final stage of the race was a recordsetting wreckfest featuring 14 cautions, but Stenhouse moved into the lead as he raced on the bottom lane in overtime, catching out erstwhile leader David Ragan. Erik Jones took the field three-wide on the backstretch but it was Stenhouse who secured his position out front after the first overtime lap.

Roush Fenway Racing Ford driver Stenhouse, who led a total of 17 laps during the race, held off a fast-approaching Clint Bowyer to win by 0.213 seconds at the finish.

"I kept my Talladega car and I told them to build a new one," said Stenhouse afterwards, "and they built a car that was really fast."



Bowyer made it a Ford on-two, followed by a trio of Chevrolets: Paul Menard ended up third, chased home by Michael McDowell, as Ryan Newman rounded out the top five.

#### **RESULTS**

1 Ricky Stenhouse Jr (Ford Fusion) 163 laps in 3h17m12s; 2 Clint Bowyer (Ford) +0.213s; 3 Paul Menard (Chevrolet SS); 4 Michael McDowell (Chevy); 5 Ryan Newman (Chevy); 6 David Ragan (Ford); 7 Brendan Gaughan (Chevy); 8 AJ Allmendinger (Chevy); 9 Erik Jones (Toyota Camry); 10 Chris Buescher (Chevy). Playoff qualifying 1 Jimmie Johnson 516/3 wins; 2 Kyle Larson 667/2; 3 Martin Truex Jr 649/2; 4 Brad Keselowski 535/2; 5 Stenhouse 395/2; 6 Kevin Harvick 557/1; 7 Ryan Blaney 435/1; 8 Kurt Busch 408/1; 9 Newman 399/1; 10 Austin Dillon 323/1; 11 Kyle Busch 559; 12 Chase Elliott 524; 13 Jamie McMurray 504; 14 Denny Hamlin 498; 15 Bowyer 469; 16 Matt Kenseth 445.



# Kristoffersson flies to victory

WORLD RALLYCROSS HOLJES (S) JULY 1-2 ROUND 7/12

JOHAN KRISTOFFERSSON EXTENDED HIS lead in the World Rallycross Championship to 31 points with victory at his home round.

Kristoffersson took a maximum score from the Holjes event by qualifying his Volkswagen Polo at the top of the intermediate classification, winning semi-final one and leading the Ford Focus of Andreas Bakkerud from lights to flag in the final.

Timmy Hansen pressured the sister Peugeot of Sebastien Loeb for much of the race, but he dropped back into the clutches of Kevin Eriksson on the final lap, allowing the nine-time World Rally champion to clinch third. Eriksson had qualified his MJP Racing Ford for the final for only the second time of 2017, and beat the remaining final qualifier, Ford driver Janis Baumanis.

Petter Solberg's semi-final stall meant he didn't qualify for the final for the second time in 2017, but the Norwegian did climb to second in the points ahead of Mattias Ekstrom, who had to miss the event to race in the DTM Norisring round. Ekstrom's replacement, PG Andersson, was 15th after failing to qualify the EKS Audi for the semis.

#### **RESULTS**

1 Johan Kristoffersson (Volkswagen Polo GTi) 6 laps in 4m14.579s; 2 Andreas Bakkerud (Ford Focus RS) +2.363s; 3 Sebastien Loeb (Peugeot 208); 4 Timmy Hansen (Peugeot); 5 Kevin Eriksson (Ford Fiesta); 6 Janis Baumanis (Ford). Points 1 Kristoffersson 181; 2 Petter Solberg 150; 3 Mattias Ekstrom 143; 4 Loeb 125; 5 Bakkerud 124; 6 Hansen 121.



The new documentary by **HANNES M SCHALLE** 

The story of the **NÜRBURGRING** 

# THE GREEN HELL

LEGENDARY DEMANDING DEADLY

DIGITALLY AVAILABLE ON July 7th 2017

on iTunes - Amazon - Sony Google Play and XBOX

# RESULTS ROUND-UP

#### **FORMULA 3 EUROPEAN CHAMPIONSHIP**

#### **ROUND 5/10, NORISRING (D), JULY 1-2**

#### **RACE 1** (38 LAPS - 54.308 MILES)

1	$\textbf{Maximilian Gunther} ~ \textbf{(D)} ~ \textit{Prema Powerteam} \cdot \textbf{Dallara-Mercedes F316}$	33m54.166s		
2	<b>Pedro Piquet</b> (BR) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F317	+1.507s		
3	Guan Yu Zhou (PRC) Prema Powerteam · Dallara-Mercedes F315	+2.134s		
4	Joel Eriksson (S) Motopark · Dallara-Volkswagen F315	+4.421s		
5	Harrison Newey (GB) Van Amersfoort Racing · Dallara-Mercedes F316	+15.640s		
6	Jehan Daruvala (IND) Carlin · Dallara-Volkswagen F315	+15.717s		
7	Mick Schumacher (D) Prema Powerteam · Dallara-Mercedes F317	+16.480s		
8	<b>Tadasuke Makino</b> (J) <i>Hitech GP</i> · Dallara-Mercedes F317	+17.907s		
9	Ralf Aron (EST) Hitech GP · Dallara-Mercedes F316	+18.508s		
10	Nikita Mazepin (RUS) Hitech GP · Dallara-Mercedes F316	+19.426s		
11	<b>Lando Norris</b> (GB) <i>Carlin</i> · Dallara-Volkswagen F317	+20.832s		
12	<b>David Beckmann</b> (□) <i>Motopark</i> · Dallara-Volkswagen F316	+24.109s		
13	Marino Sato (J) Motopark · Dallara-Volkswagen F314	+27.342s		
14	Keyvan Andres Soori (D) Motopark · Dallara-Volkswagen F317	+27.766s		
R	<b>Jake Hughes</b> (GB) <i>Hitech GP</i> · Dallara-Mercedes F315	31 laps-accident		
R	Callum Ilott (GB) Prema Powerteam · Dallara-Mercedes F314	24 laps-accident damage		
R	<b>Joey Mawson</b> (AUS) <i>Van Amersfoort Racing</i> · Dallara-Mercedes F316	15 laps-accident		
R	Ferdinand Habsburg (A) Carlin · Dallara-Volkswagen F315	6 laps-accident damage		
Winner's average speed 96.112mph, Fastest lap Aron 48.368s, 106.371mph.				

#### **OUALIFYING 1**

1 Hughes 48.231s; 2 Norris 48.233s; 3 Piquet 48.246s; 4 Gunther 48.334s; 5 Ilott 48.352s; 6 Habsburg 48.371s; 7 Zhou 48.379s; 8 Mawson 48.405s; 9 Daruvala 48.409s; 10 Newey 48.411s; 11 Mazepin 48.452s; 12 Aron 48.457s; 13 Schumacher 48.516s; 14 Sato 48.593s; 15 Beckmann 48.613s; 16 Andres Soori 48.721s; 17 Eriksson 48.871s; 18 Makino 48.930s.

#### **RACE 2** (42 LAPS - 60.024 MILES)

1 Norris 34m15.834s; 2 Hughes +1.134s; 3 Gunther +2.176s; 4 Daruvala +3.378s; 5 Aron +4.167s; 6 Piquet +4.554s; 7 Newey +5.074s; 8 Zhou +5.624s; 9 llott +6.504s; 10 Eriksson +7.848s; 11 Beckmann +12.503s; 12 Schumacher +12.554s; 13 Mawson +14.198s; 14 Makino +14.923s; 15 Habsburg +18.351s; 16 Sato +19.733s; 17 Andres Soori +22.577s; 18 Mazepin -1 lap. Winner's average speed 105.109mph. Fastest lap llott 47.977s, 107.237mph.

#### **OUALIFYING 2**

1 Aron 47.859s; 2 Hughes 47.941s; 3 Gunther 47.963s; 4 Norris 47.971s; 5 Daruvala 47.973s; 6 Piquet 47.998s; 7 Newey 48.048s; 8 Mazepin 48.058s; 9 Zhou 48.077s; 10 Eriksson 48.161s; 11 Schumacher 48.188s; 12 Ilott 48.046s\*; 13 Beckmann 48.202s; 14 Habsburg 48.085s\*; 15 Sato 48.310s; 16 Mawson 48.319s; 17 Makino 48.355s; 18 Andres Soori 48.407s. \*Grid penalty

#### **RACE 3** (39 LAPS – 55.737 MILES)

1 Daruvala 34m29.733s; 2 Gunther +0.458s; 3 Norris +3.088s; 4 Aron +4.021s; 5 Hughes +4.548s; 6 Beckmann +5.009s; 7 Eriksson +5.753s; 8 Habsburg +6.843s; 9 Ilott +8.165s; 10 Mazepin +9.223s; 11 Mawson +10.158s; 12 Zhou +10.680s; 13 Sato +19.348s; 14 Andres Soori +20.004s; 15 Newey +23.380s; R Makino 13 laps-accident; R Piquet 9 laps-trackrod; R Schumacher 4 laps-accident. Winner's average speed 96.946mph. Fastest lap llott 47.949s, 107.300mph.

#### **GRID FOR RACE 3**

1 Gunther; 2 Daruvala; 3 Aron; 4 Hughes; 5 Habsburg; 6 Norris; 7 Zhou; 8 Mazepin; 9 Ilott; 10 Eriksson; 11 Beckmann; 12 Piquet; 13 Schumacher; 14 Newey; 15 Mawson; 16 Sato; 17 Makino; 18 Andres Soori.

#### **CHAMPIONSHIP**

**1** Gunther **236**; 2 Eriksson 202; 3 Norris 198; 4 llott 166; 5 Daruvala 106; 6 Hughes 88; 7 Zhou 84; 8 Aron 70: 9 Newey 67: 10 Habsburg 56.



#### DTM

#### **ROUND 4/9, NORISRING (D), JULY 1-2**

#### RACE 1 (61 | APS = 87 178 MILES)

1	Bruno Spengler (CDN) RBM · BMW M4	53m15.532s			
2	Maxime Martin (B) RBM ⋅ BMW M4	+4.385s			
3	Mattias Ekstrom (S) Abt · Audi RS5	+4.776s			
4	Marco Wittmann (D) RMG · BMW M4	+10.812s			
5	Timo Glock (□) RMR · BMW M4	+12.151s			
6	Tom Blomqvist (GB) RMR · BMW M4	+12.828s			
7	Jamie Green (GB) Team Rosberg · Audi RS5	+18.573s			
8	Edoardo Mortara (I) HWA · Mercedes C63	+20.328s			
9	Nico Muller (CH) Abt · Audi RS5	+21.355s			
10	Gary Paffett (GB) HWA · Mercedes C63	+34.707s			
11	Paul di Resta (GB) HWA · Mercedes C63	+34.986s			
12	Rene Rast (D) Team Rosberg · Audi RS5	+35.357s			
13	Mike Rockenfeller (D) Team Phoenix · Audi RS5	+41.287s			
14	Maro Engel (D) HWA · Mercedes C63	+1m12.528s			
15	Loic Duval (F) Team Phoenix · Audi RS5	-1 lap			
R	Augusto Farfus (BR) RMG · BMW M4	9 laps-retired			
R	Lucas Auer (A) HWA · Mercedes C63	1 lap-accident damage			
R	Robert Wickens (CDN) HWA · Mercedes C63	0 laps-accident			
Min	Winner's average speed 98 212mph Fastest Ian Riomayist 48 345s 106 421mph				

Winner's average speed 98.212mph. Fastest lap Blomqvist 48.345s, 106.421mph.

#### **OUALIFYING 1**

1 Martin 47.472s; 2 Rast 47.477s; 3 Spengler 47.493s; 4 Blomqvist 47.527s; 5 Auer 47.584s; 6 Ekstrom 47.629s; 7 Wittmann 47.676s; 8 Glock 47.692s; 9 Green 47.714s; 10 Muller 47.718s; 11 Wickens 47.739s; 12 Rockenfeller 47.763s; 13 Paffett 47.781s; 14 Mortara 47.813s; 15 Engel 47.881s; 16 Farfus 47.883s; 17 di Resta 48.014s; 18 Duval 48.123s.

#### **RACE 2** (66 LAPS - 94.324 MILES)

1 Martin 1h29m22.150s; 2 Auer +2.903s; 3 Mortara +4.460s; 4 Ekstrom +4.462s; 5 Wittmann +4.487s; 6 di Resta +5.708s; 7 Farfus +11.613s; 8 Green +12.064s; 9 Blomqvist +12.694s; 10 Glock +13.347s; 11 Wickens +15.163s; 12 Spengler +15.360s; 13 Muller +17.560s; 14 Engel +23.377s; 15 Duval -1 lap; R Rast 33 laps-accident damage; R Rockenfeller 32 laps-accident; R Paffett 32 laps-accident.

Winner's average speed 63.326mph. Fastest lap Spengler 47.846s, 107.531mph.

#### **QUALIFYING 2**

1 Blomqvist 47.252s; 2 Wickens 47.256s; 3 Muller 47.289s; 4 Spengler 47.305s; 5 Ekstrom 47.329s; 6 Auer 47.344s; 7 Martin 47.355s; 8 Rockenfeller 47.395s; 9 Glock 47.400s; 10 Rast 47.414s; 11 Paffett 47.495s; 12 Wittmann 47.503s; 13 di Resta 47.510s; 14 Green 47.526s; 15 Farfus 47.534s; 16 Mortara 47.612s; 17 Duval 47.814s; 18 Engel 47.890s.

#### CHAMPIONSHIP

1 Ekstrom 89; 2 Auer 87; 3 Martin 78; 4 Green 75; 5 Rast 72; 6 Glock 60; 7 Paffett 55; 8 Rockenfeller 54; 9 di Resta 53; 10 Wittmann 46.





he 25th Goodwood Festival of Speed was a weekend defined by anniversaries, as marques, racing teams and their machines united in celebration.

Ferrari and Williams, two powerhouses of Formula 1 success, respectively

celebrated 70 and 40 years in motorsport with spectacular moments at Goodwood House under a centrepiece statue dedicated to the career of Bernie Ecclestone, a man who has shaped the development of world motorsport and witnessed the fortunes of Ferrari and Williams wax and wane over his four-decade tenure as F1's commercial rights manager. Ecclestone himself was an honoured guest of Lord March.

Current F1 world champion Nico Rosberg lapped up the atmosphere, performing burnouts and stripping his tyres to the core for waves of spectators as AMG celebrated its 50th year in high-performance engineering.

Speeds easily reached by cars and bikes at Goodwood now were once targets to be attained at Brooklands, the world's first purpose-built racing circuit, whose collection took to the hill to mark 110

Reigning world champion Nico Rosberg (above) and Valtteri Bottas drove 2014-spec Mercedes



years since the iconic speedbowl first opened for business.

Of course, the incredible highs of motorsport have often been coupled with tragedy, and Goodwood's outstanding sense of occasion always encompasses both jubilation and commemoration. Goodwood regular John Surtees passed away in March, and, fittingly, a whole batch of machines was dedicated to his success on two and four wheels. One

minute on Saturday was reserved for respectful noise as both the paddocks revved their engines in his memory.



# FERRARI AND WILLIAMS ANNIVERSARIES

FERRARI'S 70TH ANNIVERSARY CELEBRATIONS were held in typical style over the weekend, and the *rosso corsa* paint was truly radiant in the Festival sunshine. The generous group of Formula 1 cars did much to captivate those who ventured into the paddock, while their cylinders sang gloriously up the hill.

There was a real sense of evolution as early Ferraris such as the Ferrari 125/166, which Alberto Ascari took from seventh to second in the 1950 Monaco Grand Prix, were followed by more F1 cars that defined motorsport for a generation, such as Niki Lauda's 1974 312B3 and the handsome 641 from 1990.

The dominant F2002 towered over the Festival as spectators waved Ferrari flags for the 'Ferrari Moment' with the Italian national anthem playing and huge prancing horse banners unveiled outside Goodwood House, showing the culmination of a soulful, passionate journey of the marque's history.

While 30 years younger than Ferrari in manufacturing terms, Williams has woven itself into the tapestry of Formula 1 as an unwavering source of engineering ingenuity and inspiration. Karun Chandhok, a fitting helmsman considering his passion and knowledge for Williams creations, drove the car that marked out the team as a serious competitor in 1978 after a season racing a customer March chassis: the Patrick Headdesigned FW06. Head himself was also present, along with guests including current F1 CEO Chase Carey, Damon Hill, chief technical officer Paddy Lowe and deputy team principal Claire Williams.

Nigel Mansell's all-conquering 1992 FW14B naturally became the centrepiece of the Williams celebration as well, not least because of the iconic 'Red 5' on its nose. The car's active suspension technology is still in working order. To see it up close was great; when in motion the FW14B was simply mesmerising.





#### BERNIE MAKES HIS DEBUT

BERNIE ECCLESTONE, FORMULA 1'S dealmaker supreme for many years, may no longer be in charge but his influence remains profound. Lord March celebrated Ecclestone's accomplishments at the Festival, and not only with Gerry Judah's stunning central feature showcasing 'The Five Ages of Ecclestone'.

On Sunday Lord March drove
Ecclestone up the hill in a pre-war
AC 16/80 two-seater. The pair returned
to Goodwood House, where a
champagne reception was underway
with a live orchestra. After fireworks
and the unveiling of two large
banners, Bernie was interviewed
by Mark Webber, and a host of other
racing personalities came to pay
tribute, including Mika Hakkinen,
Nico Rosberg and Damon Hill.

"What Lord March has done is quite incredible and it just shows you his attention to detail, which everybody must appreciate," said Bernie. "But what's more incredible is the way he's fixed the weather!

"I used to race on the grass [at Brands Hatch] with John Surtees – different times," he reflected on his own racing career. "And I bought Brabham – we ought to get that back together again."

Asked by Webber to name the hardest person to do business with in F1, he provoked laughter by replying, "I think everybody's been nice and very easy to deal with..."

There were six Brabham cars from Bernie's era at the Festival, headlined by the BT46B, the innovative 'Fan Car', which made several runs up the Hill.











LAT IMAGES

#### **RALLY CAR STARS**

THE RALLY STAGE WAS GRACED BY HEAVY-hitters from Group B to current WRC machines. Audi's impressive legacy in the sport shone through with a line-up of Quattros whose aggressive wings and blistering power outputs, particularly the final S1 E2 and the A1 replica, defy the passage of time.

The dusty Goodwood stage, designed in part by Hannu Mikkola in 2005, proved tough as cars such as the anomalous Aston Martin V8 Vantage GT4 emerged with scuffs and scars. Topping the timesheets in Sunday's shootout was Oliver Mellors in the Proton Iriz R5, which made its debut at Goodwood and will compete in WRC2 in 2018.

Back down the hill the unmistakable sound of rally and rallycross machines pierced the air on many occasions. The late Colin McRae's 1997 Subaru Impreza, resplendent in its metallic blue with the famous '555' livery, was an evocative sight, as was the Audi Quattro RS 002 – an abandoned Group S curiosity with a silhouette straight out of science fiction.

On Friday, Pat Doran's Ford RS200 Evo 2 had a close encounter with the hay bales at Molecomb corner after Doran lost control on the preceding straight. His car was swiftly repaired to fight the rest of the weekend alongside James Grint's diminutive but rapid 2017 Mitsubishi Mirage RX, a contender for the top of the leaderboard at the Festival of Speed's shootout and Mitsubishi's answer to rallycross's increasing popularity.



#### THE DFV AT 50

INTRODUCED IN 1967, THE DOUBLE FOUR Valve Cosworth engine, known as the DFV, changed the course of top-line motor racing. Affordable, durable and powerful, it ushered in an era of accessible performance.

Lotus had exclusive use of the DFV that first year, in the successful 49, which was represented in its own class at Goodwood. Jim Clark's 1967 Dutch Grand Prix-winning chassis was driven by owner Chris MacAllister, and the only 49 not to be converted to 'B'-spec was also at the Festival. Adrian Newey appeared with his 49B, which was driven by Graham Hill during the '69 Tasman Series.

The DFV went on wider sale in '68 and supply could barely keep up with demand. Sir Jackie Stewart took his first world championship in 1969 in a Ken Tyrrell-run Matra-Cosworth MS80, and he was delighted to be reunited with it at Goodwood. Sons Mark and Paul followed him up the hill (below) in the DFV-powered Tyrrells, 003 and 006, which JYS drove to title glory in '71 and '73.

Unsuccessful when it originally raced in 1972, the Eifelland-Cosworth E21 won few fans with its unusual design, which included an air intake in front of the driver and one central rear view mirror. Last weekend, however, it went rapidly up the hill in David Shaw's hands, running comfortably under the 60s mark.

James Hunt's 1976 title winning McLaren-Cosworth M23 was also at the Festival, and was driven on Friday by two-time world champion Emerson Fittipaldi.

Peter Connew's eponymous PC1 F1 car, raced by Francois Migault in the 1972 Austrian GP, delighted connoisseurs of obscurata in the paddock. Last seen with its right-front corner crumpled back into its monocoque – after Tony Trimmer crashed it in Chevrolet-engined F5000 (002) guise following suspension failure at Brands Hatch's championship finale in '73 – it has been restored to static display form thanks to the generosity of Doug Nye and Hall & Hall, who loaned a 'blown-up' Cosworth DFV and Hewland gearbox respectively.





LIGHTER STRONGER I FASTER

www.dymag.com | info@dymag.com | +44 (0)1249 446438.





Ferrari 'Sharknose' recreations, more than 50 years after the 1961 title-winning Formula 1 cars were scrapped, was a wonderful surprise. The unusual firing note of a 120-degree V6 engine (right), not heard at an event since '63, was sensational.

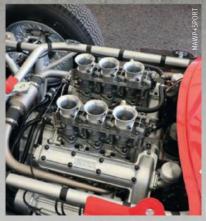
More powerful, and claimed to be 22kg lighter than its 65-degree predecessor, the V6 lowered the car's centre of gravity and was among the keys to American Phil Hill's world championship victory. Fittingly, Hill's son Derek, born in 1975, was at the wheel last weekend.

me, just awesome," said Derek.
"The experience has given me the
motivation to complete a film project
[about his father's title win] I've been
working on for years. I've seen all the
footage, hundreds of photographs,
interviewed many people and now
driven the car!"

The work was realised for Jason Wright by Setford & Company, which built both chassis traditionally around period engines and gearboxes, using the ex-Jan Biekens replica (originated by Mike Mark) as its starting point. It showcases the

Hampshire concern's extraordinary capabilities and tested its engineers' skills. The original cars are long gone.

"It's been six months of torture to get here since we started with an ex-Hill block [the 65-degree version is ex-Ricardo Rodriguez]," said Dan Setford. "We couldn't use the crank or camshafts, and had to make the inlet manifolds, [Weber IF3C] carburettors and oil scavenge pumps," added Mark. The engine has only just run on the dyno and rolling road: "It makes strong power, and we're only using 8500rpm."







#### LAW TOPS THE FASTEST RUNNERS

THIS YEAR'S SHOOTOUT WENT DOWN TO THE wire. Little separated the field, and it came down to the final two runners, with Justin Law going just 0.09 seconds faster than Jeremy Smith to claim the award.

A range of cars took part, from Duncan Pittaway's 1911 Fiat S76 'Beast of Turin' and Julian Majzub's 1927 Bugatti Type 35B, to a pair of Euro NASCAR RC-01s and Jonny Adam in an Aston Martin Vantage GTE.

Behind the leading duo just 1.57s covered third to ninth, and the entire top nine came in under the 50s mark. James Grint was the fastest competitor to cover the first 100m, and completed his run in 49.82s for ninth place, a remarkable time in his Mitsubushi Mirage RX.

Paul Dallenbach was delighted to finish under 50s in his eponymous Special, which

until this year had the open-wheel record at Pikes Peak. He recorded 49.67s in eighth.

Andy Newall took the McLaren M8F Can-Am monster up in 49.41s, and Mike Skinner put it all on the line in his Toyota Tundra NASCAR truck with an impressive 49.02s for sixth.

Overall hill record holder Nick Heidfeld set an electric record in the brand-new Mahindra M4Electro, which will compete in the fourth Formula E campaign. He carved a 48.59s run.

Anthony Reid held top spot for much of the final stages, putting in a sublime 48.28s run in the Arrinera Hussarya GT3. It looked like his time might be unbeatable, but Mark Higgins pipped it by 0.02s in his Impreza WRX, only to be ousted by Smith's Penske PC22 IndyCar. Law then went fastest of all with a 46.13s in the Group C Jaguar XJR-12D.

# **WEB DIRECTORY**

#### **AWNINGS**



**EXHAUSTS** 



#### **GEARBOXES**

# Gearboxman.com COMPETITION TRANSMISSION SERVICES

Gearboxes & Axles for Road, Race, Rally and more

Telephone: 01582 840008 Fax: 01582 840007

#### **HELMET GRAPHICS**



#### Mike Fairholme Designs

Sole approved painter of Arai helmets.

Sliver Birches, Corby Birkholme, Nr Grantham, Lincs NG33 4LE.
Tel: 01476 550630. Fax: 01476 550029.

email: fairholmedesigns@btconnect.com

www.fairholmedesigns.co.uk

#### **MEMORABILIA**



#### RACE PARTS





#### **MOTORSPORT LEGAL ADVICE**

Motor Sport Legal Advice
Tudor Alexander, Ll.B Solicitor
tudor@fletcherday.co.uk 07887 713512
Fletcher Day 56 Conduit St
Mayfair London W1S 2YZ

#### **RACE PARTS**



MOTORSPORT CONTRACTS AND LEGAL ADVICE (NATIONAL AND INTERNATIONAL)

CALL JAMIE CHAMPKIN 07880 965001

info@champkin.uk.com - www.champkin.uk.com

#### **RACE RADIO**



RACING



## PORSCHESHOP

10% off with website voucher code AUTOTEN

Or Call: 0121 585 6088

# 

www.demon-tweeks.co.uk

#### **RACING**





WWW.YBRACING.COM

#### **RALLY PREPARATION**



**TRAILERS & TRANSPORTERS** 



BRIAN JAMES TRAILERS

>>> Connected to you

www.brianjames.co.uk





TO ADVERTISE IN THE WEB DIRECTORY PLEASE CALL **0203 405 8109** OR EMAIL **ads@autosport.com** 



#### Black-and-White

The benefit of a protective transport is always valued when moving precious vehicles. Its now over 20 years since Brian James Trailers were the first to design a stylish, light and durable enclosed trailer using a GRP body construction, the original Race Shuttle.

The Race Transporter range is the third generation in the lineage and for the double decade landmark in MY2017 trailers we have introduced a host of new features, including a professional vehicle restraint system as well as fresh external styling.

Choosing a Brian James Trailer as your enclosed transport solution has always guaranteed black-and-white certainty.

Race Transporters are now available in Black or White.

Range starts from £ 6,750 + vat

BJT also offers a wide range of open trailers.

For more information on our trailer range or to find your nearest dealer

www.brianjames.co.uk/dealer





T +44 **(0)1327 308 833** 

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

# **QUALITY THAT WE ARE PROUD OF**

Woodford GRP covered trailers - Value for money. Superior in design, quality and finish



#### **DEALERS WANTED - All Woodford Trailers have full European Type Approval**







#### **WOODFORD TRAILERS DEALERS UK**

#### РОТНЅМОИТН

BLENDWORTH TRAILER CENTRE
Tel: +44(0)2392 412731
E: sales@blendworthtrailers.co.uk
W: www.blendworthtrailers.co.uk

#### LONDON

VINTAGE & PRESTIGE FINE MOTORCARS Office ++44 (0) 1442 236711 Mobile ++44 (0) 7967 260673 E: richard@vandp.net W: www.vandp.net

#### LONDON-KENT

SOUTHEAST TRAILERS
498 London Road
Ditton, Kent
me206bz.
Tel: 07933842719
E: ellisviner@btinternet.com
W: www.southeast-trailers.co.uk

#### **SOUTH LONDON**

SOUTH LONDON TRAILER CENTRE
Hackbridge Station Depot
London Road
Wallington, Surrey, SM6 7BJ
Tel: 0208 647 0110
Mob: 07836 224250
E: steve@sltc.co.uk

#### WINCHESTER

TRAILERTEK LTD Warren Farm Micheldever Station Winchester, Hampshire SO21 3AS E: info@trailers.co.uk

#### **SLOUGH**

BERKSHIRE COUNTY TRAILERS
Mobile: 07853263484
Tel: 01628 559782
E: sales@berkshirecountytrailers.co.uk
W: www.berkshirecountytrailers.co.uk

#### ESSEX

1 STOP TRAILERS
Tel: +44 (0)1787 249737
Tel: +44 (0)7850 554776
E: 1stoptrailers@mail.com
W: www.1stoptrailers.co.uk

#### BRIGHTON

HALF MOON BAY (LEISURE) LTD Smart-Trailers.co.uk Monastery Lane Storrington, West Sussex RH20 4LR Tel: 07950 968348 E: Alan@Smart-Tow.com

W: www.smart-tow.com

#### LEICESTER

MARSDEN BARN TRAILERS
Unit 1

Marsden Barn
Huncote Road
Stoney Stanton
Leicester
LE9 4DJ
Tel: 01455641367
Mob: 07968888624
E: marsdenbarntrailers@gmail.com

#### NOTTINGHAM

NOTTINGHAM
APPLEYARD TRAILERS
The Kennels
Main St
Strelley
Nottingham
NG8 6PD
Te:.01159293901
Mob:0785075014

#### MID WALES HUMPHREYS & FOULKES

Lion Works Pool Rd, Newtown Powys SY16 3AG Tel: 01686 62<u>8144</u>

#### LEEDS

ROTHWELL TRAILERS
126 Wakefield Road
Rothwell
Leeds
LS26 0SB
Tel: 01132887179
E: sales@rothwelltrailers.co.uk
W: rothwelltrailers.co.uk

#### READING

LOVELL TRAILERS
James Farm
James Lane
Grazeley Green
Reading
RG7 1NB
Tel: 01183240403
E: sales@lovelltrailers.co.uk
W: www.lovelltrailers.co.uk

#### NORTHERN IRELAND

MONTGOMERY MOTORSPORT Tel: 0044(0)2885549851 W: www.montgomery-motorsport.co.uk



#### www.**WOODFORD**TRAILERS.com

HIGH QUALITY TRAILERS FOR CLUB, PRIVATE AND PRO MOTORSPORTS

Woodford Trailers Limited • 14 Great Central Way • Daventry • Woodford Halse • Northants • NN11 3PZ Telephone: 01327 263384

# TRAILERS & TRANSPORTERS

2007 WORKHORSE WINNEBAGO LUXURY MOTORHOME FOR SALE IN PERFECT CONDITION **NEWPORT, SOUTH WALES** 



Length - 34ft

Left hand drive, automatic

Engine size: 8100

Safety Features: ABS, Back seat safety belts, driver airbag, immobiliser, passenger airbag, safety belt pretensioners

Other features: 12v lighting, 240v lighting, air con, alarm, heating, generator, cooker, double glazing, fixed double bed, grill, mains hookup, oven, satellite dish, tv. One private owner - never hired

White with beige details with a grey leather interior

Always fully maintained and serviced Cleaned regularly and kept in a building Sleeps 8 with a separate shower and toilet

Petrol powered

No HGV licence New MOT

Either contact Debbie Bainbridge at debbie@rh-properties.com or Anest Pearce at anest@rh-properties.com or call 01633 682882 to enquire



#### MAKE TRANSPORTING AND STORING EASY WITH A WEATHERWEAVE CONVERTED TRAILER

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

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





FdSc Motorsport Engineering - BSc (Hons) Motorsport Engineering

NEW for January 2018 - MSc Advanced Motorsport Engineering

 $^{*}$  MSc subject to validation. All degrees awarded by our academic partner Staffordshire University



The only TRULY FLEXIBLE route to gaining your Motorsport Engineering Degree

- APPLY ONLINE, choose your own start date &
- Earn while you learn, study flexibly around work & family commitments
- 40% lower fees than other universities

study from anywhere in the world

- Access to student loans for UK students
- Latest industry standard CAD & Simulation software FREE

NMA now has students from Formula 1,
The World Endurance Championship & The World Rally Championship!

http://motorsport.nda.ac.uk









+44 (0)1159 123456



# CALLING ALL HRDC 'ACADEMISTS' PROSTATE CANCER UK NEEDS YOU!



SUPPORT A GREAT CAUSE BY RACING IN THE WORLD'S GREATEST HISTORIC RACE FESTIVAL!

SILVERSTONE CLASSIC 2017 28-30 JULY

JOIN IN WITH THE BEST TEAM IN HISTORIC RACING TODAY!











# MARKETPLACE

MEMORABILIA

**TYRES** 

**RACE PRODUCTS** 



FOR ALL YOUR

TYRES

MOTORSPORT

RACING TYRES
Inc. ACB 10 Formula Ford

Contact

#### BMTR LTD

Tel: 0121 331 1122
Fax: 0121 331 1144
email: sales@bmtr.co.uk
see our new website at www.bmtr.co.uk



#### **RACE PRODUCTS**





#### **NEW PRODUCTS FOR 2017**



#### BATTERY ISOLATOR XR



The new Battery Isolator XR is our most powerful Solid State Master Switch yet.

## CAN-BUS SIGNAL CONVERTER



Now designed for OBD Ports making it even easier to install and to obtain the RPM and Km/h signals

# MARKETPLACE

# **MAUTOSPORT**

If you wish to advertise your products and services with Autosport in print and online please contact Francesca.hall@ motorsport.com or call 0203 405 8108



**STORAGE** 



SYSTEM STORE SOLUTIONS LTD

#### SETTING THE STANDARD IN MOTORSPORT **WORKSHOP DESIGN & STORAGE**



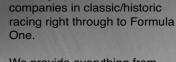












Working with teams and

We provide everything from single cabinets to a total design, layout and installation service, including project management, consultation, technical advice and no obligation site surveys.





Machine shops

Stand-alone workstations

**Transporters** 

Mobile storage units



















01622 859522 SALES@SYSTEMSTORESOLUTIONS.COM SYSTEM-STORE.COM

# **MOTORSPORT JOBS**



Want to advertise a motorsport job?

If you are recruiting in motorsport and wish to advertise with Autosport in print and online please contact

Jonathan.King@motorsport.com

or call 0203 405 8110.

For all current vacancies advertised please visit our website www.autosport.com

AERO TEC LABORATORIES LTD manufactures composite bladder devices and fluid transfer systems for a vast range of sectors, from Racing Cars to Space Craft to Submersibles.

**ATL** has continued market leadership within the motorsport sector, whilst increasing market share and is now gaining momentum within other sectors, such as aerospace and defence.

ATL is proud to remain sole supplier to Formula 1, WEC, including all manufacturers competing in the Le Mans 24 Heures, WTCC, WRC, DTM, Japanese Super GT, GT3 and BTCC. With a base in Milton Keynes, 5 minutes' drive from the train station and close proximity to the A5, ATL is in an ideal location for both employees and customers.

ATL has an exceptional working environment, balancing hard work and a passion for success with an enjoyable and friendly team atmosphere, making ATL an exciting company to work for. There are significant progression opportunities for employees who strive for continual improvement and contribute to the business growth.

#### ATL is currently looking to recruit the following roles:

Bladder Production Technicians (Ref: ATL-CP1)

Foam Technicians (Ref: ATL-CP2)

Design Engineers (Ref: ATL-DES1)

Production Planner (Ref: ATL-PR01)

Production Coordinator (Ref: ATL-PR02)

Graduate Project Manager (Ref: ATL-MAN1)
Quality Inspector (Ref: ATL-QC1)

Quality Engineer (Ref: ATL-QC2)

We are open to discussing full/part-time options for the right candidate for a selection of the roles above.

For further information and how to apply please visit www.atlltd.com





FEDERATION INTERNATIONALE DE L'AUTOMOBILE

The F1 Technical Department of the FIA is seeking to fill the position of:

#### Data Analyst

The successful candidate will be required to attend F1 races and tests, and his main responsibilities will be data analysis to verify compliance with the regulations and physical inspections of on-board systems.

#### Profile:

Candidates are expected to have a background in motorsport data analysis, experience in electronics and control systems and a good knowledge of motorsport chassis and engine systems. The role also requires strong organisation and communication skills, a team player attitude and the ability to work autonomously and in the strictest confidence. Track support experience in a high-level motorsport series and a working knowledge of motorsport ECU set-up tools, Matlab and Simulink would be an advantage.

This position is based on F1 events and in Geneva (Switzerland); fluency in English is required.

If you are interested in this position, please send CV and cover letter to recruitment@fia.com



Mercedes-Benz has been setting the standard in racing for over 100 years, and the Mercedes-AMG Petronas Formula One<sup>™</sup> Team continues the proud history of the legendary Silver Arrows. We have some exciting opportunities at our Championship winning team within our Design Office, Aerodynamics and Machine Shop teams.

#### **COST ENGINEER**

SW1710

Ensuring cost efficiency during design, keeping performance, reliability and reducing manufacturing time. Working within the engineering group on understandable cost models. We're looking for a highly experienced design engineer with knowledge of concepts, manufacturing techniques and cost engineering. Likely a senior designer or cost engineer with design and manufacturing experience.

#### SENIOR STRUCTURAL ANALYSIS ENGINEER SW 1753

The successful candidate will be involved in the design and development of a large variety of mechanical parts with an emphasis on suspension, hydraulic and driver control systems. With a strong academic background in mechanical design, the candidate will demonstrate an in-depth understanding of mechanical systems with an emphasis on component interactions at sub-assembly level and interface behaviours. High attention to details and the ability to produce high quality work in short timescales is required.

#### SENIOR AERODYNAMICIST

SW1738

Reporting to the Group Leader in one of our development teams, you will deliver innovative projects from idea to reality using our state-of-the-art CFD and tunnel facilities. You have an established track record in Formula One aerodynamics, with a creative approach to aerodynamic development and the proven ability to deliver consistent performance improvements.

#### CNC PROGRAMMER / MACHINIST-NIGHTS CH1678

Reporting to the Shift Team Leader the successful candidate will be required to programme, set and operate 5-Axis CNC machine tools to produce complex metallic car components.

CNC PROGRAMMER / MACHINIST 7 MONTHS FIXED TERM CH1740

Reporting to the Shift Team Leader the successful candidate will be required to programme, set and operate 5 axis CNC milling and mill/turn machine tools.

CMM MACHINE SHOP INSPECTOR EARLY/LATE SHIFT 9 MONTHS FIXED TERM CH1685

Reporting to the Machine Shop Inspection Team Leader, you will be responsible for the efficient inspection and verification of components, to ensure adherence to specification, in accordance with defined procedures and priorities.

We invest in our greatest asset: people. They embody our values: Passion, Respect, Innovation, Determination and Excellence.

We succeed when everyone delivers their tenth of a second. No matter which area of the team you work in, you will determine how we perform on and off the track.

Every person here takes immense pride in playing their part to the highest standards. Each and every day. Working here is fast. It demands technical excellence and teamwork. And it calls for great reserves of motivation and resilience.

Own your tenth of a second. Play your part. Join us.

To find out more, visit:

http://careers.mercedesamgf1.com/vacancies

Closing Date: 20 July 2017



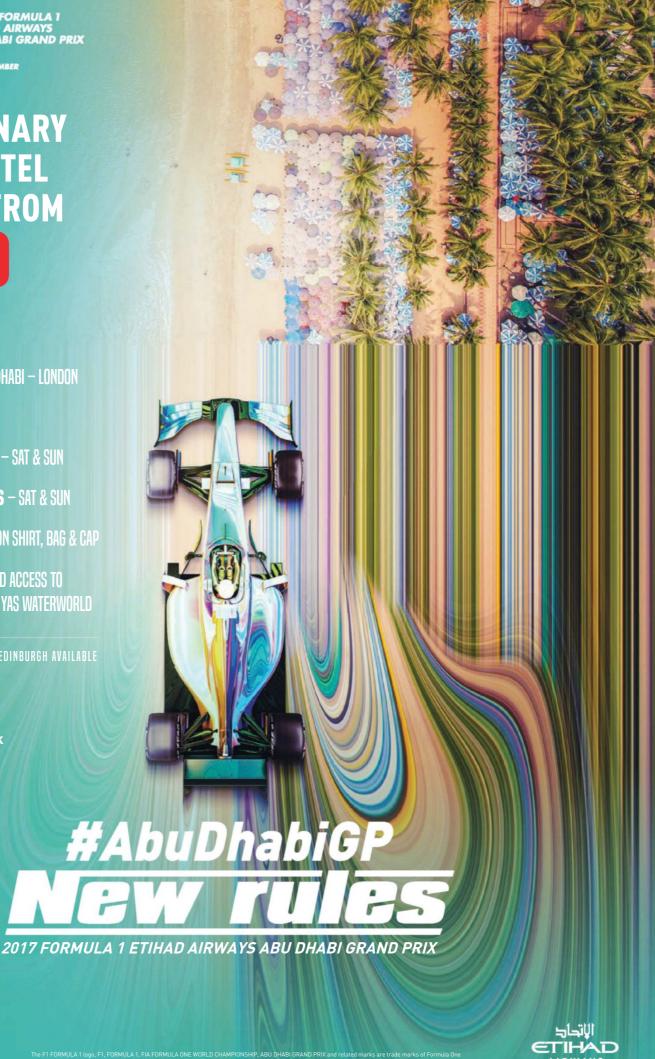
# **EXTRAORDINARY FLIGHT & HOTEL** PACKAGES FROM £ 1,090

- FLIGHTS\* LONDON ABU DHABI LONDON
- HOTEL 3 NIGHTS
- #ABUDHABIGP TICKETS SAT & SUN
- AFTER-RACE CONCERTS SAT & SUN
- RACE PACK F1 LTD EDITION SHIRT, BAG & CAP
- THEME PARKS UNLIMTED ACCESS TO FERRARI WORLD ABU DHABI & YAS WATERWORLD

\* FLIGHTS FROM MANCHESTER AND EDINBURGH AVAILABLE

#### **BOOK NOW**

Visit etihadholidays.co.uk or call **0345 600 8118** 





# CLUB AUTOSPORT

NATIONAL RACING • HISTORICS • HILLCLIMB • TRACK TESTS • FEATURES



# Government won't fund Welsh circuit

THE CIRCUIT OF WALES DEVELOPER has hit back at the Welsh Government after it elected not to part-fund the prospective motor-racing circuit, citing a "fundamental misunderstanding" of the risks involved.

Previously, the government had indicated that it might guarantee against 50% of the £433 million project if the developer, the Heads of the Valleys Development Company (HotVDC), met the other half.

Last week, the Welsh Government's cabinet secretary for economy and infrastructure, Ken Skates, said the authority would be exposed to more than 50% of the risk and was not willing to help fund the project in its current form.

In a lengthy statement that replied directly to many of the due diligence findings on the project, the HotVDC insisted it is "commercially viable

even under downside scenarios".

The statement read: "The Welsh Government would receive a fee of £2.5 million per year, with the project delivering a net economic contribution to Wales of £45 million, every year for the future.

"There appears to be a fundamental misunderstanding of the project risks born by the private sector and we encourage an early meeting with the First Minister to reconsider the decision."

The cabinet report also questioned the 6000 jobs the circuit developers claimed it would create, and said that the figure was "overstated".

Instead, Skates claimed "the number of direct full-time-equivalent [FTE] operational jobs would be little over 100" and that "circuit development could create around 500 indirect FTE jobs... as well as approximately 500 FTE



Silverstone has been the home of MotoGP amid CoW uncertainty construction jobs while the track was being built".

Responding to this, the HotVDC said: "This is factually incorrect and indeed does not reflect the figures we provided during the due diligence process."

The Circuit of Wales signed a five-year deal with Moto GP promoter Dorna in 2014 to host the British Grand Prix, before delays to the funding resulted in Silverstone taking over the race.

#### Comprehensive motorsport insurance products to keep you on track;

- Accident damage On Track
- Rally damage On Event
- Storage and Transit
- **Ø** Liability
- Personal Accident

Log on to www.ryanmi.com to obtain your online quote

Email - info@ryanmi.com Tel - +44 (0) 1799 524202





**BRITISH GT** 

# Factory Audi squad for Brit GT at Spa

FACTORY AUDI SQUAD WRT HAS ENTERED this weekend's round of the British GT Championship at Spa, running a single Audi R8 LMS for team regular Stuart Leonard and French veteran Alain Ferte.

The Belgian team is using the two one-hour British GT races this Saturday as an extended test ahead of the Spa 24 Hours on July 29-30.

Leonard, who will contest the 24 Hours alongside Jamie Green and Jake Dennis, teams up with Ferte, a race winner in the World Sportscar Championship with Jaguar in 1990, for the first time since they took victory in the Dubai 24 Hours with WRT in January 2016.

Ferte, 61, will dovetail his appearance in the

British GT encounter with an outing in the accompanying Fun Cup 25 Hours.

"The British GT round sits perfectly as preparation for the 24 Hours," Leonard said. "The race is right on WRT's doorstep so it was a no-brainer to enter.

"When we did the 24 Hours last year we tested in mixed conditions, so went into the race really down on mileage. This will help alleviate that problem this year. It's a shame it's two one-hour races, not a two-hour, as we could have used the tyre data from that, but it'll still be useful and good fun."

WRT is one of four new GT3 entrants joining for Spa, including a third Barwell Lamborghini

Huracan for Blancpain Endurance Pro-Am contenders Patrick Kujala and Adrian Amstutz.

Kessel Racing will run a Ferrari 488 GT3 for Carlo van Dam and Piti Bhirombhakdi, while Kornely Racing takes a Mercedes-AMG GT3 for Kenneth Heyer and Patrick Assenheimer, bringing the GT3 grid to a season-high 14 cars.

• Ebor GT returns to the GT4 class at Spa with its Maserati for the first time this season, with Matthew Graham and Charlie Fagg set to drive. Ex-Formula Ford ace Jesse Anttila will replace Graham alongside Marcus Hoggarth in the In2 Racing McLaren, with Jacques Duyver driving solo in the team's second car.

LMP3 CUP

# O'Keeffe targets more sportscar outings after LMP3 debut

LMP3 CUP YOUNG DRIVER INITIATIVE finalist Callan O'Keeffe has targeted more outings in the series after securing a brace of thirds and fastest laps for Douglas Motorsport at Silverstone last weekend.

The South African, who normally races for Douglas in the BRDC British Formula 3 Championship, is one of 10 drivers in the frame to win a fully funded drive alongside Sir Chris Hoy

in the final round of the championship at Donington, but received a last-minute call-up to replace regular drivers Mike Newbould and Thomas Randle. The latter was contesting the Formula Renault Eurocup round at the Hungaroring.

Driving solo, without a 'bronze' driver as mandated by the rules, 21-year-old O'Keeffe was not registered for championship points and had to serve a one-minute penalty in both races, but gave Douglas a first double-podium of the season on his first outing in a closed-cockpit sportscar.

"I've already spoken to a few people in the paddock, and hopefully Wayne [Douglas, team boss] would like to get me back in the car at some point," O'Keeffe said.

"It's nice to already have some experience in the car, and it's also

motivated me further to push on and hopefully try and win [the Young Driver Initiative]. I've really enjoyed this weekend and I'd love to come back."

Le Mans Cup regular Alex Kapadia made his first appearance in the championship in the second Nielsen Racing entry alongside Dean Gibbs.

Only six cars appeared at Silverstone, with Tockwith Motorsport and HPR Motorsport both absent.





#### **HISTORICS**

## **Ex-F2 March runs at Brands Hatch**

CLASSIC CLUBMANS ACE MARK Charteris swapped his regular Mallock for a newly rebuilt March 742 in the Derek Bell Trophy at Brands Hatch last weekend.

Currently running in 1600cc Formula Atlantic trim, the former F2 car was raced by Italian Gabriele Serblin in 1974 but latterly spent 30 years in a container in the US. Charteris managed a best result of seventh in race one, after finishing ninth in the opener. "This is just a shakedown, but I hope to use it regularly and eventually step up to a 2-litre BDG engine for F2," he said. "I've been spoilt with the Mallock."

Help is coming from Richard Evans, who also races a 742 in Historic F2.

#### FORMULA FORD 1600

# Murray to complete NI FF1600 season

REIGNING BRSCC FORMULA Ford 1600 National champion Niall Murray will complete the season in the Northern Irish Formula Ford series, with a view to a second attack on the Road to Indy Shootout.

Murray switched to the Creventic 24 Hour Series with Geva Racing this season, but the Ginetta G50 he was driving suffered an engine failure in the Silverstone 24 Hours.

Murray is leading the Northern Irish championship and wants to return to the Road to Indy Shootout at Laguna Seca, where the winner receives £160,000 towards a season in USF2000.

"Luckily enough, the week before the Silverstone race

I did the first round of the Formula Ford Championship up north so I still had something to fall back on," said Murray, who is driving a Van Diemen LA10.

"It's not costing us a whole lot to do it and the chance to go back to the Road to Indy Shootout is a big reason that we're doing it."



#### **GT CUP**

# **Tuck plans British GT move in 2018**

CATERHAM RACER BEN TUCK IS EYEING a move to British GT next year after scoring a class win on his GT Cup debut at Silverstone.

The 20-year-old shared the PT Sports Cars Ginetta G55 GT4 with Ian Payne. They finished eighth overall in the pitstop race to top the GTA class, after taking a second apiece in their respective sprint races.

Tuck said he felt comfortable in the Ginetta and could add further outings to his existing Caterham commitments later in the year.

"It was an absolutely perfect start to my GT career — it's definitely something that I'm going to aim for next year," he said.

"British GT is the goal — if I can't get the budget then I'll definitely come back to the GT Cup because I've loved my weekend here.

"We didn't change the set-up once this weekend, but I got used to the car pretty quickly and now I feel like I'm confident."

#### **IN BRIEF**



#### **EX-OPTIMUM GINETTA TO GT CUP**

Last year's British GT4 championship-winning Ginetta G55 made a first appearance in the GT Cup at Silverstone last weekend, after it was bought by Black Mamba Racing. Still dressed in the distinctive colours of Optimum Motorsport, the Ginetta (above) managed a best result of eighth in the GTA class with Chris Papageorgiou driving.

#### **SAUDI RACER JOINS F3 CUP GRID**

Omar Gazzaz made his F3 Cup bow at Silverstone last weekend and said he hoped to fly the flag for Saudi race drivers after finishing fourth in race two. With a new Saudi Arabian circuit in the process of construction, Gazzaz hopes the country will get behind his efforts: "There are no Saudi drivers in the spotlight and none in single-seater racing, so my hope is to make a name for myself."

#### HAMMOND LENDS NOVA TO GIRLFRIEND

Double Classic Stock Hatch champion Pip Hammond will lend his Vauxhall Nova GTE to his girlfriend Esther Quaintmere for her racing debut at Silverstone next month. Quaintmere, who has a background in engineering, passed her ARDS test in April. "My entire family is going to be there and basically everyone I know, so I'll have a great support system," she said.

#### **FORMULA JEDI GETS NEW NAME**

The Formula Jedi series has been rebranded as Formula 1000 as part of a relaunch as the category celebrates its 20th birthday. The one-make BRSCC series has faced a difficult start to the season with grids only just into double figures, but has been rebranded with immediate effect in the hopes of refreshing the championship. New awards will also be offered for drivers and team members, such as driver and technician of the meeting.

#### **GLANVILL HOPEFUL OF MINI RETURN**

Emily Glanvill aims to contest more Scottish Mini Cooper championship rounds this season after making her debut at Knockhill last weekend. The Junior Saloon graduate (below) had not raced since October 2016 owing to a lack of funds. "I feel so comfortable in the Mini, it definitely suits my driving style," she said.





**FF2000** Almost four decades after he last raced a Formula Ford 2000, racer and constructor Adrian Reynard returned to the category at Brands Hatch last Sunday in the car he drove back in 1978. The Reynard SF78 is now owned and raced by James Lovett, who invited Reynard to drive the car again. "It's 40 years since I last drove on the Brands Hatch Grand Prix circuit," said Reynard, who finished 13th in the race, adding: "I'm probably not quite as daring as I was in the 1970s..." **Photograph by Gary Hawkins** 

PORSCHEDRIVERS' ASSOCIATION

# **Celebration for Porsche and 924**

THE PORSCHE DRIVERS' ASSOCIATION WILL MARK 25 years since its first-ever meeting with a celebration race for 924s later this year.

The event, which takes place at Donington Park on September 30 during the 750 Motor Club meeting, also coincides with the 924's 40th anniversary in the UK. The PDA co-organises the BRSCC Porsche Championship for Boxsters and 924s.

"It's a poor man's Porsche, but funnily enough probably 75% of the drivers in the club have a proper Porsche like a 911, and yet they like to race the 924,"

said PDA member and event organiser Philip Waters.

"It's just a fantastic car to race — it's so beautifully balanced. It's got no power and drum brakes at the back, but it handles like a dream because it's so well aligned. It's a joy to drive."

Eleven drivers have already signed up for the event, including three-time Porsche Boxster champion Richard Styrin.

"We've got about 41 members in total. Some of the Boxster drivers are interested in racing 924s," added Waters. "If we're lucky we will have 25 cars on the grid."

**FIAHISTORIC MASTERS** 

#### HISTORIC FRENCH GP HONOURS SPLIT

BRITON MICHAEL LYONS ('RAM Williams FW07B') and Belgian Loic Deman (Tyrrell 010) each beat the other in the inaugural GP de France Historique's FIA Masters F1 races at Magny-Cours last weekend.

Lyons won in the wet on Saturday, and led on slicks on Sunday's damp track before the rain returned and wet-shod Deman capitalised.

Pre-1978 honours were also shared, between Brits Greg Thornton (Lotus 77) and Max Smith-Hilliard (Fittipaldi F5A), who finished third overall in race two.

Monegasque F3 Classic ace Fred Lajoux stepped up to an Arrows A1 and astounded by landing bronze on Saturday.

Steve Boultbee Brooks also debuted, with a best result of eighth in a Lotus 81.

Portugal's Diogo Ferrao, sharing with double FIA F1 champion Martin Stretton, was overjoyed to win his first FIA Masters Historic Sportscar round in his ex-Carlos Gaspar BIP Lola T292.

Mike Donovan (Lola T70 Mk3B/c) was runner-up. Nils-Fredrik Nyblaeus/ Jeremy Welch won the rain-shortened enduro in the Swede's Austin-Healey 3000.

#### HISTORIC 750 FORMULA

# Anthony Reid to Historic 750 Formula

FORMER BRITISH TOURING Car star Anthony Reid will race in the Historic 750 Formula at Anglesey this weekend.

The Le Mans podium finisher and 15-time BTCC race winner took a first and a second on his 750 Motor Club Classic Stock Hatch debut last month, driving a Peugeot 205 GTi.

He enjoyed the experience and has now been offered another 750MC outing. This time the 62-year-old will drive Michael Dorsett's Time 3B.

"I think it'll be a completely new experience," said Reid. "I know nothing about the car or the competition, so it will be a step into the unknown, but I'm always up for driving something new and I love Anglesey. I'm looking forward to it."

Paul Mason finished eighth in the Class C Time in the previous round of the series at Brands Hatch.

The Historic 750 Formula was rebranded this year as part of a push to get more Austin Seven-derived machines back on track.





# Goodwood leads to Brands Hatch

By Marcus Pye, the voice of club racing



#### LAST WEEKEND WAS ONE OF CURIOUSLY MIXED

emotions as I combined Goodwood's 25th Festival of Speed with Formula Ford's 50th anniversary at Brands Hatch. Having reported every edition from Lord March's quaint 'garden fete with racing cars and motorcycles' toe-dipper of 1993 and commentated since '94, I was not expecting to feel so utterly bereft turning up at Goodwood House bright and early on Friday, to avoid the traffic, yet without remit.

The startline comms position — my home for three days most years — was discontinued, but I couldn't resist catching up with former hillclimb ace Tim Thomson's BARC course control team, TSL's timekeepers and the marshalling team (Alan and Fay Crook; Peter and Donna Vernon-Lawes) with whom I'd evolved a great rapport. Even without the adrenalin rush of calling it live it was still fun to watch, of course, and the opportunity to scour the improved paddocks to see the FoS from a different perspective was a novelty.

I loved Jason Wright's magnificent 'twin' Ferrari 156 sharknose replicas built by Dan Setford's gifted local team over three years. Getting the very incomplete 120-degree V6 engine running to a deadline, for Derek Hill to better appreciate his late father Phil's 1961 World Championship title, was a remarkable achievement. It was also wonderful to talk to Arturo Merzario (45 years after I first watched him compete, finishing sixth for the Scuderia on an impressive F1 debut in the British GP at Brands Hatch in '72), who exercised the earlier 65-degree V6.

Formula Ford's big birthday brought a host of luminaries back to Kent's cathedral of speed. It was led by Ray Allen, who won its maiden race on July 2 1967, and 1978 Aurora AFX British Formula 1 champion Tony Trimmer, who was a mechanic grafting at Motor Racing Stables, where boss Geoff Clarke developed the idea of an inexpensive-to-operate, productionengined single-seater for race-school use. It was championed and brought to fruition with circuit group boss John Webb and Ford's Henry Taylor and Walter Hayes.

Allen and Trimmer were among numerous star guests who entertained 190 people at a special HSCC dinner on Saturday in the MCD centre, which boats the greatest panoramic view over any British circuit.

Among the speakers were Richard Mallock (the first driver to crash an FF car officially, on the first race's warm-up lap), Bob Evans, Elden designer Peter Hampsheir, Rick Morris, Lola sales manager Mike Blanchet and Royale boss Alan Cornock. Also present at an evening Ian Titchmarsh and I compered were Richard Robarts, Wil Arif, Hugh 'Palliser' Dibley, '84 FF Festival winner Gerrit van Kouwen, Champions of Brands Andy Ackerley and Karl Jones, and Chris Alford, who introduced Pre-'72 FF1600 to the HSCC.

The club's executive director Grahame White started the weekend's Historic FF Championship rounds the traditional way, with a Union flag. Both finals were epics, but it was difficult to keep my cool since my ex-Rob Cooper Merlyn Mk20 was out for the first time in more than a decade, especially when it was whizzing round in the lead for a while in Ben Mitchell's hands. Among those watching from the pits on Saturday were local favourites of yore Chris Ringrose, Colin Stancombe and Trevor Stiles, on whose racing exploits I reported in my early days with Autosport.



#### **GRANT AFTER IMPNEY REVENGE**

Historic Formula Ford Championship leader Callum Grant plans to avenge last year's narrow defeat at the third Chateau Impney Hillclimb retrospective this weekend. Fifty years after the final period sprint at the Droitwich landmark, a superlative historic entry includes four ERAs and ex-F5000 star Steve Thompson in a Ford Mustang.

#### **RON CARNELL**

The smiling Duckhams Oils competition manager since the late 1960s, Ron Carnell died last week. Ron was the consummate professional with an encyclopaedic knowledge of motorsport and the lubrication demands of competitors, from the iconic Q20-50 era to synthetic QXR. He maximised awareness of Duckhams products through helping impecunious clubmen and rising stars. For two decades the company's blue-and-yellow colours were synonymous with Ralph Firman's allconquering works Van Diemens, driven by the likes of future F1 drivers Eddie Irvine, Jan Magnussen and Mark Webber, and BTCC champion Jason Plato. "Ron was like a father to me, a friend for life," said 1983 FF1600 Champion of Brands Karl Jones, the Welshman whom Carnell took under his wing.



#### **SURGERY FOR COLMAN AFTER CRASH**

Previous HSCC Guards Trophy race winner Mark Colman has undergone surgery on an open fracture to one ankle following a high-speed accident in his Chevron B8 at Paddock Hill Bend, which stopped Sunday's round at Brands Hatch. Marshals and medics extracted Colman, stabilising him at the scene before transferring him to hospital.

**BRANDS HATCH HSCC JULY 1-2** 

## **Jackson wins** on Formula Ford's 50th

SAM MITCHELL AND CAMERON Jackson won two breathtakingly thrilling Historic Formula Ford races, scything from 10th and 13th on the grid respectively as the class's golden jubilee took centre stage at the HSCC's annual Legends of Brands Hatch Superprix.

On Sunday, 50 years to the day after he won the (processional) inaugural race on the club layout in a Lotus 51, Ray Allen and luminaries from the past watched Sunday's magnificent drama unfold as Jackson prevailed in David Wild's Lola T200.

Jackson, top qualifier Michael O'Brien and returnee Ben Mitchell (debuting your reporter's Merlyn Mk20) led before 2013 champion Sam Mitchell (also Merlyn Mk20-mounted) pounced to win Saturday's epic, with O'Brien, Ben Mitchell and points leader Callum Grant in his wake. Andrew Mansell (Merlyn Mk11A) escaped injury when he rolled out at Druids. Jackson retired when his ignition trigger moved, but shot from 25th to beat the Mitchell boys' father Westie and Saturday qualifier winner Ed Thurston in Sunday's Q-race.

Sam and Ben Mitchell led Sunday's frantic opening lap before Grant slipped ahead, taking Sam and O'Brien with him. Jackson then hit the front on lap eight. An increasingly brakeless Grant countered, but O'Brien grabbed second on the final tour. Sam Mitchell in fourth was honoured to win the John Webb Trophy, presented by the class's co-founder for best aggregate result.

Driving his Brabham BT2, Jackson had already won an unusually dull Formula Junior race, easily negating a 10-second penalty for creeping at the lights. Benn Tilley demoted fellow Lotus 22 man Mike Hibberd for second on lap two, while debutant Mark Shaw (ex-Denny Hulme BT6) ambushed Hibberd into Paddock on the last lap to claim third.

Once Robert Oldershaw had retired



and Nick Riley had supplanted Ben Short, there was no stopping Graeme and James Dodd in the E-type-rich Jaguar Classic Challenge. If Jamie Boot was chuffed with second, Costas Michael was overjoyed with a class-winning third on his series debut. The XK battle went to the wire, Paul Kennelly pipping Marc Gordon.

Thirteen days after his Ford Falcon finished on its roof at Cadwell Park, Jack Drury's consummate Touring Car victory was an emotional reward for the Terry Drury Racing team's rebuild efforts. Top qualifier Warren Briggs never recovered from a poor start and settled for second in his Mustang ahead of a superb struggle between the Lotus Cortinas of Pete Chambers, Ben Winrow and Rick Belcher. Imp men Steve Platts, David Heale and Simon Benov finished even closer!

Fuelling dramas silenced the thunderous F5000 March 73A of Saturday's Derek Bell Trophy winner Iamie Brashaw on Sunday, freeing Richard Evans (FAtlantic March 79B) to win and set the weekend's fastest lap. Evans had survived being tagged by Mark Dwyer, whose F2 March 782 then flicked Neil Glover's Chevron into a spin exiting Druids, to take second on day one. Glover recovered to third, improving to second on Sunday after a scrap with Paul Campfield's earlier F5000 Chevron.

Saturday's concurrent Classic F3 points went to Max Bartell (Chevron B34), who kept Cameron Jackson (ex-Oscar Larrauri Euroracing 101) and Gaius Ghinn (Ralt RT3) behind. Classic Racing Cars joined CF3 on Sunday, Bartell staving off Richard Trott (Chevron B43). Jackson rounded Ghinn imperiously at Paddock for third before his Alfa Romeo engine went sick, thwarting his hopes of winning in three cars. The sight of Glenn Eagling (Ensign LNF3) and Iames Denty (GRD 373) rekindled memories of F3's 1600cc era, while Martin Anslow (Brabham BT21) beat Lorraine Gathercole for CRC gold.

Leo Voyazides and Simon Hadfield won the pre-1980 Challenge enduro in the Greek's gorgeous Lola-DFV T282, but long-time leader John Burton (Chevron B26) repelled Hadfield robustly. Simon's former employer Richard Piper (March 75S) made it three BRDC shields on the podium. Sports 2000 winner Jonathan Loader (Loaded Gunn Tiga) punched above his weight in an entertaining duel with George Douglas's Martin.

Will Plant growled his Morgan +8 past the Lotus Elans of Peter Shaw and John









Davison to win a fine Historic Road Sports round. Davison fell away as they lapped a wonderful 10-car multi-marque battle, then scorched back onto Shaw's tail, finishing just nine tenths in arrears.

Ignition problems stopped '70s Road Sports polesitter Will Leverett's Lotus Europa, by which time fastest-starter Charles Barter had re-established his Datsun 240Z ahead of Jim Dean's Europa. Guest driver Tom Bradshaw bustled the Porsche Classic Partner Centres 928 to third, matching Richard Attwood's wet Silverstone result.

Historic FF2000 champ Andy Park and URS ace Marc Mercer re-enacted last year's fight, finishing together in an event graced by 1979 Euroseries champion Adrian Reynard, who finished 13th, 40 years after his last GP circuit start. Despite running father Sean over as his Osella was push-started, Tom White claimed third and early HFF2000 honours. Mercer's dad David won the URS equivalent.

James Dodd's Honda dominated two very similar Super Touring races. Double BTCC champion John Cleland placed second each time, the Scot fighting off a knackered Iason Minshaw who wrestled his ex-Rickard Rydell Volvo home without power-steering on Saturday. He connected it on Sunday, only to have to switch it off when the alternator failed.

Poleman Max Bartell and Ben Mitchell had earned Guards Trophy victory in the Elva Mk7S, which Keith St John raced here exactly half a century ago, when Mark Colman's horrific shunt at Paddock stopped the race. The result was wound back a lap, crediting Charles Allison (B8), one of two drivers yet to make their mandatory stops!

MARCUS PYE

Sam Mitchell took opening Historic Formula Ford glory

in his Merlyn Mk20

#### **RESULTS**

#### HISTORIC FF1600 (ALL 12 LAPS), **SATURDAY FINAL 1 Sam Mitchell**

(Merlyn Mk20); 2 Michael O'Brien (Merlyn Mk20SS) +1.200s: 3 Ben Mitchell (Merlyn Mk20); 4 Callum Grant (Merlyn Mk20A); 5 Benn Tilley (Merlyn Mk20): 6 Richard Tarling (Macon MR8). Class winner Stuart Kestenbaum (Crossle 16F). Fastest lap S Mitchell 1m38.637s (88.80mph). Pole O'Brien.

#### Starters 38, OUALIFYING HEAT

#### 1 Ed Thurston (Elden Mk8); 2 Michael Grant Peterkin

(Brabham BT21) +9.647s; 3 Rob Smith (Merlyn Mk20); 4 Kestenbaum: 5 Ross Drybrough (Merlyn Mk20AS); 6 Brian Morris (Lola T202). FL Kestenbaum

#### 1m40.155s (87.45mph). P Thurston. \$ 38. SUNDAY FINAL

#### 1 Cameron Jackson (Lola T200):

2 O'Brien +0.459s; 3 Grant; 4 S Mitchell; 5 Tarling; 6 Benn Simms (Jomo JMR7). CW Westie Mitchell (Lotus 59). FL O'Brien 1m38.331s (89 07mph) P S Mitchell S 38 Q-HEAT 1 Jackson; 2 W Mitchell

+9.513s; 3 Thurston; 4 Morris; 5 Smith; 6 Tim Brise (Merlyn Mk20). FL Jackson 1m38.511s (88 02mph) PW Mitchell S 37

#### **FJHRA FORMULA JUNIOR**

#### (12 LAPS) 1 Cameron Jackson

(Brabham BT2); 2 Benn Tilley (Lotus 22) +3.277s: 3 Mark Shaw (Brabham BT6): 4 Michael Hibberd (Lotus 22); 5 Laine Martin (Lotus 20); 6 Iain Rowley (Lola Mk5). CW Martin; Nick Finburgh (Envoy Prototype); Justin Fleming (Lola Mk2): Simon Durling (Lotus 18); Shaw. FL Jackson 1m40.998s (86.72mph), P Jackson, \$ 30.

#### **JAGUAR CLASSIC CHALLENGE**

(22 LAPS) 1 Graeme & James Dodd (E-type): 2 Jamie Boot

(E-type) +45.176s; 3 Costas Michael (E-type); 4 Mark Russell (E-type); 5 Ben Short/Nick Riley (E-type); 6 Robert Farrell (E-type). CW Michael; Chris Milner (E-type): Paul Kennelly (XK150S). FL J Dodd 1m44.851s (83.54mph). P J Dodd. \$ 23.

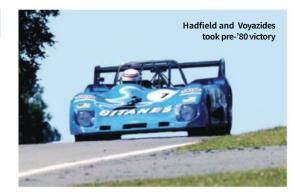
#### HRSR HISTORIC TOURING CARS

#### (11 LAPS) 1 Jack Drury (Ford

Falcon); 2 Warren Briggs (Ford Mustang) +4.355s; 3 Peter Chambers (Ford Lotus Cortina): 4 Ben Winrow (Cortina); 5 Richard Belcher (Cortina); 6 Peter Hallford (Mustang). CW Chambers; Bob Bullen (Ford Anglia 105E); Steve Platts (Singer Chamois); Roger Ebdon (Morris Cooper S). FL Drury 1m49.573s (79.94mph). P Briggs. S 26. **DEREK BELL TROPHY &** 

#### CLASSIC F3 (11 LAPS) 1 Jamie **Brashaw (March-Chevrolet**

73A): 2 Richard Evans (March-BDA



79B) +4.670s; 3 Neil Glover (Chevron-Chevrolet B37); 4 Paul Campfield (Chevron-Chevrolet B24); 5 Frank Lyons (Eagle-Chevrolet FA74): 6 Frazer Gibney (March-BMW 782).CW Evans; Gibney; Chris Atkinson (Surtees-Chevrolet TS8); Max Bartell (Chevron-Toyota B34); Marc Mercer (Van Diemen-Ford RF82); Glenn Eagling (Ensign-Lotus LNF3). FL Evans 1m26.015s (101.83mph). P Brashaw. \$ 29. RACE 2 (14 LAPS) 1 Evans; 2 Glover +25.435s: 3 Campfield: 4 Lyons; 5 Michael Bletsoe-Brown (Chevron-BDG B27); 6 Atkinson. CW Glover; Bletsoe-Brown; Atkinson. FL Evans 1m25.170s

#### **CLASSIC F3 & CLASSIC RACING** CARS (12 LAPS) 1 Max Bartell (Chevron-Toyota B34);

2 Richard Trott (Chevron-Toyota

(102.84mph), P Brashaw, S 16.

B43) +1.936s: 3 Gaius Ghinn (Ralt-Toyota RT3); 4 Keith White (Ralt-Toyota RT1); 5 David Thorburn (Ralt-Toyota RT3); 6 Graham Kiddy (Argo-Toyota JM3). CW Martin Anslow (Brabham-Lotus t/c BT21); Glenn Eagling (Ensign-Lotus t/c LNF3); Lorraine Gathercole (March-BDA 712). FL Ghinn 1m32.357s (94.84mph). P Bartell. S 18. JOHN TAYLOR TROPHY

#### **HISTORIC & URS FF2000**

(11 LAPS) 1 Andrew Park

(Reynard SF81); 2 Marc Mercer (Van Diemen RF82) +0.883s: 3 Tom White (Osella FAF); 4 Graham Ridgway (Reynard SF78); 5 Alexander Fores (Royale RP27): 6 Chris Lord (Van Diemen RF82). CW Mercer; White; David Mercer (Reynard SF78); Jeff Williams (RF82), FL Park 1m33.970s (93.21mph). P Park. S 25.

#### **HISTORIC ROAD SPORTS (11**

LAPS) 1 Will Plant (Morgan +8); 2 Peter Shaw (Lotus Elan S1) +0.932s: 3 John Davison (Lotus Elan); 4 Kevin Kivlochan (Morgan +8); 5 Andy Shepherd (Lotus 7 S1); 6 Frazer Gibnev (Elan S1). CW Shaw; Shaun Haddrell (Turner Mk1): Larry Tucker (Shelby Mustang GT350); James Owen (Triumph TR5); Nik Spencer

#### (MGB). FL Davison 1m46.419s (82.30mph). P Davison. \$ 28. '70s ROAD SPORTS (11 LAPS)

#### 1 Charles Barter (Datsun 240Z);

2 Jim Dean (Lotus Europa) +8.529s; 3 Tom Bradshaw (Porsche 928); 4 Mark Leverett (Lotus Elan); 5 Stephen Cooke (Lotus 7 S4); 6 Mark Bennett (MGB GTV8) CW Dean: Bradshaw: Chris Fisher (MG Arkley); Brian Jarvis (Porsche 924). FL Barter 1m48.908s (80.42mph). P Will Leverett (Lotus Europa). \$ 25. PRE-'80 ENDURANCE

#### **CHALLENGE (40 LAPS) 1 Leo**

Vovazides/Simon Hadfield (Lola-DFV T282); 2 John Burton (Chevron-BDG B26) +8.970s: 3 Richard Piper (March-BDG 75S): 4 Robert Parker (Osella-BMW PA5); 5 Neil Glover/Ross Hyett (March-Chevrolet 717); 6 Peter Hallford (Chevrolet Corvette). CW Burton: Jonathan Loader (Tiga-Ford SC80). **FL** Hadfield

#### 1m26.536s (101.22mph). P Hadfield. S 13. **SUPER TOURING (BOTH**

#### 12 LAPS) 1 James Dodd (Honda

Accord); 2 John Cleland (Vauxhall Vectra) +6.370s; 3 Jason Minshaw (Volvo S40); 4 Graeme Dodd (Accord): 5 Mark Smith (BMW E30 M3): 6 Keith Butcher (Audi A4). **FL** J Dodd 1m35.821s (91.41mph). P J Dodd. S 9. RACE 2 1 J Dodd: 2 Cleland +16.827s; 3 Minshaw; 4 G Dodd; 5 Smith; 6 Mark Wright (Ford Sierra Cosworth).

#### **GUARDS TROPHY (13 LAPS)**

P J Dodd. S 9.

#### 1 Charles Allison (Chevron B8):

**FL** J Dodd 1m36.161s (91.08mph).

2 Max Bartell/Ben Mitchell (Elva Mk7S) +1m07.686s; 3 Robbie Bernberg/Paul Ugo (Chevron B8): 4 Darren Wilson (Lotus 23B); 5 Nick Thompson/Sean McClurg (Chevron B6); 6 Michael & Andrew Hibberd (Lotus 23B). **CW** Bartell/ Mitchell; Wilson; Leo Voyazides/ Simon Hadfield (Shelby American Daytona Coupe); John Davison (Lotus Elan 26R); Michael Lillywhite (MGB); Bob Binfield (Jaguar E-type). FL Bartell 1m39.910s (87.67mph). P Bartell S 29



GT CUP CHAMPIONSHIP LEADER Graham Davidson was all at sea with understeer in Friday testing at Silverstone, but his fortunes were transformed when Matt Bell jumped into his Jetstream McLaren MP4/12C GT3 for a few laps. Advised by the ex-McLaren racer to make adjustments to the anti-rollbar, springs and damper settings, Davidson found *seven* seconds in Saturday morning's qualifying session and went on to take two wins from three races.

A late safety car in the opener allowed Leyton Clarke's GTC Ferrari to close, but Davidson never looked threatened. He then dominated the second race, winning by more than half a minute from Nigel Hudson's Aston Martin Vantage GT3.

With a 45-second success penalty carried over from Spa, and none for the Aston, Davidson fitted old tyres for the pitstop race and led the early stages before collecting points for second, as Hudson and co-driver Adam Wilcox notched up their second win of the season.

"It was going to take a safety car in the second half of the race to bunch it up, but overall I'm really pleased," Davidson said. "Friday was a big improvement — it made all the difference yesterday and made things a lot easier for me today on tyres that are spent now!"

Having lost his best qualifying time to a track-limits violation, Jake Rattenbury had climbed to second in the opener before his Lamborghini's right-rear tyre let go at Maggotts, but he bounced back to take a brace of GTC class wins, both times in third overall.

LMP3 Cup championship protagonists Alasdair McCaig/Colin Noble and Tony Wells/Matt Bell took a win and a second apiece to maintain the status quo in the title race.

United Autosports driver Wells struggled for confidence in race one and was unable to challenge McCaig in the opening stint, before Noble and Bell both passed ailing leader Andrew Evans. But overnight set-up tweaks brought the car to life and enabled Wells to edge away from McCaig in race two, while keeping pace with polesitter Christian England, sharing with Evans. After the stops, Bell took the lead into Club, then managed the gap to Noble.

Driving solo in the Douglas Motorsport entry, BRDC F3 regular Callan O'Keeffe impressed on his sportscar debut to secure a pair of thirds, overcoming a one-minute penalty in each for running without an amateur co-driver. Davidson took his ninth win of the year in race two Wade Eastwood picked up where he'd left off at Snetterton, taking a pair of dominant victories in F3 Cup to make it five wins from as many races this year. He had to fight to retake the lead from championship leader Jacopo Sebastiani on the opening lap of race one after a poor getaway from pole, but once in front he cruised to the win ahead of Sebastiani and Robbie Watts.

Eastwood was comfortable in race two, winning from pole, although Shane Kelly had a sniff at the lead on the final lap at Brooklands. UWR driver Kelly had limited the damage to his title hopes caused by stalling on the grid in the first outing, prompting a fighting drive to sixth. Sebastiani rounded out the podium in third, continuing his 100% streak of top-four finishes this year. Although yet to win a race, the Italian's points margin over nearest rival Kelly has increased as the championship now heads into its second half.

Savage fended off Little for Lotus Cup brace



**ALKER** 



Ryan Savage won both Lotus Cup outings with relative ease; other than briefly losing the lead to James Little midway through race one, he led from start to finish. He held off Little again in race two to take his first two wins of the year. Craig Denman and William Stacey traded places up front in the first Trophy event, Denman taking the victory in race one from Stacey. Stacey made amends in race two, scoring a comfortable lights-to-flag win.

Jeremy Timms won the opening race of the Monoposto Championship in his bike-engined Dallara, wrestling the lead from polesitter Chris Hodgen's F3 Dallara midway through and cruising to victory. Ben Cater, also in an F3 Dallara, won the second edition after the race was cut short by red flags.

Nigel Innes converted pole position to victory in both Production BMW and Racing Saloons races from fellow M3 driver Stuart Voyce. Cut adrift from the leading duo, Robert Sadler prevailed in a race-long VW Golf battle with a slow-starting Andy Baylie for third in race one, but the positions were reversed in the second. Will Davison beat reigning champion Matt Swaffer in both races to take the Production BMW points lead.

Oliver White narrowly held off Joey Foster and Luke Williams to win the Super Series FF1600 race, as they traded positions throughout.

**JAMES NEWBOLD AND JAKE JONES** 



**KNOCKHILL SMRC** JULY2

## Martin bounces back in style with FF1600 brace

MANY WOULD HAVE FORGIVEN ROSS Martin for having reservations in returning to Knockhill for the fourth round of the Scottish Formula Ford 1600s last weekend. The last time the teenager graced the Fife circuit, in June, he'd finished upside-down in the Leslie's gravel trap, having barrel-rolled following contact with Kenneth Cowie. But Martin responded in champion-in-waiting fashion by taking two dominant victories to reclaim the points lead, as chief rival and Graham Brunton Racing team-mate Seb Melrose endured a difficult weekend.

Martin stayed clear of a pair of stunning three-way battles behind him after making a perfect start from pole to comfortably take race one. Cowie fought off Jordan Gronkowski for second, with Matt Chisholm fourth. Melrose settled for sixth after being embroiled in a similarly hard-fought battle with Clay Mitchell and the impressive Michael MacPherson, with Mitchell fifth.

Race two was marred by a horrendous crash for Chisholm as the chequered flag fell. Melrose prevailed in their battle for fifth, but appeared to slow dramatically as they crossed the line. Chisholm swerved to avoid MacPherson and careered into the barrier on the main straight. He got out of his Van Diemen unaided but suffered a cracked rib.

Mark Geraghty held his nerve throughout a safety-car-interrupted opening Mini Cooper Cup race to beat Robbie Dalgleish to the line by just 0.722 seconds. The leading pair made the most of a botched start from polesitter Morgan Murray to beat the points leader, while Hannah Chapman claimed class honours with fourth overall.

The quartet remained unchanged in a more sedate second race, with Murray just edging Chapman to the final step on the podium by 0.4s. Chapman did claim her podium in race three, finishing a close second to Michael Weddell in a thrilling encounter, with John Duncan third.



Ron Cumming recovered from a broken throttle cable during qualifying to dominate both Scottish Saloons & Sportscar races in his Nemesis kit car. Cumming repeated his perfect score from the previous round by heading Kenneth McKell's Mitsubishi Evo VIII in race one by more than 10s, while Robert Drummond scythed through the field from the last row to take third.

Contact between Drummond's Ford Escort Cosworth and McKell at Duffus on the opening lap of race two made Cumming's path to a second victory of the day much easier, leading home David Headen.

Lee Elrick pulled off an audacious round-the-outside overtake on leader David McNaughton into McIntyres to take a superb win in the first of the Scottish BMW Championship races. Ally Smith was denied a brilliant race-two victory courtesy of a 10s penalty for exceeding track limits during a sensational final-lap pass on Elrick entering Butchers, allowing Elrick to inherit the win.

John Paterson increased his Scottish Legends championship lead by bagging a brace of wins. Contact between leaders Steven McGill and Billy Wait into Duffus gifted the reigning champion victory in race one, before he doubled up in the second. Stewart Black took race three as Paterson came home a close second.

Tommy Gilmartin took another two Scottish Classic wins in his Morgan +8, but was given a run for his money by Bruce Mitchell (Lotus Europa TC). Gilmartin replicated his success in an entertaining second race, again beating Mitchell.

Barry Farquharson and Wayne MacCaulay shared the Scottish Fiesta victories.

STEPHEN BRUNSDON





ROCKINGHAM BARC JULY 1-2

# A whisker away for Willis in Pickups

MARK WILLIS MISSED THE CHANCE to close the gap to Scott Bourne at the top of the Pickup Truck Racing Championship standings as he came within 0.022 seconds of a pair of victories at Rockingham.

With the series using the circuit's 1.5-mile oval, Willis, who leads the 'oval' category in the championship, lost out on victory in race one by just a couple of inches. Bourne took full advantage when Mel Collins suffered a misfire three laps from the end to inherit the lead, holding off a late charge from Willis to win.

In the second race, Bourne took the lead in the latter stages, but in a four-wide battle with two laps remaining momentum wasn't on his side. Willis edged into the lead, relegating Bourne to second, with David O'Regan only 0.079s behind in third.

"It's a cat-and-mouse game in this championship sometimes," said Willis. "You have to be in the right place at the right time, but if you lose even a fraction of your concentration you lose momentum and fall back a number of places. Thankfully that didn't happen and I held on to claim victory."

One driver who maintained his concentration all weekend was Ben Palmer. He made it four consecutive wins in the Clio Cup Series, beating championship rival Anton Spires to extend his lead in the points table.

Palmer claimed the lead on the second lap in race one as both he and Spires slid wide at the Tarzan Hairpin, and Spires was unable to recover quickly enough to maintain his lead. A strong restart, after a brief safety-car period to recover the stranded James Joannou, enabled Croft race winner Palmer to open a gap over



Spires, who was struggling to stay on the pace on older tyres.

After starting race two from pole again Spires looked on course for victory, but a momentary hesitation coming out of Tarzan allowed Palmer to pull level on the run down School Straight. Palmer then took the lead under braking into the Brook chicane, carrying greater momentum onto the banking.

Simon Freeman finished third in both races, maintaining the good form he showed in his series debut at Croft, fighting off Ben Colburn in race one and Tyler Lidsey in race two.

Former Junior Saloon Car Championship racer Sean Thomas impressed on his Road Class debut, claiming both victories in convincing fashion. In the first race he went round the outside of Shanel Drewe and Nic Harrison at Turn 1 to take a lead he would never lose. In race two, Thomas kept up the pressure on Harrison until Harrison, suffering from ABS issues, ran wide at Tarzan and slid down the order.

It was also a dominant display in the Intermarques Championship by

Willis (65) fights title rival Bourne in Pickups on the oval course Lewis Smith, who closed the gap to championship leader Malcolm Blackman, claiming victory in his Vauxhall Tigra by more than 10s in both races.

Tigra-mounted Blackman looked like he'd have a chance of beating Smith to victory in race one, but a decision to preserve tyres on Rockingham's famously abrasive surface left him in second position. He couldn't make the extra tyre life count in race two, though. Smith moved from eighth on the reversed grid to first by the second corner of the opening lap, building a commanding gap that Blackman was then unable to bridge.

Nerijus Zabotka continued the trend of one driver dominating a category as he took a pair of wins in his Subaru Impreza in the combined Nippon/Tricolore/Multi-Marque races. In race one he swept around the outside of Tony Hunter's Renault Clio at the Deene Hairpin to win, while he led from the start in the second race, defending strongly from a charging Andrew Mitchell (Peugeot 206) to take the victory.

The Hyundai Coupe Cup races both went the way of Alex Cursley, who had to use every defensive trick in the book to keep both Steve Kite and William Taylforth behind him in the two 15-minute races, making up for a winless round at Thruxton last time out.

Wins were shared in the MR2 Classic Race Series as Arron Pullan couldn't replicate his race-one domination in the second, which Adam Lockwood won by a car length. Behind the duelling pair, Daniel Bryant collected a pair of thirds.

Both MG Owners Club Championship races went to David Mellor, who completed a perfect weekend with two lights-to-flag victories in his MG ZR.



JOE HUDSON

P69 FULL RESULTS



WITH ONLY ONE DAY OF ACTION following the loss of Saturday at Barbon Manor, a day of multiple class record breaking ensued at Harewood. The old firm of Trevor Willis and Scott Moran took the run-off spoils and 18 points apiece, while track specialist Richard Spedding was the leading scorer with two second places in the GWR Raptor.

Again sharing Les Mutch's similar car, Spedding broke the 1600cc class record with a time that would stand as the best of the day on his way to qualifying top for the first encounter.

"The engine failure at Doune was more serious than first suspected and I'm grateful to Les for the shared drive," Spedding said. "Unlike mine, his car doesn't have launch control, so I have no idea how I took the class record with a time less than four tenths off the outright record."

The track inexplicably slowed for the second half, allaying Moran's fears that the returning Will Hall and Spedding would usurp his early benchmark.

"I thought I'd left a large opening for Will and Richard who were running after me, but they weren't able to take advantage," said Moran. "I think the sharp breeze cooled the track".

Hall was making his comeback after a catastrophic engine failure in early June. The spare engine needed more work than first thought and even then the car misbehaved in the first encounter, losing power for part of the run and finishing 10th. Once it was fixed, Hall used the engine's ferocious power delivery to qualify second fastest, but could only convert that to fifth in the second runoff.

It was a day of pleasure and pain in equal measure for Alex Summers. After taking the agile DJ to an excellent fourth place earlier on, the pain came with a suspension breakage in the final stanza. Adding further to the disappointment,

the car suffered additional damage during the recovery process. The loss of the scoring opportunity means Spedding is now tied with him for fourth overall.

Dave Uren is only six points behind that pair as he continues to recover from the non-racing injury sustained on his last Harewood visit. He took seventh in the first run, then improved by over a second to take fourth later on.

Wallace Menzies was unable to reap the benefit of his technical superiority as the Gould seemed unsuited to the stop-start Harewood course, which features nine tight 90-degree turns. Runs to fifth and sixth cost Menzies second in the standings to Moran, although he ought to be able to recover the position since Moran is due to sit out the triple-header of events later this month.

The similar but motorcycle-engined factory Gould of Sean Gould and Eynon Price didn't feature in the event after Gould crashed heavily in second practice. The car sustained comprehensive damage — even the steering wheel was bent, leaving Gould nursing an injured thumb. This permitted Ed Hollier to displace Gould for ninth in the points with runs to eighth and 10th places, despite complaining of a lack of power in his Suzuki-powered Empire.

The unique Harewood final bend Judge of Fact had a busy day. John Chacksfield had his finish time in round 16 struck out and Graham Wynn lost one that would have qualified him for round 15 when they crossed the outside line, which is deemed to be an advantage.

Leaders Championship-registered only, but still worthy of note, was Robert Kenrick in the only one-litre GWR Raptor. He shattered the 1100cc record by a second and a half, which would have qualified him seventh fastest for the first shoot-out.

**EDDIE WALDER** 

Moran captured round 16, but was slightly slower than Willis's (bottom right) previous winning effort

#### **RESULTS**

## AVON TYRES/TTC GROUP MSA BRITISH HILLCLIMB CHAMPIONSHIP ROUND 15

1 Trevor Willis (3.2 OMS-RPE 28) 49.54s; 2
Richard Spedding (1.6 GWR-Suzuki Raptor) 49.74s;
3 Scott Moran (3.5 Gould-NME GR61X) 49.82s; 4
Alex Summers (2.5 DJ-Cosworth Firestorm) 50.00s;
5 Wallace Menzies (3.3 Gould-Cosworth GR59M)
50.46s; 6 Jason Mourant (4.0 Gould-Judd GR55)
50.70s; 7 Dave Uren (3.5 Gould-NME GR55) 51.12s;
8 Ed Hollier (1.6 Empire-Suzuki 00 Evo) 51.22s;
9 Oliver Tomlin (4.0 Pilbeam-Judd) 51.53s; 10 Will
Hall (2.0 Force-AER/XTec WH) 52.23s; 11 John
Chacksfield (1.3s OMS-Suzuki 28) 53.96s;
DNS Lee Griffiths (1.3s OMS-Suzuki 25).

ROUND 16 1 Moran 49.88s; 2 Spedding 50.01s; 3 Willis 50.05s; 4 Uren 50.17s; 5 Hall 50.54s; 6 Menzies 51.03s; 7 Tomlin 51.19s; 8 Mourant 51.35s; 9 Les Mutch (1.6 GWR-Suzuki Raptor) 52.14s; 10 Hollier 52.27s; DNF Summers; Chacksfield

Class winners Spedding 49.19s; Summers 49.97s; Robert Kenrick (1.0 GWR-BMW Raptor) 51.11s; Griffiths 52.73s; Tim Elmer (2.0 Dallara-TKD F303) 54.65s; Allan McDonald (2.4t Morris-Mitsubishi Mini-Evo) 58.34s; Sarah Bosworth (1.8 Lotus Elise) 60.04s; Paul Howells (3.0 Porsche 911 RSR) 61.31s; Steve Darley (2.35t Subaru Impreza) 62.43s; Johnny Mckenzie (2.5 Dax-Rover Rush) 63.80s; Chris Berrisford (2.5t Subaru Impreza) 64.05s; Eric Morrey (1.0t Hillman Imp) 64.52s; Jim Kerr (1.9 Peugeot 205 GTi) 66.55s.

CHAMPIONSHIP POINTS 1 Willis 116; 2 Moran 86; 3 Menzies 82; 4= Summers & Spedding 72; 6 Uren 66; 7 Hall 57; 8 Mourant 42; 9 Hollier 40; 10 Sean Gould 38



CROFT
BARC JULY 1-2

# Hammer down for Hammerton

ETHAN HAMMERTON STRENGTHENED his grip on the Junior Saloon Car Championship with a win and a second place in his home round at Croft.

The teenager made the best getaway to the restarted opening race, but lost out to points rival Sam Kirkpatrick at the Jim Clark Esses on the second lap. Hammerton retook the lead at Sunny, but Kirkpatrick continued to threaten until he whacked the tyres at the chicane and shed a wheel.

Kirkpatrick bounced back with a win in the second race, having passed Will Dyrdal at Sunny on the opening lap. Hammerton claimed second after a brush with fellow title contender Dyrdal at the Complex, but could do little to dent Kirkpatrick's lead.

John Mickel struck a potentially decisive blow in the Legends title battle by taking four race wins and two further podiums. The only black mark came when he was penalised for making contact with erstwhile points leader Ben Power at the final corner of Sunday's opener to snatch on-the-road victory. The corrected result was Power's only race victory of a weekend blighted by brake issues on Saturday and an electrical problem that ruled him out of Sunday's second race. Steve Whitelegg was the only other man to score a win.

Caterham Sigmax championship leader Oliver Gibson extended his advantage with two victories, capitalising on clutch issues for Jamie Ellwood and a puncture for James Russell in race one. Russell led either side of a safety car on Sunday, but Gibson passed him around the outside of Tower for the win on lap six. With his tracking awry after an early knock, Ellwood could only salvage third.

Glenn Burtenshaw made a final-lap pass on points leader Declan Dolan to win the opening Mega Graduate race, but Dolan fought back to win race two as Burtenshaw became embroiled in a three-car scrap for second, eventually won by Luke Cooper. In the Super class on Sunday, Andy Molsom beat Toby Briant for the first time this year when Briant spun at Sunny.

Graeme Smith topped the Classic Graduates on Saturday after fending off first title rival Robin Webb and then Matt Willoughby, who briefly led at Tower on the final tour. Willoughby passed Webb at Clervaux to win race two.

The Global Lights contests yielded three different winners. Peter Drennan recovered from a poor start to win the opener, before Jake Byrne went from back to front in his only race of the weekend. In race three, Conor Farrell beat Drennan by bagging the lead at the hairpin two laps from the end.

Paul Roddison and Jon Halliwell took a victory apiece in the MaX5 races.

IAN SOWMAN



# RESULTS RO



#### **SILVERSTONE**

#### MSV

### GT CUP (11 LAPS) 1 Graham Davidson (McLaren MP4/12C GT3);

2 Leyton Clarke (Ferrari 458 GTC) +1.693s; 3 Nigel Hudson (Aston Martin Vantage GT3); 4 John Saunders (Ginetta G50); 5 Neil Huggins (Lamborghini Gallardo Super Trofeo LP570-4); 6 Andy Demetriou (Porsche 991 GT3 Cup). Class winners Clarke; Saunders; Gary Smith (Ginetta G55 GT4).

Fastest lap Davidson 2m06.250s (104.37mph). Pole Davidson.

Starters 26. RACE 2 (12 LAPS)

1 Davidson; 2 Hudson +41.414s;
3 Jake Rattenbury (Lamborghini
Huracan Super Trofeo): 4 Tim

Huracan Super Trofeo); 4 Tim Richards (Lamborghini Huracan Super Trofeo); 5 Saunders; 6 Graham Lucking (Ferrari 458 GTC). **CW** Rattenbury; Saunders; Dominic Paul (Ginetta G50).

**FL** Davidson 2m06.291s (104.34mph). **P** Davidson. **S** 26. **RACE 3 (12 LAPS)** 

1 Hudson/Adam Wilcox; 2 Davidson +23.992s; 3 Rattenbury; 4 Lucking/ Clarke; 5 Saunders/Patrick Scharfegger; 6 Huggins. CW

Rattenbury; Saunders/Scharfegger; Ben Tuck/lan Payne (Ginetta G55 GT4). **FL** Davidson 2m07.468s (103.38mph). **P** Rattenbury. **S** 23.

#### LMP3 CUP (BOTH 29 LAPS)

1 Alasdair McCaig/Colin Noble (Ligier JSP3); 2 Tony Wells/Matt Bell (Ligier) +3.575s; 3 Callan O'Keeffe (Ligier); 4 Christian England/Andrew Evans (Ligier); 5 Dean Gibbs/Alex Kapadia (Ligier); 6 Andrew Bentley/ Jack Butel (Ligier). FL O'Keeffe 1m58.622s (111.09mph). P England. S 6. RACE 2 1 Wells/Bell; 2 McCaig/Noble + 5.645s; 3 O'Keeffe; 4 England/Evans; 5 Bentley/Butel; 6 Gibbs/Kapadia. FL O'Keeffe 1m59.137s (110.61mph). P England. S 6.

F3 CUP (BOTH 11 LAPS) 1 Wade

Eastwood (Dallara F311): 2 Jacopo

Sebastiani (Dallara F311) +2.671s; 3 Robbie Watts (Dallara F308); 4 Daryl Jones (Dallara F308); 5 George Line (Dallara F308); 6 Shane Kelly (Dallara F312). CW Adrian Holey (Dallara F306). FL Kelly 1m57.393s (112.25mph).

P Fastwood S 20

RACE 2 1 Eastwood; 2 Kelly +0.837s; 3 Sebastiani; 4 Jones; 5 Stuart Wiltshire (Dallara F312); 6 Dave Gillett (Dallara F308). CW Holey. FL Kelly 1m57.718s (111.94mph). P Eastwood. \$ 20.

#### LOTUS CUP & ELISE TROPHY (BOTH 13 LAPS) 1 Rvan Savage

(2-Eleven); 2 James Little (Exige Cup R) +1.233s; 3 David McInulty (Exige V6 Cup); 4 Simon Atkinson (V6 Cup R); 5 Bob Drummond (Exige V6 Cup); 6 Ian Fenwick (Exige S1). CW Craig Denman (Elise 111R). FL Atkinson 2m18.965s (94.82mph). P Savage. S 24. RACE 2 1 Savage; 2 Little +1.303s; 3 Atkinson; 4 McInulty; 5 Fenwick; 6 Drummond. CW William Stacey (Elise S2 K-series). FL Savage 2m19.660s (94.35mph). P Fenwick. S 21. MONOPOSTO (8 LAPS) 1 Jeremy

Timms (Dallara F301); 2 Chris Hodgen (Dallara F304) +2.655s; 3 Ashley Dibden (Dallara F301): 4 Ben Cater (Dallara F306): 5 Jason Timms (Dallara F301); 6 Simon Tate (Dallara F302/4). CW Hodgen; Richard Moorcroft (Jedi Mk6): Brvn Tootell (Van Diemen RF01); James Densley (Tatuus Formula Renault); Peter Whitmore (Revnard 913): Matthew Walters (Mygale); Geoff Fern (Van Diemen RF82). FL Jeremy Timms 2m03.991s (106.28mph). P Hodgen. \$ 51. RACE 2 (5 LAPS) 1 Cater; 2 Hodgen +2.136s; 3 Jeremy Timms; 4 Jason Timms; 5 Dibden;

Timms; 4 Jason Timms; 5 Dibden; 6 Andrew Gordon-Colebrooke (Dallara). **CW** Jeremy Timms; Densley; Dax Ward (Jedi); Tootell; Walters; Ian Hughes (Van Diemen RF88); Fern. **FL** Jeremy Timms 2m03.924s (106.33mph).

# P Hodgen. \$ 42. PRODUCTION BMWs & RACING SALOONS (BOTH 8 LAPS) 1 Nigel

Innes (BMW E36 M3); 2 Stuart Voyce (BMW F36 M3) +3 793s: 3 Robert Sadler (VW Golf Mk5); 4 Andy Baylie (VW Golf GTI); 5 Ken Lark (VW Corrado); 6 Hugh Gurney (BMW M3). CW Peter Osborne (Vauxhall Astra VXR); John Willcocks (BMW E30 M3); Jason Dzenis (Peugeot 205); Karl Graves (BMW 120d); William Davison (BMW E30); Steve Allen (Honda Civic). FL Innes 2m26.372s (90.02mph). P Innes. \$ 53. **RACE 2 1 Innes**; 2 Voyce +3.793s; 3 Baylie; 4 Sadler; 5 Lark; 6 Gurney. CW Osborne; Willocks; Chad Donner (Ford Escort Mk1); Davison; Graves; Robert Taylor (Citroen Saxo). FL Innes 2m28.634s (88.65mph). P Innes. \$ 50.

#### FORMULA FORD SUPERSERIES

(7 LAPS) 1 Oliver White (Medina Sport JL17); 2 Joey Foster (Ray GR09) +0.199s; 3 Luke Williams (Thirsk RFR); 4 Graham Carroll (Van Diemen JL15); 5 Rory Smith (Van Diemen JL15); 6 Pedro Matos (Van Diemen JL16). FL Foster 2m19.710s (94.32mph). P White. S 19.

#### KNOCKHILL

SMRC

#### SCOTTISH FORMULA FORD 1600

(12 LAPS) 1 Ross Martin (Ray GR17); 2 Kenneth Cowie (Ray GR09) +6.948s; 3 Jordan Gronkowski (Van Diemen JL012K); 4 Matthew Chisholm (Van Diemen RF00); 5 Clay Mitchell (Ray GR13); 6 Sebastian Melrose (Ray GR14). CW Gronkowski. FL Martin 55.363s (82.38mph). P Martin. S 12. RACE 2 (11 LAPS) 1 Martin; 2 Cowie +6.948s; 3 Mitchell; 4 Gronkowski; 5 Melrose; 6 Michael MacPherson (Ray GR14).

CW Gronkowski. FL Martin 55.299s (82.48mph). P Martin. S 12.
CELTIC SPEED MINI COOPER CUP

(12 LAPS) 1 Mark Geraghty;

# UND-UP

2 Robbie Dalgleish +0.722s; 3 Morgan Murray; 4 Hannah Chapman; 5 Dylan O'Donnell; 6 John Duncan. CW Dalgleish; Emily Glanvill. FL Chapman 1m03.141s (72.23mph). P Murray, S 17, RACE 2 (9 LAPS) 1 Geraghty; 2 Dalgleish +2.454s; 3 Murray; 4 Chapman; 5 Duncan; 6 Michael Weddell. CW Dalgleish; Glanvill. FL Munro 1m03.180s (72.19mph). P Geraghty. S 17. RACE 3 (9 LAPS) 1 Weddell; 2 Chapman +0.112s; 3 Duncan; 4 Murray: 5 Chris Reid: 6 Geraghty. CW Chapman; Glanvill. FL Murray 1m03.366s (71.98mph). P Weddell. S 24.

#### **SCOTTISH SALOONS &** SPORTSCARS (12 LAPS) 1 Ron

Cumming (Nemesis Kit Car); 2 Kenneth McKell (Mitsubishi Lancer Evo VIII) +10.876s; 3 Robert Drummond (Ford Escort Cosworth): 4 David Headen (Caterham CSR); 5 Alan Doncaster (Mitsubishi Lancer Evo VI RS): 6 William Robson (Ford Focus RS). **CW** McKell; Doncaster; Oliver Mortimer (Mini Cooper R53); Paul Wilson (Mini Cooper R53); Gary Wait (Ford Sierra Cosworth). FL Cumming 52.640s (86.64mph). P McKell, S 14, RACE 2 (14 LAPS) 1 Cumming; 2 Headen +29.622s; 3 Robson: 4 Doncaster: 5 Graham Wait (Ford Sierra Cosworth); 6 Mortimer. **CW** Doncaster; Graham

**SCOTTISH BMWs (BOTH 12 LAPS)** 1 Lee Elrick: 2 David McNaughton +1.347s; 3 Gary Clark; 4 Ally Smith; 5 Douglas Simpson; 6 Steven Goldie. **FL** Smith 1m02.991s (72.40mph). P Clark. \$ 13. RACE 2 1 Elrick; 2 Greig Sutherland +3.561s; 3 Clark; 4 McNaughton; 5 Cliff Harper; 6 Goldie. FL Smith 1m02.727s (72.71mph). P Elrick. \$ 13. **SCOTTISH LEGENDS (8 LAPS)** 

Wait: Mortimer; Wilson. FL Cumming

52.886s (86.24mph). P Cumming. \$ 12.

1 John Paterson (Ford Coupe); 2 Ben Mason (Ford Coupe) +4.972s: 3 David Hunter (Ford Coupe); 4 Stewart Black (Ford Coupe); 5 Ivor Greenwood (Ford Coupe); 6 Jordan Hodgson (Ford Coupe). FL Hunter 59.892s (76.15mph). P Billy Wait

1 Paterson; 2 Greenwood +0.469s; 3 Hunter; 4 Black; 5 Hodgson; 6 Mason, FL Greenwood 59,905s (76.14mph). P Black. S 13.

(37 Ford), \$ 13, RACE 2 (8 LAPS)

RACE 3 (11 LAPS) 1 Black; 2 Paterson +1.456s: 3 Greenwood: 4 Hunter: 5 Mason; 6 Scott Hynds. FL Hunter 59.429s (76.74mph). P Colin McNeill (Ford Coupe). S 12.

#### **SCOTTISH CLASSICS (BOTH 12**

LAPS) 1 Tommy Gilmartin (Morgan +8); 2 Bruce Mitchell (Lotus Europa TC) +0.160s; 3 Charlie Cope (VW Golf GTI); 4 Andy Walker (Mallock Type R); 5 Alastair Baptie (Fiat X1/9);

6 Calum McRae (TVR 350i). CW Mitchell; Walker; Baptie; McRae: Neil MacKay (Mini). FL Cope 1m01.468s (74.20mph). P Gilmartin. \$ 11. RACE 2 1 Gilmartin; 2 Mitchell +0.194s; 3 Cope; 4 Baptie; 5 Mario Ferrari (Alfa Romeo Sprint); 6 McRae. **CW** Mitchell; Cope; Baptie; Walker. FL Mitchell 1m00.899s (74.89mph). P Gilmartin. \$11. **SCOTTISH FIESTAS (BOTH 12** LAPS) 1 Barry Farquharson (ST); 2 Wayne MacCaulay (ST) +0.877s;

3 Stephen Ward (ST); 4 Philip Liddle (ST); 5 Nicholas Forsyth (ST); 6 Kristian Leith (XR2). CW Leith. FL MacCaulay 1m02.276s (73.24mph). P MacCaulay. \$ 10. RACE 2 1 MacCaulay; 2 Farquharson +0.230s: 3 Ward: 4 Peter Cruickshank (ST); 5 Liddle; 6 Forsyth. CW Leith. FL Farquharson 1m02.102s (73.44mph). P Farquharson. S 9.

#### ROCKINGHAM

PICKUP TRUCKS (35 LAPS) 1 Scott Bourne; 2 Mark Willis +0.022s; 3 Paul Tompkins; 4 Antony Hawkins; 5 David O'Regan; 6 Mel Collins. FL Collins 40.435s (131.67mph). P Bourne. **S** 11. **RACE 2 (34 LAPS)** 1 Willis; 2 Bourne +0.246s; 3 O'Regan; 4 Hawkins: 5 Paul Jones: 6 Tompkins. FL Bourne 40.848s (130.34mph). P Lea Wood. \$ 11. **CLIO CUP SERIES (16 LAPS)** 1 Ben Palmer; 2 Anton Spires

+0.459s; 3 Simon Freeman; 4 Ben Colburn; 5 Tyler Lidsey; 6 Nick White. CW Sean Thomas. FL Spires 1m31.460s (76.36mph). P Spires. \$ 13. RACE 2 (14 LAPS) 1 Palmer; 2 Spires +0.659s; 3 Freeman; 4 Lidsey; 5 Colburn; 6 White. CW Thomas. FL Spires 1m32.067s (75.85mph). P Spires. S 13.

**INTERMARQUE (BOTH 11 LAPS)** 

1 Lewis Smith (Vauxhall Tigra); 2 Malcolm Blackman (Vauxhall Tigra) +11.186s: 3 Ian Hales (Vauxhall Tigra); 4 Keith White (BMW Z4); 5 Steve Burrows (Peugeot 206cc); 6 Michael Thurley (Vauxhall Tigra). FL Smith 1m26.927s (80.34mph). P Smith. S 15. RACE 2 1 Smith; 2 Blackman +14.566s: 3 White: 4 Thurley; 5 Chris Ayling (Vauxhall Tigra); 6 Philip Young (Mitsubishi Colt). FL Smith 1m26.993s (80.28mph). P Young. \$ 14. NIPPON CHALLENGE/TRICOLORE TROPHY/MULTIMARQUES (10 LAPS) 1 Nerijus Zabotka (Subaru

Impreza); 2 Tony Hunter (Renault Clio) +1.018s; 3 Tyrone Luffarelli (Peugeot 106 GTi); 4 David Clark (Renault 5 GT Turbo): 5 Nick Gwinnett (Renault Clio 172); 6 James Breeze (Renault Clio). CW Hunter: Luffarelli: Clark: Breeze: Andrew Mitchell (Peugeot 206 GTi);

Robert Williams (Honda Integra DC5); Andy Roberts (Honda Civic EK): Gareth Baxter (Toyota MR2 Mk1); Jason Jesse (Peugeot 206 GTi Cup). FL Mitchell 1m35.485s (73.14mph). P Zabotka. S 32. RACE 2 (10 LAPS) 1 Zabotka; 2 Mitchell +1.828s; 3 Hunter; 4 Gwinnett; 5 Luffarelli; 6 Williams. CW Mitchell; Hunter; Luffarelli; Williams; Daniel Adams (Proton Satria); Breeze; Baxter; Jesse. FL Mitchell 1m34.670s (73.77mph). P Zabotka. \$ 29. **HYUNDAI COUPE CUP (BOTH 9** LAPS) 1 Alex Cursley; 2 Steve Kite +0.430s; 3 William Taylforth; 4 James Goodwin; 5 Ray Harding; 6 Ian Brunning. FL Cursley 1m41.599s (68.74mph), P Kite, S 18, RACE 2 1 Cursley; 2 Kite +1.558s; 3 Taylforth; 4 Wayne Rockett; 5 Harding; 6 Goodwin. FL Kite 1m42.058s (68.43mph). **P** Cursley. **S** 17. **MR2 CLASSIC RACING SERIES** (BOTH 9 LAPS) 1 Arron Pullan; 2 Adam Lockwood +0.467s; 3 Daniel Bryant; 4 Ross Smale; 5 Neale Hurran: 6 Neil Stratton. FL Pullan 1m42.014s (68.46mph). P Pullan. \$ 21. RACE 2 1 Lockwood;

MG OWNERS CLUB (12 LAPS) 1 David Mellor (ZR): 2 Steve Williams (ZR) +4.365s: 3 Phil Walker (ZR); 4 Paul Wiseby (F VVC); 5 Simon Kendrick (F VVC); 6 Stuart Plotnek (F). CW Wiseby; David Amphlett (B Roadster). FL Williams 1m39.960s (69.86mph). P Mellor. S 20. RACE 2 (13 LAPS) 1 Mellor; 2 Walker +24.803s; 3 Alan Forster (ZR 160); 4 Nick Golhar (ZR); 5 Wiseby; 6 Kendrick. CW Wiseby; Amphlett. FL Mellor 1m39.614s (70.11mph).

2 Pullan +0.699s; 3 Bryant; 4 Danial

Farmer; 5 Smale; 6 Jamey Firth.

P Pullan. \$ 20.

FL Pullan 1m42.069s (68.42mph).

#### **CROFT**

P Mellor, \$20.

**JUNIOR SALOONS (BOTH 10 LAPS)** 1 Ethan Hammerton: 2 Ross

Connolly +9.837s; 3 Alicia Goundry; 4 Will Dyrdal; 5 Gordon Mutch; 6 Lucas Nannetti FL Hammerton 1m45.395s (72.58mph). P Sam Kirkpatrick, \$ 16.

RACE 2 1 Kirkpatrick; 2 Hammerton +3.022s; 3 Dyrdal; 4 Connolly; 5 Liam Thompson; 6 Mutch. FL Kirkpatrick 1m45.692s (72.38mph). P Kirkpatrick. S 16. **LEGENDS - ROUND 7 (8 LAPS)** 

1 Stephen Whitelegg; 2 Jack Parker +0.623s; 3 John Mickel; 4 Guy Fastres; 5 Paul Simmons; 6 Ben Power, FL Mickel 1m38.180s (77.91mph). P Parker. \$ 22. RACE 2 (7 LAPS) 1 Mickel: 2 Power +0.508s; 3 S Whitelegg; 4 Fastres; 5 Nathan Anthony; 6 Simmons. FL Mickel 1m38.870s (77.37mph). **P** Power. **\$** 22.

FINAL (10 LAPS) 1 Mickel; 2 Parker +1.726s; 3 S Whitelegg; 4 Power; 5 Simmons; 6 Anthony. FL Mickel 1m38.303s (77.82mph). P Jonty Norman S 21

ROUND 8 (8 LAPS) 1 Power; 2 Mickel +0.763s; 3 Matthew Pape; 4 Miles Rudman: 5 Anthony: 6 S Whitelegg. FL Mickel 1m37.962s (78.09mph). P Rudman. \$ 22.

RACE 2 (8 LAPS) 1 Mickel; 2 Pape +2.195s; 3 Rudman; 4 Anthony: 5 S Whitelegg: 6 Gary Whitelegg. FL Power 1m39.066s (77.22mph). P Simmons.

S 21. FINAL (10 LAPS) 1 Mickel: 2 Parker +0.562s: 3 Power: 4 Simmons; 5 Marcus Pett; 6 Anthony, FL Mickel 1m38.804s (77.42mph). P Parker. S 22.

#### **CATERHAM GRADUATES - SIGMA AND SIGMAX (BOTH 13 LAPS)**

1 Oliver Gibson; 2 Jamie Winrow +2.477s; 3 Harry Cramer; 4 Mark Johnson; 5 Spencer Fortag; 6 Adrian Russell. CW Jon Harmer. FL James Russell 1m34.686s (80.79mph). P Gibson. S 16.

RACE 2 1 Gibson; 2 J Russell +0.581s: 3 Jamie Ellwood: 4 Cramer: 5 Johnson; 6 Fortag. CW Harmer. FL J Russell 1m33.971s (81.40mph). P Winrow. S 16.

#### **CATERHAM GRADUATES - MEGA** AND SUPER (BOTH 14 LAPS)

1 Glenn Burtenshaw: 2 Declan Dolan +0.079s; 3 Luke Cooper; 4 Toby Briant; 5 Guy Halley; 6 Andy Molson. **CW** Briant. FL Burtenshaw 1m35.331s (80.24mph). P Dolan. S 16. **RACE 2 1 Dolan**; 2 Cooper +8.607s; 3 Burtenshaw; 4 Halley; 5 Molsom; 6 Barry White. CW Molsom. FL Dolan 1m35.443s (80.15mph). P Burtenshaw. S 16.

#### **CATERHAM GRADUATES -CLASSICS (BOTH 13 LAPS)**

1 Graeme Smith; 2 Matthew Willoughby +1.433s; 3 Robin Webb; 4 Paul Hawker; 5 Marc Noaro; 6 Trevor Harber. FL Smith 1m44.486s (73.23mph).

P Smith. S 14. RACE 2 1 Willoughby; 2 Webb +3.621s; 3 Noaro; 4 Harber; 5 Peter Tatersall: 6 Hawker. FL Harber 1m43.366s (74.00mph). P Smith. **S** 14.

#### **IRISH GLOBAL LIGHTS**

(ALL 10 LAPS) 1 Peter Drennan; 2 Conor Farrell +1.346s; 3 Mark Braden; 4 Michael Conway; 5 John Conway; 6 Ivor Miller. FL Richard

Finlay 1m35.172s (80.38mph). P Drennan, \$9, RACE 21 Jake Byrne; 2 Drennan +1.778s; 3 Finlay; 4 Braden: 5 M Conway: 6 J Conway. FL Byrne 1m32.757s (82.47mph).

P Drennan. S 10. RACE 3 1 Farrell; 2 Drennan +0.535s; 3 Finlay; 4 M Conway; 5 Braden; 6 Miller. FL Farrell 1m32.537s (82.67mph). P Drennan, S 8.

#### MAX5 (12 LAPS) 1 Paul Roddison

(Mk4); 2 Jon Halliwell (Mk4) +1.013s; 3 Ian Loversidge (Mk4); 4 Jeremy Shipley (Mk4); 5 Matthew Tidmarsh (Mk3); 6 Andrew Pretorius (Mk3). CW Tidmarsh; Josh Malin (Mk1). **FL** Halliwell 1m38.646s (77.55mph). P Roddison, \$ 15.

#### RACE 2 (13 LAPS) 1 Halliwell;

2 Roddison +0.649s; 3 Loversidge; 4 Tidmarsh; 5 Shipley; 6 Pretorius. CW Tidmarsh; Malin. FL Halliwell 1m38.482s (77.68mph). P Roddison. S 15.



# WHAT'S ON



TIGHT AND TWISTY RUNS through never-ending forests; long, straight blasts down Outback farm tracks; or short, slippery routes through Swedish snowbanks — in *DiRT 4*, the choice is yours.

The latest instalment in Codemasters' off-road *DiRT* series, which grew out of the acclaimed Colin McRae rally games, features a concept called 'Your Stage', which allows players to pick the length and difficulty of the routes they want to tackle in the rally section of the game.

"'Your Stage' is something that we've been working on for a very long time, in fact since the launch of *DiRT* 3 back in 2011," says Paul Coleman, *DiRT* 4's chief game designer. "The main feedback we have received from our previous *DiRT* games is that our community wanted more routes, longer stages and greater variety. 'Your Stage' plays directly to this. It has been designed to answer the age-old problem with rally games: that once you have driven a stage, it becomes familiar. We wanted to ensure that we held on to that basic principle of what it

is to go rallying for as long as possible."

Players of *DiRT 4* can therefore create many unique layouts over and above the pre-designed ones (as the official game of the World Rallycross Championship, it also has the Lydden Hill, Montalegre, Loheac Bretagne, Hell and Holjes tracks, as well as featuring buggy and truck landrush events).

With five locations for rally events — Australia, Spain, Michigan, Sweden and Wales — you use a simple slider configuration to choose the length

Historic rally cars
– such as Richard
Burns's 2001 Subaru
Impreza WRC (above)
– are included in *DIRT 4*,
alongside a selection
of World Rallycross
machinery (below)



and difficulty level for your stage, and *DiRT 4*'s software comes up with the rest. "We use complex algorithms to run a route through a pre-existing landscape," explains Coleman. "The system chooses a starting point and then uses the algorithm to make sure that the stage follows an appropriate path, doesn't fold back on itself, and obeys the rules of the landscape so it doesn't cut through lakes and mountains. From a player's perspective, all you have to do is select a location and then adjust sliders for length and complexity."

The system means "millions and millions" of routes are available to both hardcore rally gamers and newcomers to the series — who are catered for by 'Simulation' and 'Gamer' handling modes. Stages can also be saved to be replayed at leisure and shared with friends for online competition.

"I suppose there is a tiny chance that a stage could be replicated, as with any random system," says Coleman. "But we are able to knit different sections together seamlessly and also

# GET YOUR COPY OF AUTOSPORT ON THE MOVE

DOWNLOAD IT NOW FROM autosport.com









concatenate the co-driver calls, so that everything just flows as if it was handcrafted by our team. We are seeing a great deal of variety and the system also creates the kind of stages we never would in the studio."

The results are impressive. A lengthy stage — distances of around 15km are possible — at the most complex difficulty in the Welsh forests is a real test, especially in the R5 category of rally cars that represents the game's top class in that discipline.

After 10 minutes' racing through dark, confined forests — the fast downhill sections are particularly challenging — you really have to keep focused to avoid doing a full Kris Meeke and rolling off at the last minute. Some elements of the courses do seem slightly repetitive after a while, but that actually mirrors the nature of real roads well.

Overall, *DiRT 4* has the right amount of in-depth simulation and mad race modes to satisfy off-road fanatics and casual racing gamers alike.

ALEX KALINAUCKAS



#### HOT ON THE WEB THIS WEEK

#### YOU TO 'IT HURTS BUT I THINK I'M OK'

#### Search for: Paffett's shocking Crash - DTM Norisring

Gary Paffett and Mike Rockenfeller's wince-inducing coming-together in the second Norisring DTM race elicited the response above. Both drivers were taken to hospital; Paffett got away with only bruising, and Rockenfeller suffered a fractured metatarsal in his left foot.



#### INTERNATIONAL MOTORSPORT

#### **FORMULA 2**

Rd 5/11 Red Bull Ring, Austria July 8-9

#### **GP3 SERIES**

Rd 2/8 Red Bull Ring, Austria July 8-9

#### PORSCHE SUPERCUP

Rd 3/8 Red Bull Ring, Austria July 9

#### **INDYCAR SERIES**

Rd 10/16 Iowa Speedway, USA July 9

WATCH ON TV Live BT Sport 1, Sunday 2200

#### **INDY LIGHTS**

Rd 6/10 Iowa Speedway, USA July 8

#### **SUPER FORMULA**

Rd 3/7 Fuji, Japan July 9

#### JAPANESE FORMULA 3

Rd 6/9 Fuji, Japan July 8-9

#### TCR INTERNATIONAL

**Rd 7/10** Oschersleben, Germany **July 9** 

#### **NASCAR CUP**

Rd 18/36 Kentucky Speedway, USA July 8 WATCH ON TV Live Premier Sports, Sunday 0000

## AUSTRALIAN SUPERCARS

Rd 7/14

Townsville, Queensland, Australia

July 8-9

#### **WATCH ON TV**

**Live** Motorsport.tv, Saturday 0755, Sunday 0755

### SCANDINAVIAN TOURING CARS

Rd 4/7 Falkenberg, Sweden July 9

#### **UK MOTORSPORT**

#### **SNETTERTON AMOC**

#### July 8

50s Sports Cars/Jaguar XKs, Equipe GTS, Historic Touring Car Challenge, Aston Martin GT, Inter Marque, AMOC Innes Ireland Cup

#### **OULTON PARK BARC**

#### July 8

Classic FF1600, Clubmans, Sports/Saloons, Kumho BMWs

#### **BRANDS HATCH MSVR**

#### July 8-9

FF1600, Mini Challenge, Mini Miglia, Mini Seven, Mighty Minis, Fastest Mini, Pre '66 Minis

## DONINGTON PARK BRSCC

#### July 8-9

FF1600, Caterham Seven 420R, Caterham Seven 310R, Caterham Seven 270R, Caterham Supersport, Caterham Roadsport, Caterham Academy, French Caterham Cup

#### **ANGLESEY 750MC**

#### July 8-9

Club Enduro, Formula Vee, Locost, Toyota MR2s, RGB, 750 Formula, Historic 750 Formula, Bike Sports, Civic Cup, Sport Specials, 5Club MX-5 Cup

#### **KNOCKHILL KMSC**

#### July 8-9

SsangYongs, Northern Saloons/Sports,

MG Trophy

## MONDELLO PARK CKMC

#### July 8-9

Supercars, Formula Vee, Formula Sheane, BOSS Formula Libre, Strykers, Irish Touring Cars, SEATs, Future Classics, Fiesta Zetecs, Fiesta STs

## BRC, NICKY GRIST STAGES

July 8-9





### FROM THE ARCHIVE

Rene Arnoux (Ferrari 126C3) soaks up the adulation of the tifosi after finishing second in the 1983 Italian Grand Prix at Monza. The dominant win by Nelson Piquet (Brabham-BMW BT52B) is pretty much incidental. Arnoux is followed home by the twice-lapped Johnny Cecotto (Theodore-Ford N183).

LAT IMAGES

www.LATimages.com

@latimages





#### GLENN FREEMAN

**y** @glenn\_autosport

#### A FIRST GLIMPSE OF A NEW FORMULA 1 HERO: 'JV'

ormula 1 free practice was already underway by the time we arrived at Silverstone, but I'd spotted a gap under a fence intended to block the view at Bridge Corner and peered through. The first thing I saw was a red blur hammer past me, having a wobble later in the corner that required Eddie Irvine to catch the Ferrari. As far as I was concerned, we could watch the rest of the session from this tiny slot.

Despite being someone who has tried to see the good in F1's quieter engines since

Despite being someone who has tried to see the good in F1's quieter engines since 2014, it's impossible to ignore the fact that even if Irvine had come through on rails I'd have still been blown away by the sound of the 1996 V10-engined F310 when

I heard it for the first time at the British Grand Prix. I'd seen an F1 car run in the flesh once before, when Johnny Herbert drove a Lotus around the Brands Hatch Indy circuit in '93, but I'd had to wait a bit longer to attend a grand prix. Almost certainly against my better judgement, there was no way I was putting earplugs in.

At Silverstone, I'll never forget Michael Schumacher's car heading out of sight from Club to Abbey, and as the noise trailed off someone in the back of the crowd shouted a hopeful "BANG!" to cheers all round. By the time of his first retirement in 2006 Schumacher was popular wherever he went, but following his battles with Damon Hill in 1994 and '95 that feeling had not yet extended to British shores.

Not that I was supporting the home hero. Following Nigel Mansell's move to Indycar racing for '93, Hill filled the void of a British driver to cheer for in a Williams. But by the end of '95 he'd put himself, and his fans, through the ringer, and Mansell's foray into American racing had alerted me to the fact that a famous name from F1's past had a second generation: Villeneuve. I was young enough that the sheer stature of the surname was initially enough for me to follow Jacques' fortunes closely in the US, and by the time of Hill's '95 problems I had a ready-made replacement lined up who was heading to the F1 grid for the following season.

The 'JV' hat I bought that weekend still takes pride of place at home to this day, in all its faded glory, sporting an autograph I managed to get 11 years later. Villeneuve didn't need to win the 1996 British GP for it to be an unforgettable experience — that was just the icing on the cake. \*\*

#### **MAUTOSPORT**

Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1EF Tel +44 (0) 20 3405 8100 Email autosport@autosport.com Individual email firstname.surname@motorsport.com Website www.autosport.com Twitter @autosport

#### Editorial

Editor-in-Chief Edd Straw
Editor Kevin Turner
Deputy Editor Marcus Simmons
Grand Prix Editor Ben Anderson
F1 Reporter Lawrence Barretto
Assistant Editor Alex Kalinauckas
Chief Sub-Editor Peter Hodges
Executive Editor Stuart Codling
Group National Editor Jack Benyon
Rallies Editor David Evans
BTCC Correspondent Matt James
Art Editor Michael Cavalli
Office Manager Joanne Grove

#### Autosport.com

Editor Glenn Freeman
Deputy Editor Matt Beer
Autosport Plus Editor Scott Mitchell
International Editor Jack Cozens
Social Media Editor Fatema Chowdhury
Technical Team Leader Geoff Creighton
Senior Digital Designer Amar Vijay



#### Photography

Steven Tee Glenn Dunbar Sam Bloxham Zack Mauger

#### **Special Contributors**

Gary Anderson Alan Eldridge Rob Ladbrook Stephen Lickorish Stefan Mackley David Malsher Marcus Pye Dieter Rencken Nigel Roebuck Caroline Stammers Jim Utter Gary Watkins

#### Correspondents

Argentina Tony Watson Australia Phil Branagan Austria Gerhard Kuntschik Belgium Gordon McKay Brazil Lito Cavalcanti Finland Esa Illoinen Germany Rene de Boer Greece Dimitris Papadopoulos Italy Roberto Chinchero Japan Jiro Takahashi New Zealand Bernard Carpinter Russia Gregory Golyshev Spain Raimon Duran Sweden Tege Tormvall USA Bruce Martin, Jeremy Shaw UK & Ireland Pete Allen, Lee Bonham, Stephen Brunsdon, Jonathan Crawford, Dom D'Angelillo, Kerry Dunlop, Charlie Eustice, Joe Hudson, Jake Jones, Samarth Kanal, Matt Kew, Mark Libbeter, Stefan Mackley, Dan Mason, Damian Meaden, Lucy Morson, Will Moulton, James Newbold, Jason Noble, Mark Paulson, Brian Phillips, Graham Read, Hal Ridge, Peter Scherer, Ian Sowman, Chris Stevens, Oliver Timson, Ian Titchmarsh, Eddie Walder. Rob Watts, Richard Young

#### Advertising

Tel +44 (0) 20 3405 8106 Email autosport.ads@motorsport.com Sales Manager James Robinson Display Advertising Don Rupal, Karen Reilly, Jamie Brooker Classified Advertising Fran Hall, Ben Kavanagh Autosport.com Sales Manager Fiona Bain Online Advertising Chris Hermitage Sales Director Matthew Witham

#### **Advertising Production**

Tel +44 (0) 20 3405 8131

Production Controller **Abbey Gunner** abbey.gunner@motorsport.com

#### Subscriptions

UK +44 (0) 344 848 8817 Overseas +44 (0) 1604 251451 Email help@asm.secureorder.co.uk

Sunita Davies +44 (0) 20 3405 8134

Autosport, ISSN number 0269946X, is published weekly by Autosport Media UK Ltd, I Eton Street, Richmond, TW9 LEF, United Kingdom Airfreight and resilient in the UKA because and Media

weekly by Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 LFF, United Kingdom. Airfreight and mailing in the USA by agent named Air Business Ltd, c/lo Wolfdnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamasica, NY 11434, USA Periodicals postage paid at Jamasica NY 11431. Subscription records are maintained at Autosport Media UK Ltd, 1 Eton Street, Richmond, TW9 1EF. Air Business Ltd is acting as our mailling agent.

#### Licensing and Syndication

Stuart Williams

#### Management

Managing Director **Tim Bulley**Publishing Director **Stuart Williams**European Editor-in-Chief **Damien Smith**Editorial Director **Anthony Rowlinson**Group Publishing Manager **Sunita Davies**Special Events Manager **Laura Coppin**Digital Product Manager **Simon Grayson** 

We abide by the Editors' Code of Practice and are committed to upholding the highest standards of journalism. If you think we haven't met those standards and want to make a complaint, contact 0203 405 8100.





#### CIRCULATION TRADE ENQUIRIES

Seymour Distribution Ltd, 2 East Poultry Avenue, London, EC.1A 9PT. Tel: -44 (I) 20 7429 4000. Printed by William Gibbons & Sons Ltd, 28 Planetary Road, Willenhall, Wolverhampton W13 3XT. ISSN 0269-946X. Autosport is published weekly by Autosport Media UK Ltd, 1 Eton Street, Richmond, 1980 157

#### © 2017, AUTOSPORT

MEDIA UK LTD
Trading as Autosport Media
UK. Publishing, trade and
further subscription details
on www.autosport.com.
While due care is taken to
ensure the contents of
Autosport are accurate, the
publishers and printers
cannot accept liability for
errors and omissions.
Advertisements are accepted
for publication in Autosport
only upon Autosport Media
UK's Standard Terms of
Acceptance of Advertising,
which are available from the
Advertising Department.

### SelectMotorRacing.com

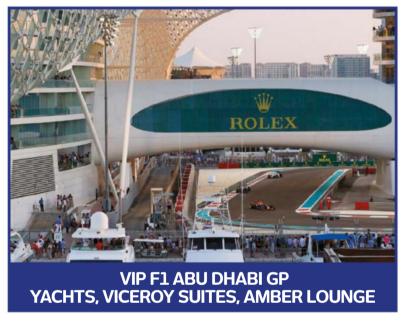
INTERNATIONAL MOTORSPORT TRAVEL > RACE TICKETS > HOSPITALITY



#### Flexible Travel Options

Escorted Tours | UK Travel Team | By Air | Coach Tours | Self Drive









Book Now for 2018: All FORMULA ONE EVENTS, LE MANS 24HRS, WEC 6HR SPA & NÜRBURGRING, MONACO HISTORIQUE, MILLE MIGLIA, LE MANS CLASSIC, GOODWOOD FESTIVAL AND REVIVAL

BOOK ONLINE: enquiry@selectmotorracing.com







Beading Marvellous is our hard Carnauba wax that's amazingly easy to apply and buff off. It adds a micro protective film made from Carnauba and fortified polymer waxes and will leave an impressive finish for 3+ months.



# FORMULA (5 FORD HITS (5)

1967 - 2017

We celebrate racing's greatest junior category



HOW IT BEGAN GREATEST DRIVERS LANDMARK CARS ITS STRENGTH TODAY FORD'S NEWEST ERA







#### NOT MANY WOULD ARGUE AGAINST

the claim that Formula Ford is the greatest junior motorsport category of all time.

Formula Renault has certainly contributed hugely, but the great racing, affordability and longevity of Formula Ford is impossible to beat.

Then there are the scores of graduates that went on to succeed in almost every major motorsport discipline in the world, including Formula 1. World champions such as Emerson Fittipaldi, Jody Scheckter, Ayrton Senna and Jenson Button first showed their car-racing abilities in Formula Ford, and the Brands Hatch Festival became the place for young drivers from around the world to demonstrate their talents.

Ford has been criticised for moving away from the popular Kent, but no manufacturer can be expected to support an out-of-production engine forever. The sport moves on and Ford has moved with it, while the Kent continues to thrive in club and historic racing. That's the best of both worlds.

We've had great fun putting this 48-page 50th anniversary celebration together - and, such is Formula Ford's reach, there was a lot we didn't have room for. We hope you enjoy it.

#### **KEVIN TURNER, EDITOR**

kevin.turner@autosport.com









#### FORMULA FORD 50TH ANNIVERSARY

THE BEGINNING We speak to John Webb

Formula Ford's founding father tells us how the idea came about and why it succeeded

FORD'S HEART The Kent engine

Putting the Anglia's powerplant in a racing car seemed like an odd idea, but it still works

THE RIVALS Van Diemen v Reynard

Ralph Firman and Adrian Reynard look back at their intense rivalry in the category's heyday

MEMORIES OF FFORD From Allen to Warwick

Some key figures from the sport tell us their views and stories of Formula Ford

FORD CHAMPIONS The top drivers in the UK

There used to be several FFord championships running at once. Here are the top title winners

**PIVOTAL CARS** The best of the best

From the thousands of cars built for Formula Ford, a handful of unusual ones stood out

**GREATEST DRIVERS** The stars of Formula Ford

With so many fine drivers having come through FFord, picking a top 10 was tricky...

**TOP CLUB RACERS** Historic Formula Ford in 2017

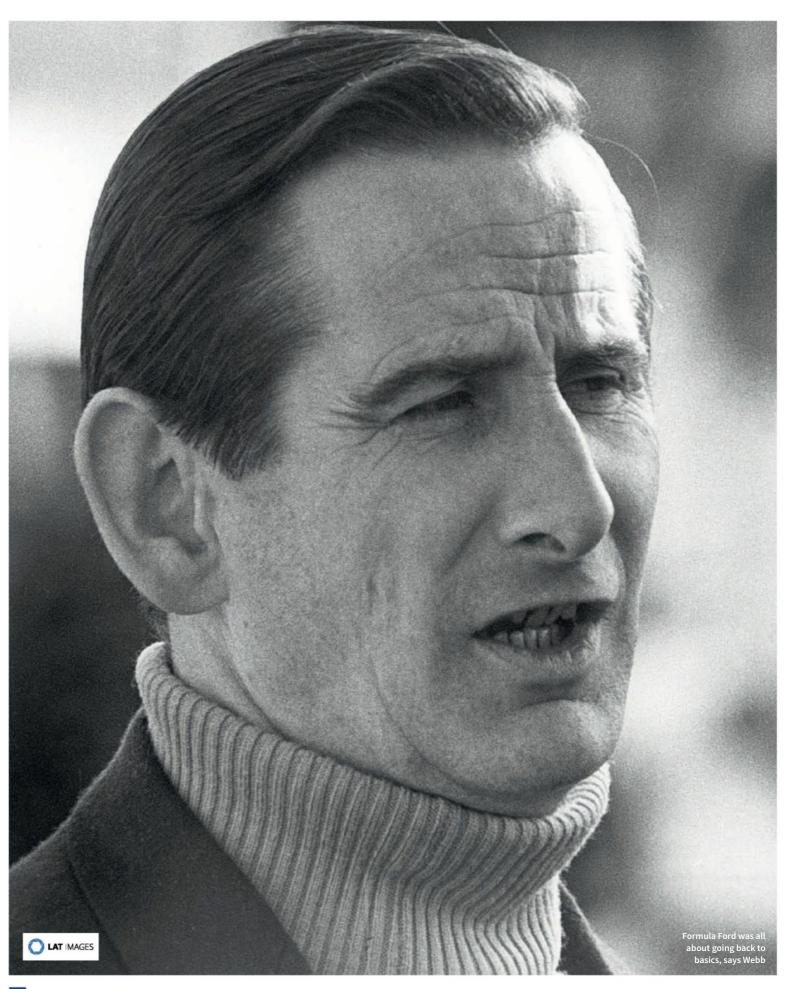
The cars might be nearly five decades old, but the racing in the HSCC series is top notch

FF1600 TODAY How good does it look at 50?

Club series for Kent-engined cars remain strong, but Zetecs and Duratecs are hard to find

**NEXT GENERATION** Why British F4 is relevant

Ford continues its involvement in junior single-seater racing with British F4. Here's why



## The birth of the greatest junior category

Its roots lay in the quest for a reliable race-school engine, but it became the legendary racing series where future champions learned their trade. Simon Taylor talks to John Webb, the driving force behind Formula Ford

ormula Ford, surely the most successful motor-racing category of all time, came out of a search for a solution to a rather different problem.

Half a century ago a man called Geoff Clarke was running Motor Racing Stables, the racing drivers' school at Brands Hatch. By today's standards it was primitive and, although it did coach a few drivers who went on to progress up the ladder, most of its business came from thrill-seekers who would turn up, borrow a crash helmet and pay a few quid a lap to have a go in a real single-seater. The cars were worn-out Formula Juniors and F3s: many got crashed and abused, and the cost of repairing over-revved engines threatened to wipe out any profit. A constant supply of racing tyres

was also a big cost.

Clarke hit on the idea of

replacing the tired racing

engines in the school

cars with Austin or Ford

production-car units. He

reckoned the thrill-seekers wouldn't know any different. He discussed this with Brands Hatch boss John Webb, whose Motor Circuit Developments company also owned Mallory Park, Oulton Park and Snetterton. Webb, now living in retirement in Spain, remembers: "Geoff's problems coincided with my view that at a routine club meeting we had a surfeit of saloon and sportscar events and very few single-seater races, because most young racers couldn't afford them. Between us we identified a mutual interest.

"We kicked around different ways of creating a cheap, uniform formula, but I said it would never work unless it had a big name behind it - 'For example', I said, plucking out a name at random, 'Formula Ford'.

"That seemed to have possibilities, so

the following Monday Geoff and I went, very humbly, to see [Ford vice-president] Walter Hayes and [Ford head of motorsport] Henry Taylor. We asked them if they would mind letting us use Ford's name if we started a formula based on a simple single-seater design, with an easily-available Ford engine in a cheap spaceframe chassis.

"Lots of people have suggested that it was Ford's idea and they funded it. No way. They didn't put in any money at any stage. Walter just said, 'If you get this thing off the ground, there's a batch of 50 standard Cortina engines sitting on the factory floor that we can let you have cheap'.

"Then we needed to find a chassis. We asked Bruce McLaren first, but he was busy with plans for a Formula B car

Brands on July 2 1967 and Ray Allen, the star MRS pupil of the day, won it.

"Jim Russell, who ran the racing drivers' school at Snetterton, also got involved, and we had 15 cars on the grid that day, all Lotus 51s and converted 31s. Half of them broke their gearboxes, and it all looked like being a failure. We told Chapman we had to change to Hewland 'boxes, and after that the cars were very reliable. But to start with there was a lot of opposition to the category. Race organisers didn't like it at first, and nor did the public."

But, because novices found it was a way to get into single-seater racing at low cost, the entries got bigger and the races became ever more hard-fought. Soon spectators began to look forward to the thrills and

> spills in Formula Ford. Lotus weren't on their own for long: other manufacturers soon joined in, and engine builders became adept at assembling the supposedly standard engines very carefully to get the maximum power. The key to the formula - that all the cars should as far as possible be the same, and built to the

same price - meant that, as the formula took off, new stars were able to shine on an identical budget and in an identical car to everybody else.

To start with, the rules fixed the maximum car cost, complete, at £1000 (maybe £25,000 today). In 1968 Formula Ford's first champion was Tim Schenken, and in a piece I wrote for Autosport about his success he set out the cost of his Merlyn Mk11 in detail. Off-the-shelf the engine cost £85, but Schenken spent a further £165 having it meticulously prepared within the regulations by Chris Steele, converting to dry sump, balancing and equalising all reciprocating weights, and seeking out the best camshaft from a 12-off production batch that would have been made to

#### "I said it would never work without a big name behind it. 'For example', I said at random, 'Formula Ford'"

[which became the Formula 2 M4A]. So we went to Lotus."

Colin Chapman's eyes lit up when he saw the possibilities of profit in reusing the obsolete spaceframe design of the Lotus 22/31 F3 cars. "But, because he'd done a deal with Renault to use their engine in the new Lotus Europa, he insisted on using the Renault gearbox."

The cars used standard 1500cc singlecarburettor Cortina engines (soon to become the crossflow 1600 from the Cortina GT). Significantly the rules specified road tyres, which would be cheaper and last longer than racing tyres. The Firestone F100 radial, with its deep, soft tread, soon became standard wear. The first Formula Ford race was run at



pretty broad tolerances. The chassis, running gear, gearbox, wheels and tyres consumed the remaining £750.

There had been low-cost single-seater formulas before, of course. The 750 Motor Club's Monoposto Formula catered primarily for self-build enthusiasts and produced an odd mixture of 'specials'. It would always have a limited appeal. Formula Vee had started in the early 1960s and became popular in Europe and the USA, but the cars' preponderance of VW parts, including the flat-four air-cooled engine and swing-axle suspension, meant that the cars never looked, sounded or felt like grown-up racing cars. The fact that Formula Fords followed the design, layout and general appearance of single-seaters in Formula 3 and above meant that they were accepted as real racing cars. As Webb says, "the general public could have been looking at a Formula 2 car or a Formula Ford: to them they all looked the same.

"And Formula Ford has always had a very good accident record, especially when you consider the number of drivers, many of them novices, and the closeness of the racing. We had some spectacular accidents and frightening-looking pile-ups, but very few serious injuries."

Once Formula Ford took off, its astonishing success surprised even Webb: "A whole new industry mushroomed within motor racing. Something like 50 manufacturers emerged, from tiny to big, and several years ago I was told that over 10,000 FF chassis had been built."

It's impossible to put a number on how many young drivers followed their dreams and set out in Formula Ford. The category gave them a chance to learn important lessons and work through excitements, dramas, disappointments, glories. The majority got no further, of course, but the category did produce a whole generation of world champions, from James Hunt to Ayrton Senna to Jenson Button.

Jody Scheckter dominated the formula in 1971, and less than two years later he was in Formula 1, going on to win the world championship for Ferrari.

Schenken won 34 races in a season; in that article I quoted him as saying, "I try not to think, 'In 1971 I'll be driving an F1 car'. I just keep trying to improve." He didn't make it to world champion, but he was in F1 by '70, a year ahead of his self-imposed schedule.

Most remarkable of all was Emerson







Fittipaldi: he arrived from Brazil in 1969 to do Formula Ford, but barely a year later he was in F1, and he won his first grand prix 11 weeks after that. Two years on he was world champion.

In 1972 the BRSCC had the idea of an end-of-season meeting called the Formula Ford Festival. After four editions at Snetterton it was moved to Brands Hatch and became a massive celebration of all things FF. Down the years its winners have included Johnny Herbert, Eddie Irvine, Jenson Button and Anthony Davidson, and this year's running will be the 46th.

In 1979, for example, all 192 places on the entry list were filled, and 50 more had to be turned away. Eight heats on Saturday decided the runners for Sunday's quarterfinals, semi-finals and then the crucial final. Remarkably, at a time when there was very little motor racing on television, Webb persuaded the BBC to cover it.

There were 28 different makes on the Festival grids that year: as well as the familiar Royale, Van Diemen and Crossle there were Halliday, Martlet, Saracen and Wimhurst. Drivers came from 16 nations, including names that never got much further and are now forgotten: the likes of Carlos

Above left: early days at Brands Hatch in 1967

Above: 1979 Festival was hugely popular: there were 192 entries, and 50 had to be turned away. And it was covered by the BBC

Abdala, Ed Pimm, Roy Pagliacci and Carel van Hoogenhuze. A large crowd turned up in pouring rain to watch wall-to-wall Formula Ford racing, with Scotsman Donald Macleod emerging victorious.

The success of Formula Ford encouraged Webb to dream up other categories. Formula 5000 was a great success: once again he was looking for a cheaper way, and F5000s were as big, as noisy, as spectacular and almost as fast as F1 cars. The British enthusiast could only see F1 at the big events at Silverstone, Brands Hatch and occasionally Oulton Park, but promoters could run F5000 at any circuit in the country for a fraction of the cost.

Formula Atlantic came out of Webb's admiration for Formula B in America - agile, fast, impressive racing cars for half the cost of Formula 2. "I thought Formula B was a terrible title, it sounded bureaucratic and second-best," he says. "So I did a deal with Atlantic Petroleum to sponsor the series. As soon as I'd signed the contract Atlantic was taken over, so I didn't get the money, but I kept the name."

One that didn't catch on was Formula F100, called after the Firestone tyre and for full-width cars that were effectively

sports-racing Formula Fords.

Down the years the appeal of Formula Ford has been unstoppable. It's now subdivided into classes, some permitting more recent, more sophisticated Ford engines. But Webb's original concept using the Kent engine, that pushrod Cortina 1600 unit, lives on in the Historic and Club FF categories, and continues to thrive. Modern developments - monocoque chassis, wings, tyre warmers - are banned, and the early class cars have to use outboard suspension.

"In all walks of life, people should think about simplifying, getting back to basics," reckons Webb. "When we created Formula Ford we were simplifying the basics so that a whole generation of people who couldn't afford to get onto the motor-racing ladder in a single-seater were able to go racing. It's great to see that, in some of the classes anyway, that still holds good.

"The great thing was, as the rising stars moved on from Formula Ford to F3 and above, there was always a new wave of drivers to take their place. Scores of them. And because the racing was so close, you had no idea what the next meeting had in store. We were discovering a new Max Verstappen every week."■

## The heart of the matter

The engine that started it all is still going strong By Matt James

hen the first Ford Anglia rolled off the production line, it set in motion the events that would lead to the creation of the most popular single-seater category of all time.

Although the 1959 version of the saloon was fitted with an early one-litre development of the Kent engine that would go on to become synonymous with Formula Ford, it shared the same block.

Developed into a 1500cc motor for the Cortina later in the 1960s, particularly its GT model, the robust and cost-effective engine would find its way into the back of the very first Formula Ford car, the Lotus 51, in 1967.

But it was when the powerplant was fitted with a crossflow head that things started really moving. Of course, the premise of Formula Ford was to keep the cars within reach of the man on the street, so developments were kept to a minimum.

Henry Taylor, Ford's competition manager at the time, was a prime supporter of Formula Ford and he was heavily backed by the Blue Oval's then public relations guru Walter Hayes.

The crossflow motor was introduced at the end of that initial Formula Ford season and the capacity was ramped up to 1600cc. Blueprinting was also allowed. As author Graham Robson explains, the move opened up engine-tuning possibilities and allowed the cleverest engineers to make real strides.

"Blueprinting basically meant a lot of jiggery-pokery," says Robson. "The theory is that if you sat down with an engine and the whole panoply of drawings, you could build





an engine to exactly the dimensions it should have – if you were a clever engine builder. One that comes to mind is Scholar Engines, because it was famous early on and it was very prolific.

"People like Scholar could float right up to the edge of the regulations without breaking them. And you could, for instance, have a camshaft profile that was still just legal and so on and so on. Blueprinting meant, in theory, making the engine as super-standard as you could.

"Once the real experts, the engine builders, had worked their miracles, power went up. In theory, the first engines - the road-car engines - were 78bhp. But a Formula Ford engine that had been through an engine builder would be getting on for 100bhp. It's not crookery, but it is a matter of knowing just what works and what doesn't - maybe let's call it sorcery."

Extracting the most from the powerplant wasn't easy in the early days, and Scholar

#### "It's a matter of knowing what works - let's call it sorcery"

Engines boss Alan Wardropper explains that the problems were mostly down to Ford. Scholar was created in 1968, and was in on the ground floor in terms of development.

"It's funny when you think about the modern engines that were in Formula Ford after the Kent days: the Zetec and the Duratec. No-one ever complained about the engines then, did they? That's because the engines are so precise.

"But the problem with the early Kent Formula Ford engines was that there was a massive variance in their construction. The tolerances were different, so you never got two engines that were the same. You could do something on one engine, and another would have been built with slightly different dimensions and parts. No two engines were exactly the same, which made the job slightly tricky."

That led to some quirks, including the famous 1980s 1600cc Kent engine nicknamed Patch. It was a Minister-tuned unit that was a repaired powerplant from a previous blow-up, hence the nickname. It went on to power Andrew Gilbert-Scott and Gerrit van Kouwen to Formula Ford Festival wins (it later blew up for good).

"There was Patch, but I'm not certain how 'original' Patch was at the end of the day - I think there were a few engines that

#### LIFE AFTER THE KENT



WITH FORD SUPPORTING THE CATEGORY, THE KENT ENGINE couldn't live forever. It had become outdated as a production motor at the beginning of the 1990s, and change was afoot.

The 1992 season was the last that the headline category in the United Kingdom was for the Kent block before it switched to the more modern Zetec powerplant. This upped the size of the engine to 1800cc, and then Formula Ford took another step away from its roots in '95, when slick tyres were introduced. Formula Ford was thought to be out of step with other categories at the time (notably Formula Vauxhall Junior) in the way it prepared young drivers for higher categories.

One of the drivers who contested the top-line British Formula Ford championship in both its Kent and Zetecengined eras was Michael Vergers.

The Dutchman was champion in 1990, and continued to race into the late '90s in the Zetec era. "I think the reason people liked the Kent-engined cars so much was their simplicity," explains Vergers. "The Kents were pure cars and the engines were easy to work on for the clubmen.

"Zetec did change things, and the cars had more torque low down," says Vergers. "In FF1600, it was all about keeping the momentum going. In Zetec, a driver could make a mistake in a corner and then would have the power to get out of it. The challenge was slightly less.

"Also, the engine had a heavier cylinder head to it, so that altered the handling of the cars. The centre of gravity changed and that took something away from it. There was also more to go wrong in the modern engines, which meant that the reliability turned off some of the clubman racers."

Zetec lasted until the end of 2005, before further alterations in the production range meant that the 1600cc Duratec (above) - lighter and immediately more popular - was adopted.

In 2012, the turbocharged 1.6-litre Ford EcoBoost engine was blended in to the championship as the main class, with the remaining Duratec runners allowed to form a second class, before EcoBoost was the only powerplant allowed from '13.

That engine remains in use today in the class that has been rebranded as British F4. While the name has disappeared, the everlasting interest in Formula Ford 1600 means that the category is a long way from dying out.

were given that name," remembers Wardropper. "We had a few of our own, including a South African-sourced engine we called 'Winnie', and there was another called 'Baldrick' that we sent to Ireland."

As Wardropper points out, with the more modern units, even an ounce or two more aluminium on a mass-produced engine, such as the Zetec or Duratecs, would soon mount up and the bean-counters would not be happy. Such precision did not exist in the late 1960s or the '70s.

"The engine is, essentially, very easy to work on," says Wardropper. "It has been since it came in. From 1967 until '71, the engines were the Mk1 version of the crossflow and then in '72 the Mk2 crossflow came in. From that point until now, when we are still working flat-out on Kent engines, the cylinder heads have been virtually the same.

"The secret was knowing the areas

where you can tickle it, some of its nuances. I'm not going to give away trade secrets! But there are specific things that the Kent needs help with: it's like a black art, if you like.

"You'd be able to try lots of different stuff in the engine, but essentially you would go back to things that you had done before. There aren't too many places you can go to with it."

When Kent-engined Formula Ford was at its peak in the 1980s, the work of the engine tuners was at its maximum. Most of the leading teams were allied to tuners, and Scholar was working with the dominant works Van Diemen team.

"Most of the runners would make sure that the engines were rebuilt every 1200 to 1500 miles in the 1980s heyday," says Wardropper. "I guess, over the course of a season, they could spend up to £5000 on the motors. But some of the works teams



would have the cylinder heads and valves checked every few hundred miles too.

"I think that over the course of the Formula Ford Festival, we would have the cylinder heads of most of the leading cars in the week leading up to the race. We would do it while the test week building up to the event happened. We were never quiet none of us [engine builders] were."

The black art employed by the engine tuners could improve performance and reliability, and the inconsistency in the engines themselves meant a good unit was sought-after and that sent prices rocketing.

"As far as Kent-powered Formula Ford is concerned, a lot of people put emphasis on the engine and its tuning," says Wardropper. "But, when you look at the key elements engine, driver and chassis - then the engine is the one constant thing in it. Lots of people put store by making sure the tuning was right, but you could probably find more

**Basic components** helped encourage the category. This is Mondiale in 1984 in the other two elements.

"When I look back at the drivers who all went on to greatness, none of them complained about the power of their engines. I think there might be something in that."

While Formula Ford has gone in different directions in terms of engine (and even name) since the early days, the Kent version has refused to die.

The Formula Ford 1600 class remained overshadowed until the early 2000s, when it reignited. Even the Formula Ford Festival eschewed its roots but, from 2002, the 1600cc engine reclaimed its place alongside the newer versions in having a showpiece final. It has since restored its place as the headline act at the October meeting.

The Walter Hayes Trophy at Silverstone, which was created in 2001, also helped rekindle the Kent spark.

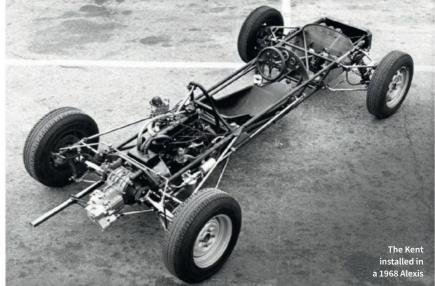
Over the past five years, constructors

have started to build new bespoke chassis to meet the growing demand, and there is a raft of competitions to pitch the best FF1600 runners against each other.

"When we started doing the Mk2 engines in 1972, they were £200 per unit. I wish I had stocked up," jokes Wardropper. "I am staggered that it's maintained the popularity it has. OK, the engines are easy to work on, but they're still expensive. It costs between £1.50 and £2 per mile to run a Kent engine with the mechanical deterioration and reparation that needs to be done to the motor. The Zetec and Duratec engines cost just a few pence.

"However, the marketplace has shown that the Kent engine has retained its popularity. Here at Scholar, we have one guy working full-time on Kent engine rebuilds and even he's too busy. I would never have thought that would have been the case when I started Scholar 49 years ago." ■









## The greatest rivalry

Many marques battled it out in Formula Ford, but the competition between two in particular stood out. By **Matt James** 



ormula Ford warfare reached its peak in the 1980s. While the '70s had seen a proliferation of small, independent manufacturers, the '80s was when the competitive edge of the Kent-engined category was at its sharpest.

The larger specialist manufacturers realised there was money to be made but, to keep the cash rolling in, the quest for success became red hot.

Prime among the acknowledged category benchmark constructors was Van Diemen, and its job was to fend off Below left: "It was just pure competition," says Firman

Below: "Most enjoyable time of my career," reckons Reynard

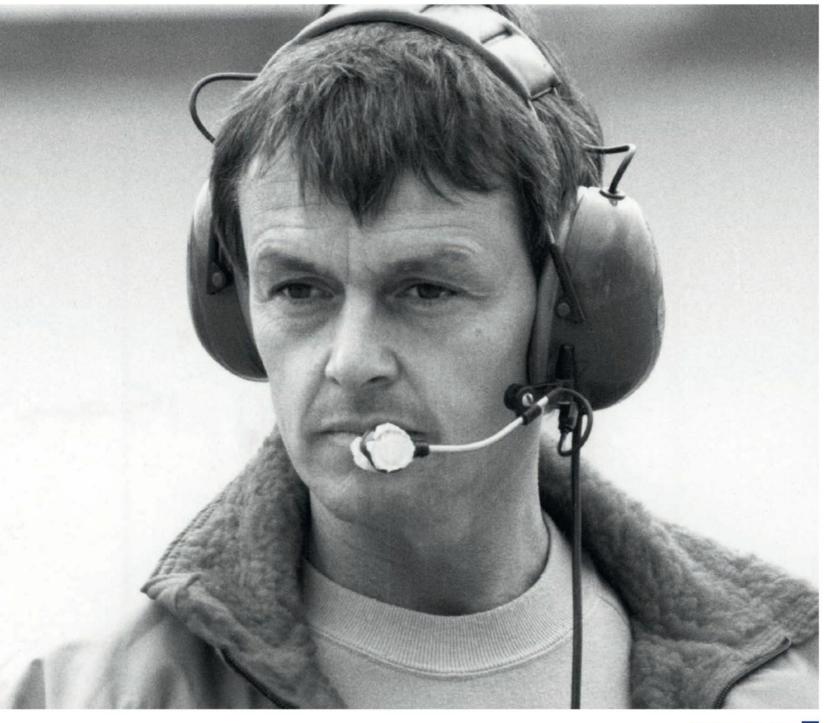
a host of pretenders to its crown. There was competition from Lola, Royale, Quest, Swift and the small Northern Irish constructor Mondiale, but one of the strongest and most consistent threats came from the up-and-coming Reynard firm.

We talk to Van Diemen boss Ralph Firman and Adrian Reynard about the pitched battles that were fought on the circuits up and down the country.

#### What was it about the Formula Ford category that attracted you?

RALPH FIRMAN I had been running a team of F3 cars - although in those days, you

called it a preparation shop, not a team. As was always the case, I got knocked financially by a couple of drivers and I figured that the only real way to make money out of it was to build cars. When you looked around at motorsport, Formula Ford was the shining star. It was affordable to build and it was on the rise. **ADRIAN REYNARD** I had done a racing school in a Lotus 51, and I bought a Ginetta G18B to race in 1972, which came with an engine. I crashed it, and bent the chassis. I learned all about the car as I rebuilt it – all the bits and pieces on it – but I knew the car was too soft and there was lots I could





improve on it. So I designed and built my own car during '73 and made my debut in it at the end of '73, the first Reynard car.

#### Could you feel the surge in popularity in the category?

**RF** There were literally hundreds of cars around, and it was really going places. The engineering skill going into the cars was increasing too, and that brought more and more people to it. We took a knock when the Crossles and the Hawkes came in during the mid-1970s, but we got going again when I employed Dave Baldwin to design my car in '77. That turned us around. AR Simply everybody was in it, and that wasn't just the top drivers and the top cars, it was the top engineers too. I was running my car and looking at all these established manufacturers, and I thought I would like to be a part of that. I built five cars for 1976 but I concentrated on FF2000 for a while. Leame back to Formula Ford 1600 in '82

#### How hard was it to make money from FF1600 to begin with?

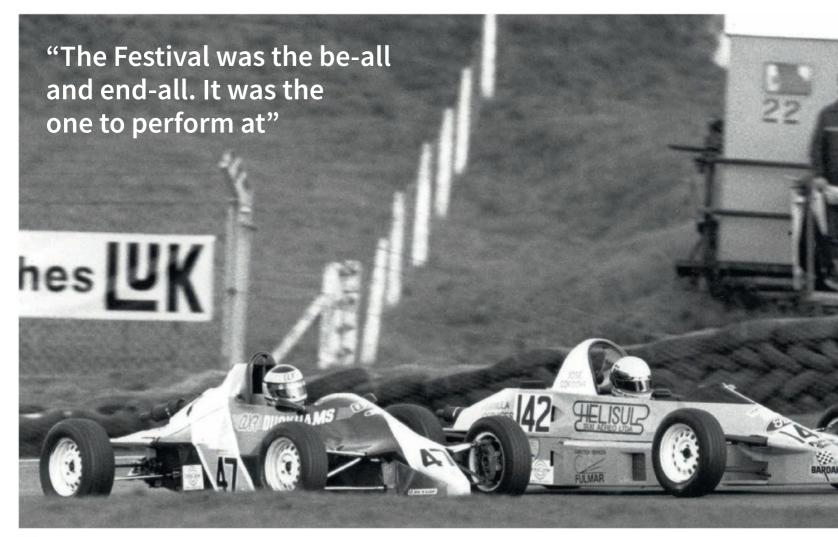
**RF** I remember other manufacturers moaning about this or that, and I said

to them that the only way to make real money out of it was to either build 10 chassis or 100 chassis. It was an economy of scale. We were set up as an operation that could build 100 cars - we had all our own fabrications and machining shop and so we had to build as close to that number as possible. It was hard though. AR I had started a business with Bill Stone, who was the production manager with March Engineering when I had just left college. We were making wishbones for March, Mallock and Chevron among others. Building racing cars was something that was done on the side, if you like, and I used to sell the cars in kit form because I had nowhere to put them all together. It was a gradual process building up the business and Bill left in 1977. We re-entered Formula Ford 1600 in the early '80s; it was a lot more serious.

#### What were the key areas of development in the 1980s in Formula Ford?

RF We just took what we learned year on year and applied it to the chassis for the following season. That could be from the chassis side or the engineering side. The tools we were using improved year on year too, so that helped. I always used to say that we would spend £100,000 to find 0.1 seconds each year. That was true when you took into account the development, the testing and the design process that went into everything. Of course, during some seasons, that wouldn't work and someone would come up with something better... AR Because I was an automotive engineer, it was all about maximising performance. I was not involved in the engine or the gearbox - I left that to other people - but I was all about the stiffness of the chassis and the suspension. When I say that about the suspension, I don't mean the springs and things like that, I mean I built it so that it would not flex, which meant the cars were predictable to drive. We worked hard on the spring loads that would go into the car. That's why I think so many people liked the cars that we produced.

I guess the aerodynamics were the biggest revelation. I had been working as chief engineer for the March F1 team in 1980, and we took



the car to the MIRA windtunnel. We did the same for the Reynard 82FF."

#### **How important were the works** teams to promoting your brand and promoting the success of your chassis?

RF The works team was 100% important to us: not least because it gave us power to our door and we would keep them hanging on and hanging on for news about That generally meant I would go along to the meetings and help with the set-up and we would also be in a position to offer development parts and things like that.

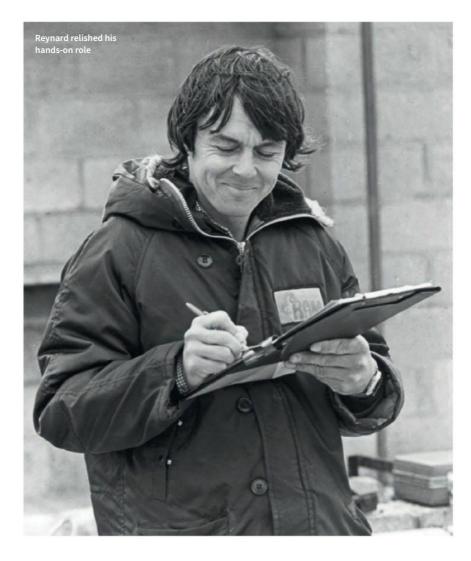
in the driver market. People would come the works driver. Of course, in our mind, we would already know who we wanted and who we had signed, but by keeping the others stringing along, they would run out of options. Then we could place them with teams that had been loyal to the Van Diemen marque. Gamesmanship? Maybe, but I am sure the other manufacturers did likewise! **AR** We never ran a full factory team as such: we relied on teams to do that for us. But we would assist certain teams and help with the engineering side of things. We were also good at loaning cars to a lot of quick drivers, which is what we would do to keep ourselves in the shop window.



RF We would just talk about the up-andcoming talent among ourselves. If we had a better car than other people, then drivers would naturally come to us. Maybe they had done a junior Formula Ford championship, or a regional one. With a driver like Ayrton Senna - who came to us after we waited for two years - we knew about his reputation and we knew about him before he came knocking. He had been quick in karting, and we did pay attention to that. But we took it upon ourselves to spot who would be the next big thing coming along.

Sometimes, we had drivers who weren't the best win the championship because the car we had given them was good. Conversely, sometimes we had drivers who were great but the chassis might not have been the best and they lost out. Things were so competitive that you couldn't afford to slip up because someone else would be there. AR When [partner and former FF1600 dicer] Rick Gorne joined me in 1982, he was very good at putting a package together. He would source a good engine, find a driver with sponsorship, he would

build relationships with teams and he



would join the dots of the whole programme. You could then place drivers where you wanted them to be with teams who you wanted to run your cars. That is the way we worked it to make sure we had the top guys in our cars.

#### How intense was the rivalry between you when it was at its height?

**RF** It was just pure competition. Anything that happened between the teams was to do with the competition on the track and that was it alone. You were desperate to beat each other. It was about proving yourself every single weekend, and if you made a mistake, it would be pounced upon. You had to be perfect. It never got personal, no matter what the result, and you would be able to go into the bar at the end of the day and share a drink with the guys from the other manufacturers. For me, that was the appeal of it. AR It was fierce, but it is always good to have any competition in any formula that you do. It was a good clean fight, and the rivalry on the circuit was strong. I'm not sure that we actually did go for

drinks afterwards, but there were all kinds of tricks going on: stealing customers from each other and trying to get the upper hand. Those were the market forces at the time that drove everybody on. The racing was very clean, even though we eyed each other suspiciously and even, on some occasions, contemptuously. Despite that, I can't remember any major rows or protests between us all.

#### **Was the Festival more important** than the championship?

RF The Festival was the be-all and end-all. Sure, you could win the championship, but you could also lose it and that would be forgotten by the time that the Festival came about. It was the one to perform at and, from a commercial point of view, it was perfect timing: you would generally show your car for the year ahead in the paddock at Brands, and it would also be the last thing that most people remember from the season just gone. It would certainly help to fill an order book. AR For me, it was all about the championships. That is what I wanted to build my company and my reputation





A E DRY SUMP SYSTEMS

## ARE The dry sump specialists



ARMSTRONG RACE ENGINEERING INC, better known as ARE Dry Sump Systems in California, is proud to have been making dry sump systems for Formula Ford racing engines for over 43 years

he company was founded in 1974 as a racing engine machining and building company. By 1976 the company had a fully equipped machining and balancing facility with two engine dynos, flow benches and engine assembling departments.

Formula cars were always the passion of ex-kart racer Gary Armstrong, founder of ARE. Of course, this led to racing Formula Fords, but his main passion after obtaining degrees in Automotive and Mechanical Engineering became designing products.

It became apparent early on that there were major improvements to be made to dry sump systems, and this remains the company's focus to this day. The marriage of ARE Racing Engines and ARE Dry Sump Systems early on allowed for much-needed in-house development, both on the dyno and on the track.

The Formula Ford 1600 cast alloy dry sump was developed with the unique and power-proven off-set trough design in 1975, and was only the third dry sump product to be built by ARE. Considering the company now makes over 50 different dry sumps, that was quite early on!

Our heat-treated, fully machined alloy dry sumps became the top choice of the racing industry and by 1980 ARE was producing over 20 different dry sumps for applications including small-block Chevrolets in Formula 5000, as well as NASCAR.

The tried and proven Kent Formula Ford dry sumps evolved into structural units for the first March Formula Atlantic cars and then on to being standard equipment on the Swift Formula Ford 1600 and 2000, as well as Van Diemen and Reynard Formula Ford cars. These components are still made to this day.

In development for the past couple of years is ARE's all-new FF1600 'fluidic' design, based on the American Le Mans Series-winning LS Corvette ARE dry sumps. This takes the Formula Ford Kent 1600 engine to another high-tech position in the ever-popular and competitive series, just in time to celebrate its 50th anniversary.

This new dry sump is designed for even greater performance and durability, using A356 aerospace aluminium alloy, heat-treated to T-6, fully machined in-house on our HAAS four-axis CNC units and incorporating the ARE Fluidic design, with o-ring type screened outlets available either on the right or left.

It is no secret that nostalgia and passion for Formula Ford encourages ARE's desire to continue making dry sumps for FF1600 engines, and we are coupling that with state-of-the-art innovations.









We are happy to have Formula Ford champion, owner and instructor Ed Moore as ARE's agent in the UK for ARE Formula Ford dry sumps. All other ARE dry sump components as well as the Spintric air/oil separator (www.spintric.com) are distributed by Classic World Racing's Mike Jukes.

Visit ARE at www.drysump.com for more information

#### SWIFTLY INTO THE FIGHT



TOWARDS THE END OF THE 1980s, Reynard and Van Diemen faced a new challenge: Swift Cars. They were designed and constructed in the USA, but racer Frank Bradley persuaded the firm to give him the licence to build the machines in England.

Bradley says the motivation to create his own chassis was inspired by the Van Diemen boss himself. "I was actually driving for Ralph

Firman in Formula Ford 2000 in 1985, but he put the price up for the following season, so I said no to him and told him I was going to build my own car," remembers Bradley. "I am not sure he quite believed me. Anyhow, I got in touch with Swift and they granted me permission to build the car in the UK."

That started a stream of success. which culminated in two championship successes in the early 1990s and a

Formula Ford Festival win in 1990 with Dave Coyne (#9, pictured above, the year before) driving.

"When I started building the cars, I was in a corner of Ralph's workshop because it was the only space we had," says Bradley. "That arrangement didn't work out to be too popular..."

The rivalry was generally good natured, but there was plenty of double dealing with drivers - and there were

a few extra stunts that were pulled too.

"I remember at the Formula Ford Festival, Ralph and Van Diemen always used to be at the top of the paddock in pride of place," says Bradley. "I thought that was a bit unfair, so I got in touch with Brands Hatch boss John Webb and offered to rent the top end of the paddock for £100 or something. Being Webby he bit my hand off for a bit of cash - Ralph was not amused..."

on. The Formula Ford Festival was always something of a lottery and you always had to have luck on the day. You had to go through the quarter-finals, semi-finals and finals and so much could happen. That doesn't necessarily say who has got the best equipment. No, it was titles that I was interested in.

Van Diemen-Reynard rivalry was consistently fierce

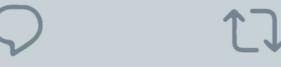


#### Did you enjoy the battles between you?

RF Looking back on it, that was the zenith of Formula Ford and competition in the purest sense. It was all about winning on the track, and it consumed all you did. It was the level it operated at, and the threat coming at you from all quarters, that kept you on your toes throughout the season and then again in the off-season. There was no time to relax because you had to constantly strive to be the best, otherwise you would lose your position at the top. Intense, yes, but thoroughly enjoyable. AR It was the most enjoyable time of my career. Obviously, my company grew and we expanded into other categories with lots of success. We had 200 or 300 people at our height, and there were some very clever people there. But then you have to share the glory with the people that you had gathered around you. I was more like the architect than anything else. In Formula Ford, it was just me and Rick and we were 100% responsible for it. The success was down to us, and the satisfaction was great.

#### Do you think that will ever be recreated in another series?

**RF** It would be impossible now. There are so many one-make series and there is no room for engineering freedom. I am still involved in Kent-engined Formula Ford because I love it, I love the creativity it breeds and there are still manufacturers out there to beat. That's why I keep coming back to it - and I probably always will. **AR** To do that, you would need a free hand with constructors and you need a free engineering hand. There needs to be room for innovation but there is very little space for that in motorsport today. I guess Reynard had a hand in closing that loop with the onset of the one-make formula with Formula Vauxhall Lotus in 1988. I currently race with the 750 Motor Club [in the Bikesports Championship] and there is freedom there, which I enjoy. Maybe there is space within the 750MC to do something like that again. Who knows where else we are going to get the next generation of engineers if things like that don't exist?"■







### Autosport @autosport

## Your Formula Ford favourites

We gave you the opportunity to join in with our **Formula Ford** celebrations on social media. Here are the moments, drivers, cars and circuits that have made an impression on you over the years

**Vicholas Sheehan** @thenicksheehan

Seeing a young lad coming out of bridge @SilverstoneUK, going round the outside at Brooklands, inside at Luffield and taking a last gasp win. We thought that lad had some talent so I kept an eye out for him over the years. Apparently he got the hang of racing did @JensonButton:-)

Steven Gaitt @gaittman

A sucker for a Duckhams Van Diemen. 2000 Festival win for Davidson was best defensive drive I've ever seen. Thruxton slipstreamers were ace

Mare @aware86

Luca Filippi @LucaFilippiLF

For me any Duckhams Van Diemen

The 1988 champion #Vincenzo Sospiri, the only Italian winner of the Formula Ford festival history!

Sean Thompson @seaniethompson
I was there!! What a great day.

Tim Taylor @tim\_taylor10

Has to be Woodcote on the Silverstone Club Circuit when you'd have them heading at you 5 or 6 abreast!!!

Steve Beards @stevebeards

My favourite car was the Reynard FF84 and with John Pratt driving, always sideways

Wayne Boyd @wayneboydracing

Best track has to be Brands especially come Festival time, always seriously tight racing!

David McArthur @mcarthur252

Still going strong. FF1600 the most competitive club racing in the world today and I'm incredibly proud to be a part of it.

Jamie Stanley @jsrworld

Been the training ground of the greats but these days it's all about the #walterhayes

Matt James @MattJMNews

It was the Festival final in 1989, and I was a Jonathan McGall fan. He led the final until Nico Palhares, who won, had him off! I was gutted

Brian Stewart @eurocardoc

The Magic Merlyn! Brands Hatch and Tony Brise

Paul Anthony @toneantoine

May have to dig out the VHS for FF Festival '88 soon!











James @mundy71
@antdavidson winning the festival in 2000 or Bernard Dolan getting under
1m34 on the Brands GP track

Teemu Salo @salo74teemu
I have never watched the races but I remember playing Toca Race Driver 3
when I was a little kid. I always wanted to drive Formula Ford!

**Whockhill Circuit** @krcircuit

Formula Ford @krcircuit - the perfect track for fantastic FF1600 racing!

Kevin Turner @KRT917

The Duratec Festival final in '06 stands out for me. @NickTandyR was amazing in the wet. If only he'd not overtaken behind the safety car...

Nick Tandy @NickTandyR

That was a mega race! Never mind, '07 was kinder to us!

Adam Cooper @adamcooperF1

At the first FF1600 race I covered for AS in 1985 I met @HillF1,
@markblundellf1, @johnnyherbertf1, Eddie Irvine and Bertrand Gachot

Marcus Simmons @MarcusSimmons54

1985 season was epic. Great senior crop, strong juniors, and Champion of Brands had bumper grids too!



Edgar Wasseige
The genius of Senna.

Oliver Briscoe

Jan Magnussen, last race of season at Silverstone in 1992, pulled off at least two perfect passes into Brooklands which are both in the top few best passes I've witnessed.

George Pribojac

Formula Ford Festival 1985 at Brands Hatch won by Johnny Herbert driving a Quest. There was no way he should have been able to win it; his drives through the field were just fantastic to watch. You could tell from his first heat that he was something special. I was also at Brands when he had his huge F3000 accident; such a shame. Without his injuries I'm sure he could have been an F1 World Champion.

Stephen Griffin
I saw them at Donington in 2010 and they didn't disappoint.











Whether they've used it as a springboard to reach the higher echelons of motorsport, or made a career in the category itself, racers cherish their time in Formula Ford

#### **DEREK WARWICK**



Ex-F1 driver and 1992 World Sports **Car champion** In 1976 I drove in 63 Formula Ford races in a Hawke DL15 and won 32. It was possible to do that many races in

those days with a man and a van and we ran it very cheaply.

That season was very special. It was so hard and you were up against people like Jim Walsh and Rick Morris, specialists on certain circuits. You had to be on your

A-game to beat them.

We still ran the Hawke DL15, which was an easy car to set up. With hindsight I spread myself too far. We decided we wanted to do all the Formula Ford championships, so we did the European, the British, the Townsend Thoresen and the DJM Records championship. I won the European title, but I didn't win any of the British championships, which was a bit of a disappointment.

We all decided we'd go to Europe - all the top runners, David Kennedy, Rod Bremner, Derek Daly, Bernard Devaney - so the competition was amazing. At the Sachsenring there must have been a 15-car train. I remember going into the last lap in something like 12th position

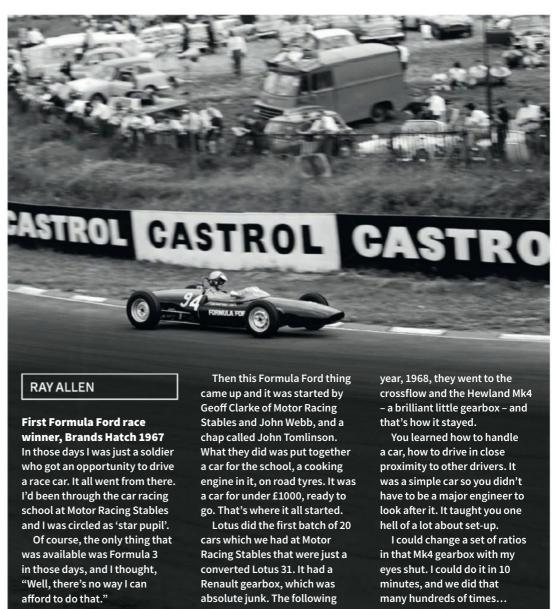
and then winning the race. I was racing against great drivers - they were all, as it turned out, potential F1 drivers. We also had a lot of fun.

For the 1976 Brands Festival Hawke's David Lazenby wanted me to run the new car, the DL17. I didn't want to, but he persuaded me and said he'd run the car from the factory.

We were quickest in practice and we were on pole for the semis, and all of a sudden I've got all sorts of stewards fussing around me with oil coming out the back of the car. It was pissing out of the brake pipe. I said, "Clean it up, tell me to press the brake and I'll make out I'm pressing it and then it'll be clean" [to satisfy the stewards].

Warwick had an eventful Festival at Brands in the new Hawke DL17





I knew I was going to end up with no rear brakes, and I did the whole race with iust front brakes. I think I finished sixth. which meant I was on row six for the final.

It was the only time the car wasn't under my control and Derek Daly was the guy taking the car backwards and forwards to Hawke. I once accused Derek of tampering with the car, which I withdraw now because I think he wouldn't do it. I don't think it's in his DNA. All I can say is I don't know how I could have done practice, heats and quarter-finals without a bevel end – it had been hacksawed off.

I came through and finished second in the final, and I was devastated. The Festival was a big stepping stone to Formula 3, and an important race to win.



Walsh was famed as a punchy racer. but perhaps not as pugilistic as Henry

#### JIM WALSH

#### Formula Ford legend

I had a lot of fun in Formula Ford. We lived in Northampton at the time, and it was John Murphy who got me started as he used to work for my father as a mechanic. I used to go and watch him race, and then my father gave me the opportunity to go through the Jim Russell School.

It was quite amazing, really. There was John Murphy and Syd Fox and all those very quick drivers. When I started practising at Silverstone I thought I was really late on the brakes into Becketts - but then John and Syd would come by me like I was a novice. That gave me a good goal to aim for, and it was good for me when I got up on equal terms with them.

I used to love the car control of those Formula Fords; we had some great races. I met a lot of good friends like John Village and Rick Morris. I also raced with Derek Warwick, Geoff Lees, Bernard Devaney and Derek Daly. It was a great time of my life.

I won the Silverstone Formula Ford championship three times in 1976, '79 and '80, but I stopped racing in 1981. We were looking for sponsorship to do Formula 3 but I only managed to do one race. The sponsorship deal didn't get off the ground.

I was testing a Pacer at Snetterton and had quite a bad accident when a steering bracket broke. That put me out of action for a few months, and I was in hospital in Norwich when I got the news that the F3 deal had fallen through.

The only time I was ever on a circuit with Ayrton Senna was the day I crashed at Snetterton. He was just starting in a Van Diemen, and there were only a handful of drivers who could take Russell flat in top. He was one of them. I could see right then that he was going to be great.

#### **NICK TANDY**

#### 2015 Le Mans winner

I loved my time in Formula Ford and I'm really proud that I'm part of the category's history. It was a great time in my career because it was also a time when I was running my own cars. You could develop your own bits and pieces and work with your engine builder and so it wasn't just about the driving.

I started in Minis, but I always fancied being able to look out and see the wheels, which was a novelty. You soon find out that if you can see the wheels it's also a lot easier to knock them off, which took me some time to get my head around.

The Formula Ford Festival was always the big one and I won with the late, great Bert Ray's chassis - and I'm glad he was around to see it.



#### F1 chief technical officer

In my first professional race, my design finished first, second and third. I thought, "This is easy, so I'll keep doing it." But it got a bit harder after that.

At Hawke I was responsible for the development of the DL15 and the DL17 and then I went on to Royale with the RP26, RP27 and RP29.

John Village and I were in the same class at school and he used to copy my maths! One year, towards the end of term, our history teacher was asking us what we were going to do when we left school. John said he wanted to be a racing driver, so I said I'd be his mechanic.

We were able to go back to the school a few years later when John had just won the European championship in a car I designed. So we did learn something at school.

#### **CLIFF DEMPSEY**

#### Formula Ford team boss

It was 1990 when I'd just started the team. We went to the Festival and we were up against all the works teams, and we put the car on pole with Michael Edgar. That is something I will always look back on because it was a very special day.

We didn't realise it at the time because we were so green, but to go there and stick the car on pole, ahead of the quality of drivers and teams that were there, was a remarkable achievement.

We did the Southern Irish championship, Northern Irish championship and a few rounds of the national championship. That probably made it more special, because we didn't have as much running time as the cars that were racing there.







#### **TOP FORMULA FORD WINNERS**

POS DRIVER

The winners of the major national series in Britain using Kent engines (1968-92), Zetec (1993-2005), Duratec (2006-11) and EcoBoost (2012 to date). Only final wins from the major national championships are included (ie heats are not counted).

POS	DRIVER	CAR	WINS	
1	Jim Walsh	Hawke DL12/Royale RP21/RP24/RP26	32	
2	Dan Cammish	Mygale M13-SJ	26	
3=	Dave Coyne	Royale RP26/Van Diemen RF81/RF84/Swift FB4/FB89 Ray 86F/Van Diemen RF87/RF88		
3=	Derek Higgins			
5	RickMorris	Hawke DL15/Royale RP26/RP29/RP31M	24	
6=	Kenny Acheson	Royale RP24	21	
6=	Andrew Gilbert-Scott	Van Diemen RF79/RF81/Reynard 82FF/Lola T642E	21	
6=	Derek Lawrence	Titan Mk6/Dulon LD9/MP15	21	
9	Scott Malvern	Ray GR10/Mygale SJ11	20	
10=	Mark Blundell	Lola T644E/Van Diemen RF84/RF85	19	
10=	David Coulthard	Van Diemen RF89	19	
10=	Jason Elliott	Van Diemen RF85/RF86	19	
13	GeoffLees	Royale RP16/RP21	18	
14=	Warren Hughes	Van Diemen RF90	17	
14=	RussellIngall	Van Diemen RF91/RF93	17	
16=	Don MacLeod	Lotus 69F/Merlyn Mk11A/Van Diemen FA73/RF77	16	
16=	Richard Morgan	Lotus 61/Ray 73F/Royale RP16/Crossle 25F	16	
16=	Mark Peters	Lola T540E/Van Diemen RF83/RF84	16	
16=	Tim Schenken	Merlyn Mk11	16	
20=	David McClelland	Crossle 30F/Van Diemen RF78	15	
20=	Paul Warwick	Van Diemen RF86	15	
22=	Jonathan Bancroft	Van Diemen RF84/RF85/Reynard 84FF	14	
22=	Eddie Irvine	Van Diemen RF87	14	
22=	Jayde Kruger	Mygale M12-SJ	14	
22=	Callum MacLeod	Mygale SJ07	14	
22=	Enrique Mansilla	Van Diemen RF80/RF81	14	
27=	Wayne Boyd	Mygale SJ08	13	
27=	Kenny Gray	Van Diemen RF75/Royale RP21	13	
27=	Niko Palhares	Van Diemen RF88/RF89	13	
27=	John Pratt	Lola T642E/Reynard 84FF	13	
27=	Colin Vandervell	Merlyn Mk11A/Mk11A/17	13	
27=	Trevor van Rooyen	Royale RP24	13	
33=	Robert Arnott	Merlyn Mk20A/Mk24	12	
33=	Kelvin Burt	Van Diemen RF88/RF89	12	
33=	Terry Gray	Royale RP24/Van Diemen RF79	12	
33=	Mauricio Gugelmin	Van Diemen RF82	12	
33=	Kurt Luby	Ray 86F/Van Diemen RF88	12	
33=	Roberto Moreno	Royale RP26/Van Diemen RF80	12	
33=	Scott Pye	Mygale SJ10	12	
33=	John Village	Royale RP26/RP29/RP36/Van Diemen RF85/RF86	12	
41=	Julian Bailey	Lola T540E/T640E/Van Diemen RF81	11	
41=	Tommy Byrne	Van Diemen RF80	11	
41=	Jonny Kane	Van Diemen RF91/Swift SC94F	11	
41=	David Leslie	Royale RP24	11	
41=	Eric Lichtenstein	Mygale M12-SJ	11	
41=	Valle Makela	Van Diemen RF03	11	
41=	Nigel Mansell	Hawke DL11/Crossle 25F/32F	11	
41=	David Sears	Royale RP26	11	
41=	Ayrton Senna da Silva	Van Diemen RF81	11	
41=	Ian Taylor	Dulon LD9	11	
41=	Derek Warwick	Hawke DL15	11	





#### Mark Blundell

Blundell burst onto the UK FF1600 scene as a teenage motocross champion in 1984 and was an immediate success, taking 25 race wins across his first season in circuit racing and securing second in both Junior FF1600 championships, as well as the Champion of Snetterton title – the achievements earned him the prestigious Grovewood Award. His second year in FF1600 brought the Esso-backed BRDC title. He stuck with Formula Ford for his step up to FF2000 in '86. Blundell's later career included Formula 1 podium finishes and a Le Mans 24 Hours success, plus victories in CART Indycar. He remains involved in motorsport with his MB Partners driver management company, which steers the careers of an array of rising stars and provides in-house simulator training.





#### Derek Warwick

Formula Ford 1600 was the circuit-racing launchpad that bridged Warwick's careers as a world champion in stock cars and a future Formula 1 star. After some exploratory outings in 1975, he contested every FF1600 championship he possibly could in '76 in a self-run Hawke while working for the family Warwick Trailers firm in the week. The result was 32 race wins from 63 starts, runner-up spots in the major British series and the Festival, and the European championship title. That established him as a single-seater prospect and set him on the way towards F1 via Formula 3 and Formula 2. Though never a grand prix winner, Warwick contested 146 F1 races between 1981 and '93 – and his parallel sportscar career included Le Mans 24 Hours victory in '92.





#### Robert Dahlgren

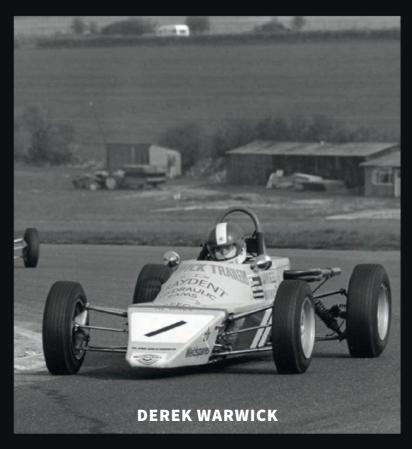
Swedish star Dahlgren was the sensation of the Scandinavian Formula Ford scene in the late 1990s, taking third in his home FF1600 championship in his first year of car racing in 1997 and then both the Swedish and Nordic titles the following season. That set the scene for a three-year stint in UK Formula Ford Zetec, starting with the Menu Motorsport team and then the works Van Diemen outfit. A regular race winner but not consistent enough for a title at first, he put it all together for a sensational underdog championship victory for the Murray team in 2001. He has since become a Volvo touring car star, with spells in V8 Supercars and the World Touring Car Championship, plus great success in the Scandinavian championship, which he currently leads in a SEAT.

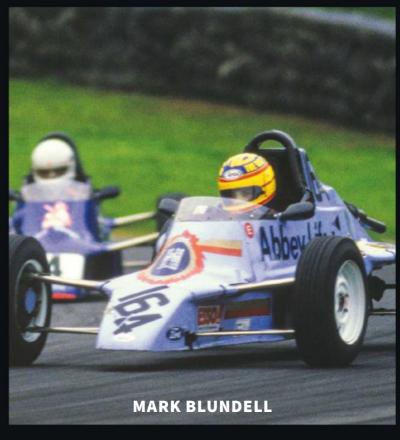




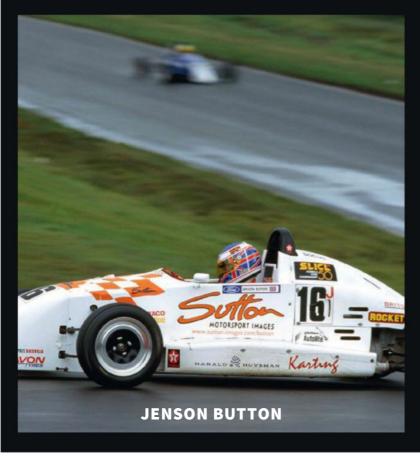
#### Jenson Button

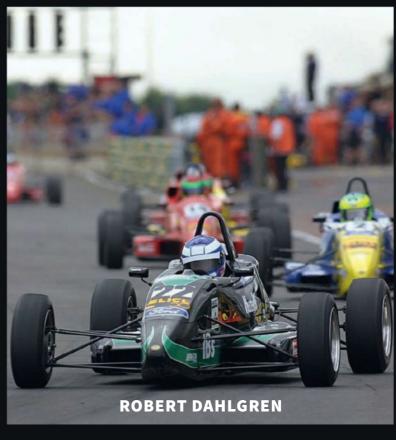
Button was already tipped as a future Formula 1 star when he arrived in British Formula Ford in 1998 with a glittering karting career behind him. Up against a field that included future IndyCar champion and double Indianapolis 500 winner Dan Wheldon, plus future multiple Australian V8 Supercars champion Marcos Ambrose, Button stormed to the title in his Haywood Mygale. By the end-of-season Festival, Wheldon's and Ambrose's improved works Van Diemens were looking tough to beat, but Button emerged on top from a clash with Ambrose to win the showpiece event too. A McLaren Autosport BRDC Award win followed, before a 17-season F1 career that included 15 grand prix wins and a staggering 2009 title with the hurriedly-created Brawn GP team.

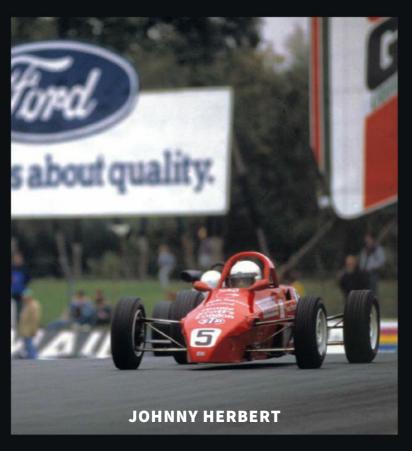


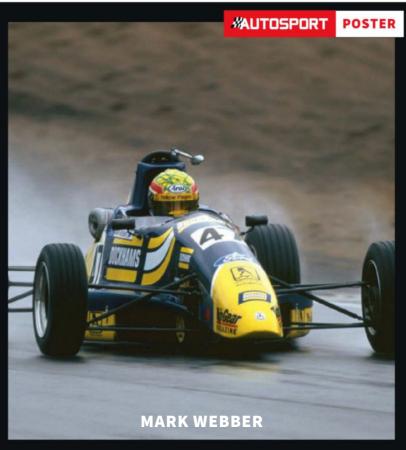


## LEGENIS OF F



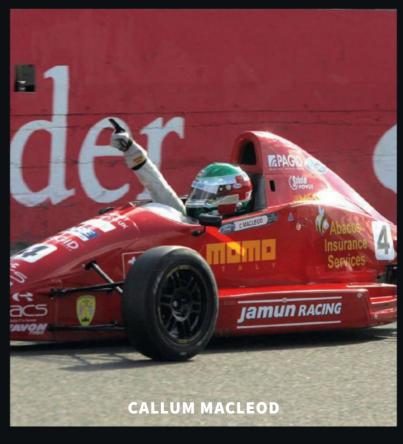






## DRMULA FORD









#### Mark Webber

Nine-time F1 grand prix winner and World Endurance champion Webber was a Formula Ford race winner in his native Australia and the UK, including a famous triumph in the wet 1996 Festival. In the years following, he learned the importance of fitness in motorsport and forged a name as one of the fittest drivers on the grid. Now retired from racing and working with Porsche as a global ambassador, Webber is looking to share his experience and knowledge with the next generation of young racing stars by hosting a pre-2018 season fitness camp. Drivers and teams interested in tapping into his wealth of motorsport-centric training experience can register interest in attending the camp by contacting bookmark@markwebber.com before October 1.





#### Johnny Herbert

Racing the unusual Quest chassis against the might of the likes of Van Diemen made Herbert an underdog hero of the mid-1980s FF1600 scene. His victory in the 1985 Formula Ford Festival has become legendary. A crash at the start of qualifying left him at the back of the grid with a 10-second penalty for his first heat, but he hacked his way from the very back of the triple-figure entry to reach the front row for the final – which he won. Achievements such as his Festival win and the 1987 British Formula 3 title meant Herbert was tipped as a future Formula 1 world champion and, though terrible leg injuries from a Formula 3000 crash interrupted that progress, he won three grands prix as well as the 1991 Le Mans 24 Hours.





#### Callum MacLeod

MacLeod claimed the second UK Formula Ford title of the Duratec era in a ferociously competitive 2007 season. His main rival was future Le Mans 24 Hours winner Nick Tandy, but in a hard-fought year it was MacLeod who claimed the championship with 14 race wins along the way. His sponsor Abacus Insurance Services – www.abacusinsuranceservices.co.uk – supported his FFord title-winning season and has been part of his career ever since. Now a sportscar ace enjoying his campaign with Team Parker and Bentley in the British GT Championship, MacLeod is available for drives in any sportscar championship and can be contacted via callum@callummacleod.com and @cmacleodracing; more details of his driver coaching business can be found at callummacleod.com.





#### Nathan Freke

Freke showed what a driver on a low budget coming through the regional Formula Ford 1600 ranks could achieve in FFord in the mid-2000s, when he rose from success in the club-level series to earn a seat with top team Jamun for the first year of Duratecengined UK FFord in 2006. In an extremely competitive championship up against future Le Mans 24 Hours winner Nick Tandy and Indianapolis Freedom 100 winner Peter Dempsey, Freke won half of the season's 20 races and took the title by a commanding 161-point margin. Freke has since forged a career as a sportscar driver and built his own Century Motorsport team into a major force in UK racing. He is a BRDC member and is always available for drives.

## The champions

#### Compiled by Marcus Simmons

The champions of the major national series in Britain using Kent engines (1968-92), Zetec (1993-2005), Duratec (2006-11) and EcoBoost (2012 to date).

	BRITISH FORMULA	FORD	
YEAR	DRIVER	CAR	
1976	David Kennedy	Crossle 30F	
1977	Trevor van Rooyen	Royale RP24	
1978	KennyAcheson	Royale RP24	
1979	David Sears	Royale RP26	
1980	Tommy Byrne	Van Diemen RF80	
1981	Ayrton Senna da Silva	Van Diemen RF81	
1982	Mauricio Gugelmin	Van Diemen RF82	
1983	Andrew Gilbert-Scott	Lola T642E	
1984	Dave Coyne	Van Diemen RF84	
1985	Bertrand Gachot	Van Diemen RF85	
1986	Jason Elliott	Van Diemen RF86	
1987	EddieIrvine	Van Diemen RF87	
1988	Derek Higgins	Van Diemen RF88	
1989	Bernard Dolan	Reynard 89FF	
1990	MichaelVergers	Van Diemen RF90	
1991	Marc Goossens	Van Diemen RF91	
1992	Jamie Spence Swift SC92F		
1993	RussellIngall	Van Diemen RF93	
1994	Jason Watt	VectorTF94	
1995	Bas Leinders	Swift SC95Z	
1996	Kristian Kolby	Van Diemen RF96	
1997	Jacky van der Ende	Van Diemen RF97	
1998	Jenson Button	Mygale SJ98	
1999	Nicolas Kiesa	Mygale SJ99	
2000	James Courtney	Van Diemen RF00	
2001	Robert Dahlgren	Van Diemen RF01	
2002	Westley Barber	Van Diemen RF02	
2003	Tom Kimber-Smith	Van Diemen RF03	
2004	Valle Makela	Van Diemen RF03	
2005	Charlie Donnelly	Mygale SJ04	
2006	Nathan Freke	Mygale SJ06	
2007	Callum MacLeod	Mygale SJ07	
2008	Wayne Boyd	Mygale SJ08	
2009	James Cole	Mygale SJ09	
2010	Scott Pye	Mygale SJ10	
2011	Scott Malvern	Mygale SJ11	
2012	Antti Buri	Mygale M12-SJ	
2013	Dan Cammish	Mygale M13-SJ	
2014	Jayde Kruger	Mygale M12-SJ	

MSA FORMULA/BRITISH FORMULA 4		
YEAR	DRIVER	CAR
2015	Lando Norris	Mygale M14-F4
2016	Max Fewtrell	Mvgale M14-F4

	MCD/	BRSCC FORMULA F	ORD		
1968 Tim Schenke		Tim Schenken	Merlyn Mk11		
	1969	Dave Walker	Lotus 61		
	1970	Colin Vandervell	Merlyn Mk11A/17		
	1971	Bernard Vermilio	Merlyn Mk17/Mk20		
	1972	Ian Taylor	Dulon LD9		
	1973	Donald MacLeod	Merlyn Mk11A/Van Diemen FA73		
	1974	Syd Fox	Hawke DL11		
	1975	GeoffLees	Royale RP21		
	1976	David Kennedy	Crossle 30F		
	1977	Chico Serra	Van Diemen RF77		
	1978	KennyAcheson	Royale RP24		
	1979	Terry Gray	Van Diemen RF79		
	1980	Roberto Moreno	Van Diemen RF80		
	1981	Ayrton Senna da Silva	Van Diemen RF81		
	1982	Julian Bailey	LolaT640E		
	1983	Andrew Gilbert-Scott	Lola T642E		
	1984	Dave Coyne	Van Diemen RF84		

	BRD	FORMULA FORD	
ĺ	1972	Ian Taylor	Dulon LD9
	1973	Derek Lawrence	Dulon LD9/MP15
	1974	Patrick Neve	Lola T340
	1975	GeoffLees	Royale RP21
	1976	Jim Walsh	Royale RP21
	1977	Nigel Mansell	Crossle 25F/Crossle 32F
	1978	Peter Morgan	Lola T540
<ul><li>1979 Jim Wal</li><li>1980 Jim Wal</li></ul>		Jim Walsh	Royale RP26
		Jim Walsh	Royale RP26
	1981	John Village	Royale RP29
	1982	Rick Morris	Royale RP31M
	1983	${\sf MaurizioSandroSala}$	Van Diemen RF83/Reynard 83FF
1984 Alvaro Buzaid Reynard 84FF		Reynard 84FF	
	1985	Mark Blundell	Van Diemen RF85
	1986	Jason Elliott	Van Diemen RF86
	1987	EddieIrvine	Van Diemen RF87
	1988	Derek Higgins	Van Diemen RF88
	1989	Niko Palhares	Van Diemen RF89
	1990	Gareth Rees	Reynard 90FF

BARC FORMULA FORD			
YEAR	DRIVER	CAR	
1972	Syd Fox	Hawke DL9	
1973	Ted Wentz	Elden Mk8/Elden PH10B	
1974	Richard Morgan	Ray 73F/Crossle 25F	
1975	GeoffLees	Royale RP21	
1976 Rod Bremner Crossle 30F		Crossle 30F	
1977	David Leslie	Royale RP24	
1978 Kenny Acheson		Royale RP24	
1979 David Sears		Royale RP26	
1980 Tommy Byrne Van Dier		Van Diemen RF80	
1981	Enrique Mansilla	Van Diemen RF81	
1982	Gianfranco Cane	Van Diemen RF82	
1983	Peter Hardman	Van Diemen RF83	
1984	PeterTownsend	Lola T644E	

BRSC	C JUNIOR FORMU	LA FORD
1976	Sean Walker	Royale RP21
1977 WillyTRibbs RoyaleRP21/RI		Royale RP21/RP24
1978	Rob Zurrer	Crossle 32F
1979	Guy Dormehl	Van Diemen RF79
1980	Tim Lee-Davey	Tiga FF79
1981	Phil Kempe	Royale RP26
1982	John Penfold	Van Diemen RF81
1983	Perry McCarthy	Van Diemen RF83
1984	Jonathan Bancroft Van Diemen RF84	
1985	Jason Elliott	Van Diemen RF85
1986	Paul Warwick	Van Diemen RF86
1987	Derek Higgins	Ray 86F/Van Diemen RF87
1988	Kurt Luby	Van Diemen RF88
1989	David Coulthard	Van Diemen RF89
1990	Warren Hughes	Van Diemen RF90

BAR	JUNIOR FORMUL	.A FORD
1981	MarkPeters	Lola T540E
1982	MarkNewby	Van Diemen RF81/Royale RP31M
1983	Graham de Zille	Lola T642E
1984	Jonathan Bancroft	Van Diemen RF84
1985	Adrian Willmott	Van Diemen RF85
1986	Paul Warwick	Van Diemen RF86
1987	Derek Higgins	Ray 86F/Van Diemen RF87
1988	Kurt Luby	Van Diemen RF88
1989	David Coulthard	Van Diemen RF89
1990	Warren Hughes	Van Diemen RF90

JUNIOR ZETEC FORMULA FORD		
2000	Matt Gilmore	Van Diemen RF99
2001	Steven Kane	Mygale SJ00
2002	Ben Clucas	Mygale SJ01



### Cigar tubes to stealth bombers

Multi-make racing is one of the strengths of Formula Ford. Marcus Pye picks out the cars that set new standards

even its illustrious Formula Junior ancestor, active across the front-to-rearengined transitional period of 1958-63 can rival Formula Ford for sheer variety of machinery. Inspired by the relentless rise of the world's greatest junior single-seater category from the get-go at Brands Hatch in '67 to far beyond the onset of subsequent Zetec and Duratec-powered eras, more than 150 manufacturers built cars to meet the regulations, fuelling the aspirations of clubmen to F1 world champions.

o other class in motor

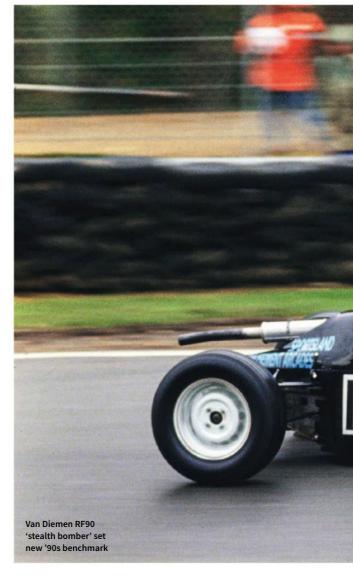
racing's rich tapestry - not

From commercial ventures of mixed fortune to free-spirited men in sheds with a burning desire to compete, Formula Ford inspired the masses, but as competition abounded the relentless testing and development to reach the top, then

stay there, was both expensive and cruel. It was survival of the fittest. Countless well-intentioned yet less commerciallyastute, or well-resourced, firms went bust - some several times - trying to defeat the might of its biggest players.

Having grown from small acorns in a bitterly cold and unprepossessing breezeblock building on a podunk Norfolk airfield, Ralph Firman's Van Diemen concern (propagated from the remnants of the defunct Lotus Components business that had given up on customer cars) made more than 2000 FF1600s, but was not always at the head of the pack with the likes of Lola, Royale and Reynard keeping veteran ex-Lotus designer David Baldwin focused.

The first purpose-built Formula Fords in 1967 were Lotus 51s, evolved from the 31 F3 model, a design rooted in the FJunior 22 of '62, albeit with the upright engine of its 20











predecessor. The 51 was hamstrung within the original £1000 price ceiling by its weak Renault Dauphine gearbox, rendered obsolete by Mike Hewland's clever reworking of the VW Beetle 'box, with the luxury of changeable ratios.

A version of Arthur Mallock's FJ to F2 (via Clubmans) U2 was there at the start  $\,$ too, bringing front-engined variety. Indeed, Richard Mallock ignominiously crashed his car – the only interloper amid the Motor Racing Stables v Jim Russell Racing Drivers' School Lotus fleets - on the warm-up lap for the inaugural race at Brands Hatch on July 2 1967. Happily, Mallock Jr did redeem himself with some strong victories in '68.

While Russell and brother-in-law Firman nailed their flag initially to Alan Taylor's Alexis mast - producing Russell-Alexis cars - it was Selwyn and Clive Hayward of Colchester Racing Developments who established Formula Ford's first powerhouse, having hit the ground running with their Hewlandequipped Merlyn Mk11. Tim Schenken's proved difficult to beat in 1968, the first

championship season, thus the Essex-built machines sold like hot cakes.

Simple, well-built and strong, with an excellent factory back-up, the sleek Merlyns handled beautifully and set the standard for several years. Successive Mk11A, 17 and 20/20A evolutions from Selwyn Hayward's pen improved the breed and brought hundreds of racers to the tracks. While later Lotuses, most notably the ultimate hallowed 69FFs (which followed the fashion-led 61 'wedge' model) and John Crossle's eponymous cars from Northern Ireland were fine tools - the Crossle 25F of 1974 ahead of its time - there was plenty of opposition.

Peter Hampsheir's wieldy Elden chassis, built near Brands Hatch and showcased brilliantly by Tony Brise and others in the early 1970s, sold as far afield as New Zealand, while ex-Lotus engineer David Lazenby's Hawke products sold widely too. Eric Broadley's Lola Cars was another to find an international foothold, making more than 100 of the earliest T200/202/204 series. A large proportion of the marque's

production was exported to influential distributor Carl Haas in the US from whence perhaps the ultimate FF1600 - David Bruns's awesome Swift DB-1 - would emerge in '83.

That's jumping the gun, however, for Bob King's Royale Racing (later taken over by right-hand man Alan Cornock) became Van Diemen's greatest challenger in the mid-1970s, by which time all signs of the classic cigar-tube-shaped miniature F1 cars of the '60s had disappeared. Rectangular-tubed chassis with straight, sided cladding had taken over and in '75 Geoff Lees's sensational triple championship and FF Festival success in a pair of Royale RP21s – designed by South African rising star Rory Byrne - hit the headlines. Byrne's shrink-wrapped RP24 (with interference fit engine) and Pat Symonds's RP26 kept Van Diemen in particular more than honest.

Firman and Baldwin responded, of course, moving the game on with their stiffer inboard front-suspended RF81 - the iconic Ayrton Senna car everybody remembers - and all-inboard RF82. Over in California, however, Swift Engineering was preparing to serve up a shocker. Its super-sleek DB-1, whose designer Bruns was previously noted for his innovative ADF, blew rivals away at the end-of-season SCCA National Championship Run-Offs at Road Atlanta, piloted by 47-year-old Swift director RK Smith. With its forward driving position, aerodynamic long-tailed body and cast bellhousing/oil tank adaptor linking engine and gearbox, it looked like something from outer space and changed the rules of engagement overnight. That Smith was a strong competitor, rather than a superstar, saw everybody beat a path to the factory door.

Hundreds were sold, over several years, during which nobody caught up. It was no coincidence that Van Diemen's beautiful



RF85 - which took its tally past 1000 cars bore more than a passing resemblance, but a whole year had been lost. Following a season in which the bizarre RF84 'pterodactyl' or 'stickleback' - with its pullrod-suspended front end and narrow rocker rear - failed to impress outside the works team, rockstaresque boffin Adrian Reynard's wieldier cars (which went as quickly sideways as they did pointing forwards) made huge strides.

Rule changes demanding that drivers' feet were behind the front axle line in all new designs meant that most Swift rivals were stuffed for a few seasons, as the DB-1 still reigned Stateside. Only the arrival of Van Diemen's incredible RF90 (nicknamed 'stealth bomber) brought significant performance gains and a new landmark in 1990. Baldwin's design brought phenomenal Spectrum, Mygale and Ray competed in the Duratec era

mechanical grip and aero performance.

Latterly, Spectrum cars (from Michael Borland's Australian factory), Ray (produced by Gavin Ray, whose late father Bert's designs were always contenders in good hands) and Firman cars (yes, Ralph can't resist the challenge) have ruled the roost. Today's chassis are stiffer and stronger than ever, but produce the same spectacle and driving enjoyment as their forebears always did.

Formula Ford has come an incredibly long way in 50 years, but its ethos and spirit and peerless racing remain long after later-engined eras have come and gone. Production engines with limited power, treaded tyres and no wings proved that the original recipe was by far the best. Hats off to Geoff Clarke, John Webb, Ford's Walter Hayes and their cohorts for their vision in establishing a legend.

#### Formula Ford A-Z (Kent-engined)

ADF (USA)	Beattie (GB)	Cheetah (GB)	Davron (GB)	Ferret (CDN)	Hampe (F)	Jomo (GB)
Aero (CDN)	Bee Gee (GB)	Cheetah (AUS)	Delta (GB)	Focus (GB)	Hawke (GB)	
Agent (GB)	Bef Priamos (GB)	Chevron (GB)	Delta (I) (Lotus copy)	Forsgrini (USA)	Hayashi (J)	King (GB)
Alexis (GB)	Begg (NZ)	Chinell (GB)	De Sanctis (I)		Hermes (GB)	Kittyhawk (USA)
Alta (GB)	Birrana (AUS)	Cirrus (GB)	DRW (GB)	Galloway (AUS)	HR2760 (USA)	Konig-Heath (GB)
Arian (GB)	Black Jack (GB)	Citation (USA)	Dulon (GB)	Gemini/Jem (GB)	HTR (GB)	Kvantti (SF)
Arrow (GB)	Bobsy (USA)	Condor (B)		GES (GB)	Huron (GB)	
ASD (GB)	Bowin (AUS)	Cooper (GB)	Eagle (USA)	Getem (GB)	Hustler (NZ)	Ladybird (GB)
Ash (CDN)	BPG (GB)	Cooper-Chinook (CDN)	Egan (GB)	Geva (NL)		Lago (GB)
<b>Avanti</b> (USA)	Brabham (GB)	Corsa/Corsair (USA)	Eifelland (D)	Ginetta (GB)	Image (GB)	Lanan (GB)
	Bradley (GB)	Cougar (GB)	Elden (GB)	GNF (GB)		Laser(GB)
Baker (US)		(Lotus convert)	Elfin (AUS)	Griffon (CH)	Jamun (GB)	LCR (CH)
(imported Nike)	Caldwell (USA)	Crossle (GB)	Elwyn (AUS)		Javelin (GB)	Le Grand (USA)
Barrcarr (USA)	Carom (USA)	CTG (GB)	Eutectic (NZ)	Halliday (NZ/GB) (Don	JEN (USA)	Lenham-Hurst (GB)
Barney (GB)	Centaur-Scholar (GB)			Halliday/Dave Ryan)	Johnston (NZ)	Lola (GB)
Beach (USA)	Centro-Scott (GB)	Dastle (GB)	Faster (CH)	Hamlen (GB)	Jomic (GB)	Lomas (GB)

#### THE ODDBALL MACHINES

ASIDE FROM MAINSTREAM manufacturers aiming to peddle their cars to the masses, plus fringe wannabes (ranging from highly-qualified graduate mechanical engineers and resourceful mad-professor types to the deluded), Formula Ford has always been rife with ingenuity and innovation. Some delightful, sometimes bonkers, oddball creations emerged from artisan workshops in all theatres of FF1600 warfare. They only add to the category's status.

Identifying the most bizarre car is subjective, but many with long memories will identify Hugo Spowers's futuristic Prowess as a contender.

Looking like something dreamed up by Jules Verne, with its full canopy claustrophobically enclosing an unusual driving position and restricting sightlines from the cockpit, it was not pleasant to drive, said veteran Fordster Wil Arif, one of the few to have tried it in 1987.

Much more successful were the series of OX cars (Oxen?) built and raced by Champion of Brands regular John Oxborrow. The Seaford, Sussex-based housebuilder achieved some remarkable results with the best of his brainchildren. Everybody loves an underdog, but John earned have-a-go-hero status as, with his short-circuit knowledge, he claimed





some impressive scalps when the big boys came to FF1600's spiritual home. Subsequently, he built and raced a BDA-powered roadburner.

In the US, meanwhile, Formula Vee veteran Harvey Templeton built one of the finest one-offs ever to grace the category at his workshop in Chattanooga, Tennessee, in 1978. The bullet-shaped HR2760 had a massively wide front track and hydraulicallyadjustable suspension camber controls within its armoury. The combo came into its own on banked ovals, proving very competitive at Daytona and Charlotte Motor Speedway. I'll not forget seeing the machine at an SCCA Sebring event in the early '80s, when Templeton was well into his seventies.

Macon (GB)
Mallock U2 (GB)
Mantis (GB)
March (GB)
Martini (F)
Martlet (GB)
Matek (GB)
Mawer (AUS)
McGregor (GB)
McNamara (D)
Melton (GB)
Merlyn (GB)

Micron (GB)

Lotus (GB)

Lvnx (NZ)

Mirage (GB) Mondiale (GB) MRE (GB) Mygale (F) Mystere (GB)
Nike (GB) Nomad (GB) Norvic (GB)
Oscar (GB)

NOT VIC (GB)
Oscar (GB) OX (GB)
Pacer (GB)
Palliser (GB)
Phantom (USA)

Photon (GB)
Piper(GB)
Piper(USA)
Pirola (I)
Pringett-Mistrale (GB)
Prowess (GB)
PRS (GB)
Quest (GB)
Quick One (USA)

Race (USA)	Saracen (GB)
Ram (USA)	Sark (GB)
Rader(GB)	Scandia (USA)
Raven (GB)	Smith (GB)
Ray (GB)	Sparton (GB)

RCS (GB)

Reynard (GB)

Rondeau (F) Roni(I) Rostron (GB) Rotor (GB) Royale (GB)

RPB (AUS)

Russell-Alexis (GB)

Ryan (NZ) (see Halliday)

Spectrum (GB)
Star(GB)
Stealth (NZ)
Stohr (USA)
Supernova (GB)
Swift (GB)
(Ian Moore, Ed's dad)
Swift (USA)
Swift (EUROPE)
Swift (NZ) (Bruce
Smythe one-off)

Talon (GB)	
Technauto (F)	
Tecno (I)	
Tiga (GB)	

Titan (GB)
Totem (GB)
Touraco (GB)
Tsunami (CDN)
Tuna (USA)

<b>Ulrich</b> (GB)
--------------------

van Bienien (
Vaney (B)
Varo (GB)
Vector (GB)
Viking (USA)
Viroy (GB)
Vista (GB)

Van Diemen (GR)

<b>Weber State</b> (USA)	
--------------------------	--

Wiet (GB/NL)
Wimhurst (GB)
Winkelman (GB/USA
Wren (AUS)

Xpit (CDN)

Zagk (D) Zegler (A) Zeus (GB) Zink (USA)



## Greatest Formula Ford drivers

We run the rule over arguably the 10 best drivers to grace the Formula Ford ranks in Britain over the past five decades. By Marcus Simmons

Jenson

After a suck-it-and-see F3 test with Carlin to see whether he was any good, the Frome karting megastar was stuck into a Haywood Racing Mygale by managers David and Steve Robertson and became the golden boy of British racing with a rookie title success. That was against experienced and highly rated racers such as Dan Wheldon and



team-mate Derek Hayes, and shining new Aussie Marcos Ambrose.

What he said: "After my first Formula Ford test at Thruxton I thought I would do OK speedwise. I was sure I had a good chance of being at the front, but a lot of people told me there was no chance of winning in my first year. I've proved that wrong so far."

What he went on to: Meteoric rise via one year in F3 took him into F1, and a pretty reasonable career all told including a world championship.



### **Bernard** Dolan

A product of the ultra-competitive Irish scene, Dolan moved to the UK with the works Mondiale team in 1988 and then. with Reynard, shared the '89 crowns with Van Diemen's Niko Palhares. A real scrapper and spectacular racer, Dolan got the better of his team-mate, a certain Gil de Ferran...

What he said: "Effectively the best way to get people to sit up and notice is to clean up in both the English FF1600 championships. If I don't come up with the goods, the end of the year will see me retire from the sport. A string of second places will leave me only partly satisfied."

What he went on to: After winning one of those 'English' titles in 1989 he was a thorn in the side of de Ferran, Rubens Barrichello, David Coulthard etc in Vauxhall Lotus, but funds ran out in F3.





### Russell **Ingall**

The craggy-faced Australian FF1600 champ arrived in England in 1991, 'borrowed' a tiny corner of the Van Diemen factory to prep his car with old mate Russell Atkinson, and ran works driver Marc Goossens close for the title. After a year in German F3, he returned for the first year of Zetec engines and demolished a quality field full of works-team talent. What he said: "I've parted company with a fair bit to come here and I'm not a millionaire to start with. If nothing comes off before the end of the year we're in strife a bit, but if I keep putting up the numbers, you never can tell. It just takes one person to come along with the dollars, then we're on our way." What he went on to: Co-driver role to Larry Perkins in 1995 Bathurst 1000 resulted in victory and a full-time drive in V8 Supercars. Became a title winner and Aussie folk hero.



# Geoff

The toothy Warwickshire youngster took an unprecedented Triple Crown of all the major club's FF1600 titles in 1975, winning over 30 races (including heats) in his Royale. That was despite huge competition from a wealth of talented rivals, led by explosively fast Van Diemen-racing South African Kenny Gray.

What he said: "I want to do F3, but first I want to win the championship." And on his biggest rivals: "Kenny Gray and Jim Walsh really – they bother me quite a bit. It's Silverstone I bother about Jim most. Kenny's always about though - you know you've got to beat him."

What he went on to: Flirted with F1 for a few years, but his 1981 European F2 title with Honda took him to Japan where he became the country's first big foreign star.

He did no karting, but two FF1600 seasons to find his feet in 1981-82 led to a works Lola drive in '83, and then he spearheaded the Reynard attack in '84. Incredibly fast, Pratt demolished many of the country's lap records, but the calculating, hardracing Dave Coyne denied him any title success, despite a raft of race wins.

### What Dave Coyne said about him:

"He is the best person I've raced against for out-and-out dicing. I mean, that year [1984] it could never have been tighter. There was a lot on the line and I was lucky that I came out on top really. It could quite easily have been the other way round." What he went on to: Race wins in FF2000 before the (little) money ran out. Ran racing school at Rockingham and mentored Andy Priaulx in his single-seater days.





### **Tommy Byrne**

It's well documented that this working-class lad from Dundalk, who blagged his way to the top on sheer talent, was the only driver Senna feared in his junior days. After racing FF1600 in Ireland and then a British season in 1979, he took a works Van Diemen drive for '80 and won the RAC title. Moved up to dominate FF2000 in '81, then took over Senna's FF1600 car for the Festival and, to the Brazilian's chagrin, won that. What he said: "I knew nothing about car preparation until I wandered round the Brands paddock and saw that, compared to my battered Crossle 20F, some of these guys were driving Rolls-Royces. But my experience has taught me a lot: 1980 is absolutely no worry to me and with a car as good as everyone else's I'll win the championship."

What he went on to: FF2000 and F3 titles, and a brief stint in F1 with Theodore. Went to the States and Mexico, and still lives in the US as a racing instructor.



## Rick

Three times a Festival runner-up, Morris made his name in the ferocious mid-1970s scene, and several years later was capable of even beating Senna. In between he made an underfunded move to FF2000, and then made another bid at the senior category after his FF1600 days. But with other business interests racing took a back seat. Big talent who won many races, mainly in Royales. What we said: "Rick left Tricentrol in February and branched out on his own with a company called Rick Morris Racing, dealing with the selling of micro-computers. In October his second company, a car-brokerage firm, will start operating. So how does he find time to run two companies and still go racing and testing? 'I work nights!' he replies ruefully."

What he went on to: Moved back up to FF2000 but stopped full-time competition, although still has the occasional race in FFords to this day.







He was known as a Silverstone specialist, and three times won the BRDC title that featured many rounds at that track, but in his early days Walsh had won further afield too. His incredible, intuitive, long-game racecraft made him the master of the Silverstone

slipstreamers through half a decade, and his Royale was usually at the front at the chequered flag. What he said: "Generally drivers don't appreciate how close the cars are during those frantic dices for the lead, the only worry being if the wheels interlock. Sometimes one does get aggressive with others' tactics, but it's usually all forgotten by the end." What he went on to: Serious testing shunt scuppered his career, and planned comeback a decade later in BTCC in 1991 fell through.



### **Dave** Coyne

Camberley karter Coyne starred in the Star of Tomorrow series in 1980, and returned to FF1600 in '84 to lead the works Van Diemen team, claiming the **RAC and Townsend Thoresen crowns** after a massive season-long battle with Reynard's John Pratt. The hardest of racers, Coyne was back in FF1600 at the end of the decade after winning an '87 Euro F3 title, and brilliantly won the '90 Festival for Swift - after starting his heat from the back of the grid.

What he said: "The Formula Ford Festival, this event, is the only one I've ever truly wanted to win. If someone had offered me an F3000 drive or a win here, I'd take this. This is the way I would have chosen to win it too. I wouldn't want to win it pole, pole, pole. This gives me far more pleasure."

What he went on to: Race-winning British F3000 stint in 1991 meant he touched the hem of F1, before dropping to FRenault. Still racing on in clubbie events.



### **Ayrton** Senna da Silva

'The latest Brazilian hotshoe' was always keenly anticipated in British FF1600 circles, but Van Diemen boss Ralph Firman already knew this one was special – his 1977 driver Chico Serra had been raving for years about a young karting kid then named Ayrton da Silva. Initially in an RF80, da Silva found his feet. Then, ensconced in the latest RF81, he steamrollered to 10 wins in a 12-race run to wrest the RAC and Townsend Thoresen titles. Disillusioned with the requirement to bring money, he then walked out before the Festival and threatened to quit the sport. If he returned, surely the world was his oyster...

What he said: "Very good drivers with talent are making no progress without the money, and ordinary ones without much talent are getting there with it. Next year the racing is on my own terms, as a hobby without the mental pressures to win and do well for sponsors. If I am on the way to a meeting and do not feel like racing, I can turn round and go home."

What he went on to: Dominated FF2000 in 1982 - without ever turning round to go home – and won British F3 in '83. Then he became an F1 driver of some renown.





HAVE YOUR SAY

Disagree with our list? Who did we miss? Let us know on Twitter or Facebook, or email autosport@autosport.com.

(a) E-mail autosport@

autosport.com

Twitter twitter.com/

Facebook facebook.com/ autosport autosport

### OTHER ONE-CIRCUIT/REGIONAL KINGS

"I'M STILL GETTING PAID TO RACE, AND I'M 62 years old now," says Chris Hall. "I owe that all to Formula Ford at Brands Hatch."

Of the one-circuit kings, Hall probably stood as one of the tallest. He was the 1991 Champion of Brands in his Jamun M91, a constructor from Kent that was virtually only ever seen at this track. He took multiple wins for nearly a decade at the circuit, his first in 1983 and his last in '92. He even stepped onto the national stage in that final season, and scored a podium finish at Donington Park.

"It was great winning at Brands, but I think that the Jamun was only designed to go around there," he laughs. "It was a good car, but it was a great Brands car.

"The Champion of Brands was a hugely competitive series, but I really used to like it when the national runners came to town, and we always used to have the Formula Ford

Festival too. The year I won the Champion of Brands, I really thought I could win the Festival final. I won the heat and quarter-final and then finished second in the semi. However, I slipped up in the final and ran wide at Druids, I was seventh in the end and Marc Goossens won."

But those connections have come full circle for US-based Hall, who is racing a McLaren in the IMSA Continental Tire SportsCar Challenge. He sees the likes of Goossens, Jan Magnussen and Jonny Kane - all former on-track Formula Ford rivals – in the paddocks at American sportscar races.

"We talk about the Champion of Brands days. It's great to see where they've gone and the careers that they've had," he says. "I knew that I could have lived with them for pace. I proved it whenever the quick guys showed up, but hey - I'm not complaining. They were great times." **MATT JAMES** 



Champion of Cadwell **Castle Combe** Ireland Lydden **Star of Mallory Champion of Oulton Champion of Snetterton** 

Scotland

Bob Bailey and Colin Verity **Bob Higgins** Vivion Daly

Pullman brothers Derek and Chris

Don Hardman

The two John Booths, 'Butcher' and 'Brolly' Carl Jarvis (Olly's dad)

Tom Brown





# Club shows class

Formula Ford will swiftly shatter any lingering preconceptions about historic racing not being as competitive as any other branch of motorsport. Ben Anderson is required to bring his A-game

lub racing in the UK is deceptively more competitive than outsiders give it credit for. It has always been a rich mix of wealthy amateurs, budding professionals, penniless talents and fading stars, but those who know to look closely won't be surprised to learn how tough this diverse branch of motor racing can often be.

There is an obvious and specific hierarchy in professional motorsport, which is naturally the focus of most of the interested world's attention, but lurking in various corners of the national racing web are category specialists who would probably fancy their chances if Sebastian Vettel rocked up to Anglesey and tried to take them on at their own game.

I've been fortunate to try many club racing categories on for size over the years, and the strength and depth of particular grids varies greatly. Usually you will expect the top two, three or four drivers in any series to really know what they are doing, before the standard starts to fall away. If that number pushes past half a dozen then I would suggest you've got a series that is pushing for a place in the upper echelons of competitive club racing.

The sheer number of available categories naturally dilutes the available talent pool for any particular series, and the nature of amateur racing precludes grids getting much deeper, simply because most parttime racers lack the experience, time and money to dedicate themselves to racing beyond being occasional weekend warriors.

For me the exceptions are generally found in one-off special events, such as the Silverstone 24 Hours, the Brands Hatch Formula Ford Festival, or - chief among them - the Walter Hayes Trophy. Without a doubt that is the most competitive club racing event on the calendar, bar none.

I last competed in Silverstone's knockout Formula Ford 1600 showpiece in 2013. I was not fortunate enough to take part in high-level national or international karting, but racing in the Walter Hayes Trophy is how I imagine a top national or international kart race would be: huge

depth on the grid, scores of potential race winners, large numbers of cars running in a long train, all at similar pace, all mistakes punished mercilessly. full grids of drivers driving properly.

It was perhaps fitting then that I should be lucky enough to try Historic Formula Ford racing on an autumnal weekend at Silverstone. I reckon this is the closest I've come to a club racing experience that replicates what the Brands Festival and Walter Hayes Trophy offer.

It is so easy to write off historic racing - 'rich old fuddy duddies recapturing lost youth by messing about in classic cars they recall from their childhood days'. But there is so much more to it than that.

Beyond the fact that there are some wonderful racing cars to be found across the spectrum of historic racing grids, there are also some pretty handy drivers around - and Historic Formula Ford probably enjoys the greatest single concentration of them.

"There are 10 guys here who are absolutely stunning," reckons historic racing ace and car preparation expert Simon Hadfield, who has competed successfully in Historic Formula Ford himself.

"It should always be a situation where you have to drive better to get the advantage, rather than buy it. It should be that you have to work for it."

The likes of Callum Grant (22) and Sam Mitchell (21) are young drivers with vast experience of Formula Ford racing that belies their ages. There are teenagers like Benn Tilley (17), who jumped from Junior Saloons into Historic Formula Ford. And there are drivers like Mark Shaw and Tiff Needell, who have come back to racing at this level after living prior lives in the professional tiers of racing.

Many of the leading drivers are also part of historic racing dynasties. Reigning champion Grant (son of Ian) and former title winner Mitchell (son of successful Historic Formula Ford racer Westie) - who won the final race of 2016 at Silverstone are both frontrunning youngsters whose fathers have pedigree in historic racing. And they are not alone.

"There's still a 'lad and dad' ethos to

this," adds Hadfield, whose own son James has competed in the category. "There are youngsters out there who are all sons of historic racers. It's a great place to learn racecraft, but no-one from here is going to end up in Formula 1."

That may be so, but this phenomenon of 'sons of' historic racers now having a go themselves has added depth to the grid, helping to push the standard up and drive the whole thing forward.

Former Historic Sports Car Club chairman Chris Sharples is a long-standing competitor in this HSCC championship and he says achieving lap times in the low 1m06s around the Silverstone National circuit used to be a great effort not so long ago.

There is very little development scope in a category that uses period pre-1972 cars and engines of course, yet Grant cut a lap of 1m04.758s to take pole for the 2016 Silverstone Finals meeting, and 0.804 seconds covered the top 12 qualifiers

this season on the Brands Hatch Indy circuit.

Then you have the astounding Mazda MX-5 Supercup, where 0.912s covered the top 25 cars in qualifying for its Brands Hatch Indy round!

Those who bemoan the rapid rise of Max Verstappen to Formula 1 should consider how his youthful exuberance may actually be forcing seasoned heroes to raise their games further.

Thanks to my own breadth of experience and excellent preparation of Autosport's Merlyn Mk20 from Mike O'Brien's SpeedSport team for the Silverstone Finals, I was able to slot straight into that Historic Formula Ford top 12. But it was hard work.

It was noticeable that the top 12 were a step ahead of the rest over a lap, and all competitive with each other depending on set-up/aerodynamic tow/their own personal performance in a given session.

That's exactly how racing should be whatever the level. As Hadfield says, you

# Our man got to mix it with the HFF regulars at the 2016 finale



### "You have to arrive fully focused. All the kids at the front are on it and they're thinking about it all the time between races"

such was the relentlessness of the competition at the front of the 45-car field.

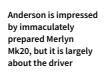
That is a very narrow spread for a club series. To put that in context, 0.87s covered the top 12 qualifiers for the second round of the 750 Motor Club's Locost championship on the same circuit in April.

To beat Historic Formula Ford you need to look to the British Racing and Sports Car Club's modern-day version of the category, which has been boosted by an influx of career-minded drivers chasing its Mazda Road to Indy prize. Just 0.791s covered the top 14 qualifiers for the opening round of

should win by driving better than everyone else and you should have to earn it, though to be fair none of us got within a quarter of a second of the pace Darren Burke's Macon used to set regularly around this track, or Ben Mitchell's amazing 1m04.177s pole time from 2016. Whatever breakfast he ate that day I wish I'd had it!

"It's all about the exit and getting on the throttle properly with these cars," says Hadfield. "You don't have to get the entry exactly right because the cars are old and a bit lazy, but the exit is crucial."

But they are still single-seaters, and



so long as they are set up decently, they respond depending on driver input. Drive well and you will do well; drive badly and you will be made to pay the price by your rivals. You have to be bold, keep experimenting with your technique, and always strive to move forward. Historic racing often gets written off, but if you stand still in Historic Formula Ford you will go backwards fast.

The 1999 Formula Palmer Audi champion, Richard Tarling, is another to rock up for the Silverstone Finals, qualifying 11th and finishing fourth in the damp first race. He is a contemporary junior single-seater rival of







the late Justin Wilson, Darren Turner, Richard Lyons, Damien Faulkner and Robbie Kerr, and says he is so impressed by the competitive but unaggressive vibe he feels compelled to continue racing in HFF.

"You have to arrive fully focused," says Shaw, Autosport's team-mate at Silverstone. "All the kids at the front are on it and they're thinking about it all the time between races - on simulators and whatever!"

This is the wonderful thing about Historic Formula Ford. No matter who you are and what your prior reputation, unless your car is an absolute dog there are simply no hiding places. Everyone has pretty much

the same engine and everyone has broadly similar aerodynamic limitations. As one frontrunner put it, "you just have to jump in and get on with it!"

When you can't effectively spend money developing a technical advantage - Ben Mitchell reckons a Lotus 59 is worth 0.3s but they are hard to find – over your opposition, you tend to end up with closer racing and more competitive driving. This is what you see in Caterham racing, and it's nice to see the same recipe can be baked in historics.

The cars might be old, but the racing is still as close and competitive as you'll find anywhere else in the UK. ■

### WHY HISTORIC FORMULA FORD IS SO POPULAR



HISTORIC SPORTS CAR CLUB CEO GRAHAME WHITE WAS clerk of the course when Formula Ford held its first race at Brands Hatch on July 2, 1967, so he knows a thing or two about its enduring appeal.

Formula Ford has had ups and downs in the intervening 50 years, particularly amid the rapid rise of expensive slicksand-wings entry-level single-seater racing during the past two decades, but still it endures.

The BRSCC's National FF1600 championship, for modern Kent-engined cars, has been revitalised by a tie-up with Mazda's 'Road to Indy' programme in the United States, attracting young, aspiring career drivers who lack the means to tread the path to Formula 1.

Meanwhile, the HSCC's Historic Formula Ford championship for pre-1972 cars (neatly excluding the subsequently dominant Crossle and Van Diemen models) is going from strength to strength.

"To start historic racing there is no better way," says White. "They are simple cars, but quick enough to know you are in a real racing car. The front end of the field can be very competitive, and the racing has been very, very close but also very clean."

Cars are available to buy for around £20,000, but insiders say that price is creeping up with the popularity of the category, and the inflation that applies to historic racing generally.

Autosport is told Merlyns are selling for north of £30,000 these days, and even the cheaper models will require a £10,000 outlay to bring them up to snuff. But this is still way more affordable than shelling out close to £100,000 for Historic F3 ownership, or twice that for a Chevron B8 sportscar.

There has been the "odd controversy with engine cams and dampers", according to White, but the category is generally well-policed in terms of eligibility and driving standards.

"Historic Formula Ford has always had pretty good grids," adds White. "When a championship is successful it generates its own success – people talk about it, notice the close racing, and most things that are simple are good.

"There is a big social element to it too. It's competitive, affordable historic racing. Nothing rivals it."



# Formula Ford today

The Road to Indy prize, a new race format and competitive racing ensure this category is as popular today as it ever was. By Jack Benyon

t's the category that is always connected with your Ayrton Sennas, Jenson Buttons and Anthony Davidsons, but Formula Ford is still a relevant formula in motor racing today.

After British Formula Ford became MSA Formula for the 2015 season, it was left to the British Racing and Sports Car Clubaffiliated FF1600 National Championship to take the reins as the highest form of nonslicks-and-wings single-seaters in the UK.

In particular, 2016 and '17 have featured a host of changes in the category, leading to bigger grids and a buzz around the championship it hasn't had for some time. For this year, the series has introduced a three-race format per round instead of two, dropping race time from 20 minutes to 15. But for an extra race, and no increase in the entry fee, it's gone down a treat.

TV coverage on Motorsport.tv has also added something for competitors, but without a doubt the single biggest draw for competitors in the National championship is the Mazda Road to Indy prize. The winner of the championship goes to a shootout at Laguna Seca in November with the chance of winning \$200,000, for a funded campaign in USF2000. That's the first rung on the Road to Indy ladder; if you win that series, you win the budget to progress for a funded season of Pro Mazda; if you win that you go to Indy Lights; and success there gives you an IndyCar scholarship.

"Obviously it's nice to have that prize at the end of the year, for the championship winner to be able to go there and race against the best in the world. It has been a big plus," says successful FF1600 team owner Cliff Dempsey.

Fellow team owner James Oldfield believes a combination of the changes in format, better promotion and the prize have combined to increase grid numbers.

"We have full grids at all the rounds for the remainder of the year," he says. "There are more people doing every round as well. Last year it was 12, with some one-offs. This year around 19 are doing every round and I think that will carry on next year.

"It all kickstarted with the Road to Indy prize. The National is the most competitive championship and people want to win it. It looks like we're on for a five-way fight for the title this year. There's quality drivers."

One of last year's quality drivers was Niall Murray, who won the title and went to the Road to Indy Shootout. He's competing in the Northern Irish championship this year.

"There are drivers who wouldn't be in it this year without the Road to Indy prize," says Murray. "You don't get much of a prize in F4 or F3 compared to Formula Ford."

While the Road to Indy has proven a major draw for the National championship, it's proved less so for the SuperSeries, another FF1600 championship run by James Beckett with the support of organiser MSVR.

"It created interest last year," he says. "For me personally it's not brought one driver. I'm not saying it's a bad thing, but it hasn't got new people in the SuperSeries."

The SuperSeries is the second championship, along with the National, that goes all over the mainland and to Northern Ireland. Despite the category no longer receiving works backing from Ford or other major suppliers, it's incredible that so many Formula Fords can still compete, and that so many championships survive.

Scotland and Northern Ireland both have championships, both also offering Road to Indy Shootout places, and the pace of the drivers in those 'regional' championships is always proven in the end-of-year Formula Ford Festival and Walter Hayes Trophy.

Those events also provide a chance











### "The Walter Hayes has a unique place in the calendar; it captured the imagination when it started"

for FF1600 competitors of old to come out and try their hand, with drivers such as Wayne Boyd and Joey Foster, who now compete in sportscar racing, taking part in one of the most fiercely contested motorrace weekends anywhere. The Festival and Hayes, at Brands Hatch and Silverstone respectively, have been won by some of the most successful drivers in motorsport.

Beckett, who runs the Walter Hayes Trophy with the Historic Sports Car Club, believes the end-of-season atmosphere is what makes the Trophy so special.

"It's just that it has a unique place in the calendar; it captured the imagination when it started," says Beckett of the event. "It really took off in 2005, when we had 164 cars! It's Silverstone, the end of the season, the camaraderie, it's that carnival-like atmosphere, like the end of school."

While there's no massive monetary prize, the fact that there are well over 70 cars at both the Festival and the Hayes proves that the category still has relevance.

And that's partly down to sustainability. One of the most successful and renowned Kent engine builders, Neil Bold, is rushed off his feet with work.

"We are mega busy – it's never been so busy since I've been in business," says Bold, based in Bolton. "It's better than  $ever. \ You \ can \ get \ everything \ for \ them.$ Ford has started making the cylinder blocks again for these [Kent engines], which is really helpful. Formulas come and go but Formula Ford is the only one that has stuck around for so long.

"They're quite straightforward engines. They're pretty well bulletproof. The main weakness is people installing them, as they often get it wrong. Driver error, missing gears can damage them, but that can damage any racing engine."

It would be unfair to say that supply doesn't dry up.

The Kent engine is used in most of the major categories of Formula Ford with modern chassis. But the number of competitors out there means there's a supply and demand growth. If a part becomes scarce, someone works on how to make a new one to keep it all rolling.

"We were struggling with flywheels a while ago, and carbs, but you can get both of those brand-new now," says Oldfield. "You can still get cars and parts easily. The only manufacturer parts are in the engine."

That means you can machine the rest, or if there's something in the regulations that prevents that, there's always a solution to be had. There's an understanding in the category that the engine hasn't been used as the top-spec since 1992, and that to keep going there has to be flexibility.

A few years ago, there was talk of a switch to Zetec or Duratec engines. That failed because of the number of Kent engines around and the fact that no-one could really decide which was the correct way to go. Dempsey believes that a call for Duratecs in the future could be necessary.

"In the long term the Duratec engine detuned with the same sort of power curve as the Kent would be ideal, because you'd

probably get five seasons out of it without touching it, it would bring down costs dramatically," he says. "You're looking at £7000 for a Kent and a rebuild for £1500-£2000, which is a high cost as it is.

"There are too many people with them and too many purists. It would be difficult to change it. For the future we could look at it to get the costs down even more."

But that's a fair way on the horizon. There are enough Kents out there and enough championships running them to race your version pretty much anywhere in the UK on any given weekend, or at least a couple of times a month.

If you want to see a Formula Ford with a Zetec or Duratec, you'll be looking at the Monoposto championship almost exclusively. Or a VHS.

There are not many out there and, for now, the Kent is the right way to go. Provided the parts can be found or made, the sheer number of them makes them the powerplant of Formula Ford's current and immediate club future.

With the UK series thriving with the Road to Indy link, and with great new format ideas from a forward-thinking working group at the helm, the National championship is in good health. That's backed up by the strong competition and pace in the regional championships.

While it costs £50,000 for a frontrunning FF1600 to do the National Championship, and even less to do the regionals - and there's a chance to win £160,000 in prize money in the US - there's always going to be competition in current Formula Ford.

Any category's future is changeable without a big manufacturer or corporation to back it, but the growth over the past two years will tell you that the Kent, and club-level FF1600, has a few years in the old dog yet. ■





### FORMULA FORD GOES TURBO



**BRITISH FORMULA FORD** entered a completely new era in 2013. It wasn't just about a new engine, which arrived in 2012 alongside the Duratec, with the **EcoBoost motor being** mandatory, it was more fundamental with the series becoming a slicks-and-wings formula for the first time.

The change to a 1.6-litre turbocharged engine producing 200bhp was logical given the

developments in powerplant technology.

"Formula Ford always had Ford's most popular mainstream engine in it," says championship promoter Sam Roach. "As the Duratec had gone out of production a couple of years earlier, it was felt by Ford it was time to find the fourthgeneration engine. EcoBoost had the same features of being very compact and very light but with







the more modern direct injection and turbocharging."

But the switch to a new, safer steel spaceframe chassis with front and rear wings was far more radical.

It was initially introduced without wings but these were then added for 2013 with the prospect of Formula 4 - a number of FIA-backed entry-level single-seater series worldwide - looming.

"It felt up to date with what drivers wanted to drive," recalls Roach. "Drivers will spend their whole life racing aero cars so it makes sense to start with a more relevant car."

But the series never really had chance to build momentum. Just two years in, FIA F4 arrived with its specification carbonfibre chassis and global appeal.

"It was a really easy decision [becoming F4]," explains Roach.

"We could see Formula 4 had the potential to be big in single-seaters and we knew we had to be in with that."

The EcoBoost motor remained - with power reduced to 160bhp – but the iconic Formula Ford name did not, instead being replaced by the cumbersome MSA Formula title before becoming British F4 last year. Therefore South African Jayde Kruger goes down in

history as the last British Formula Ford champion.

With big-name teams and future stars like 2015 champion Lando Norris flocking to the new series, the decision was validated.

But still the same concept from 50 years ago lives on: a road-based Ford engine mated with a basic single-seat chassis. Some things never change. STEPHEN LICKORISH

Top left: Regional series still attract sustainable numbers. This is Northern Irish FF1600 at Kirkistown

Top right: Road to Indy is a draw for some FF1600 championships

Above: The Walter Hayes has become a 100+ car thriller in November



It's very easy for a series to claim it uses a standard road-car engine. But British Formula 4 can genuinely do that thanks to its direct-injection, turbocharged Ford EcoBoost unit that's found in the Fiesta.

"We take a completely standard EcoBoost engine and fit a dry sump and airbox system - to all intents and purposes it's a completely standard engine," explains Ford

Performance manager Mike Norton. It's not just Fiestas either; EcoBoost technology can be found globally across the Ford range, from one-litre three-cylinder units to the V6 that powers the Ford GT.

"It's a very versatile and reliable engine for the FIA's F4 power cap at 160bhp," continues Norton. "I think one comes off the production line about every 22 seconds, so there

are quite high numbers of them. Ford technology is something we are very proud of and we wanted to associate the championship with.

"The big thing for me is that EcoBoost doesn't just mean eco and efficiency, it's a very powerful engine when used in a certain way."

As well as its efficiency and power delivery, another important point is its reliability and durability.

"As part of the affordability of F4, the FIA stipulates that the engine rebuild intervals are quite long at about 10,000km, so it makes sense to use a road-car engine that has proven reliability and durability," says Ford Performance senior manager Gerard Quinn, adding that some teams are still using original engines from when British F4 began in 2015.

### **AERODYNAMICS** - just before the F4 days - Ford Although the engine is the on the initial aero development obvious link between the was heavily involved in working on of the F4 car in our climate facility Mygale-Ford car used in British the aerodynamics. Although aero with Mygale and were able to F4 and the manufacturer's is now fully down to Mygale, Ford develop the package for the car. road-going products, there are still likes to help out where it can Our research and development plenty of other areas where and learn lessons that can be facility in Essex was used, so it was the same technicians and the same information can be transferred. applied to its road models. In 2013 when wings were first "The aero is very important equipment we used for the road introduced in British Formula Ford to us," says Quinn. "We worked cars being used for the race cars."

One of the other major changes when British Formula Ford became an FIA-backed F4 series was the introduction of a carbonfibre chassis, replacing the traditional steel spaceframes of previous eras.

This exposed Ford to the world of lightweight components an important area with more and more road cars being made from carbonfibre.

"The Ford GT road car is constructed of carbonfibre," says Quinn. "Lightweight components are something we are now developing and looking at to bring into future road-car production.

CARBONFIBRE AND LIGHTWEIGHT COMPONENTS

"The carbonfibre tub is homologated by the FIA, ensuring the highest safety standards. What we learn in the development of carbonfibre in race cars assists us in the development of carbonfibre technology for future road-car applications."

### **TYRES**

A long-term partnership between Ford and tyre firm Hankook has ensured that the best possible rubber is used on track.

"Hankook's interest in getting involved with us on the race programme was because of our long-standing relationship though Ford's commercial vehicles," explains Quinn. "That has been helpful to us in terms of having the best race tyre to use."

Norton admits that the larger

because we thought the car would be a little bit undramatic and wouldn't be a driver's car. But to be fair to the FIA and particularly [former Single Seater Commission president] Gerhard Berger, who set the sizes, drivers really enjoy the car."

tyres introduced when the

category became an FIA series

were a worry: "We were a little

bit concerned with the size of

the tyres with the 160bhp engine





# Still relevant at 50

Ford's commitment to junior racing remains strong after half a century, and there are many reasons why

### By Gerard Quinn, Senior Manager, Ford Performance

### **OUR FORMULA FORD HERITAGE IS STILL**

relevant and is a source of much pride to so many of us at Ford Motor Company. We are proud that we are still involved in junior racing, evolving our series with the latest automotive and race technology. Meanwhile, Formula Ford continues to flourish in the hands of privateers in club racing.

We've always had a role to play in Formula Ford, right up to the introduction of the EcoBoost engine in 2012. It is the longest continuous involvement we've had in any series of racing - 50 years is a long time.

There is an emotional attachment to Formula Ford and our company was founded on racing by Henry Ford. The interest is still there, right up to the highest levels of the company. Lots of series come and go for Ford

because of market demands and redeployment of resource and budgets, but we still keep a presence in junior racing.

Since the inception of

Formula Ford the series has allowed us to showcase relevant technology, something that we continue to do across all our race series, including F4. Formula Ford has always had a stock engine you can put in a racing car. Technology so good you can take it racing, you might say.

Formula Ford has had strong periods and those where it was quieter, and it's great to see events like the Brands Hatch Festival and Walter Hayes Trophy still going strong. There are also lots of historic races in which we see Formula Fords competing around the world.

As with any technology, we have evolved and we want to have the best possible product for our customers. With the 1.6-litre EcoBoost we started racing in '12 we learned a lot about the new engine. What we learn on the race track is invaluable.

We also recognise there is still a desire for people to race Kent engines, and Zetecs and Duratecs. We have in the past made engines

available after production runs have ended - that was a way to make sure club Formula Ford continued.

We've contributed a lot to motorsport at grassroots level - Emerson Fittipaldi, Ayrton Senna, Tommy Byrne and Jenson Button all came through Formula Ford. And that's the same for today's generation - people like Le Mans winner Nick Tandy, Dan Cammish, Lando Norris, Max Fewtrell and Ash Sutton.

It's not just going racing, it's about making opportunities for people to make future careers. It's a cost to the company, but it's worthwhile when you see the drivers going on to have successful careers elsewhere.

The Ford GT programme in the World **Endurance Championship and IMSA** SportsCars is very important for us to

### "It's not just racing. We're making opportunities for people to make careers"

demonstrate things like aero, lightweighting, the use of carbonfibre and of course EcoBoost engine technology. It's no surprise that these are apparent in F4 too, particularly aero and turbocharging.

Safety is a hugely significant attribute in our road cars and that carries over into racing. In collaboration with the FIA Institute and chassis manufacturer Mygale, we've developed the F4 car to the highest safety standards, constantly evolving with new technology. A lot of it is identical to an F1 car, such as the carbon monocoque safety tub, wheel tethers and Accident Data Recorder.

The heart of the F4 car is the 1.6-litre EcoBoost engine from our current Fiesta ST line-up, produced by Ford employees at our engine facility in Bridgend. The technology has to be relevant for us - we are racing to

develop and advance our technology that ultimately benefits our consumers. It's important for drivers to get used to relevant technology too. Look at F1 - it has moved to 1.6-litre turbo engines. Nothing stands still.

F4, which has been developed in collaboration with the FIA, is now a global programme, of which we are one of the leading championships around the world. A part of that is being with TOCA. Our relationship with the British Touring Car package has been very successful. It gives us exposure on TV, with ITV, social and a digital presence, which is important - for us and for drivers - and is very professionally run.

As we evolved from Formula Ford to F4 we were conscious we needed to ensure that race car affordability was maintained. This

> would allow privateers and professional teams to purchase cars to go racing at an affordable cost in the same series, something that has happened at this level of single-seater racing since the introduction of Formula Ford in 1967. We have

worked closely with the FIA developing a technologically advanced race car to a very specific price cap. Current EcoBoostpowered F4 cars cost just over €50,000. Taking inflation and advancements in safety and technology into consideration, I believe we have overdelivered.

Our series continues to be a learning series. While driver development is critical, Formula Ford and F4 have also enabled many technicians, team managers, race engineers - even journalists - to develop their skills in a race environment. We are immensely proud that we continue to do this after five decades.

Over the last 50 years of involvement we have evolved, and we look forward to continuing our role at the grassroots level of motorsport and supporting single-seater racing.

# SCHROTH RACING CHAMPIONS CHOICE

# SCHROTH



NEW FIA Standard 8853-2016 available right now

XLT CARBON Visit www.schroth.com/racing to learn more about our products.



Follow us on Facebook www.facebook.com/schrothracing

