124-PAGE SEASON PREVIEW SPECIAL

GARY ANDERSON RATES THE TEAMS

BUTTON AND ALONSO: WASTED AT McLAREN?

MALITOSPORT

Every driver • Every car • Every race

F12016 guide





ACHIEVE GREATER





Never underestimate F1's ability to surprise

AFTER THE FIRST PRE-SEASON TEST TWO WEEKS AGO, it was seemingly game over. But while Mercedes still heads to the season-opening Australian Grand Prix on March 20 as the clear favourite, there is reason to think that Ferrari could be a bigger threat than initially seemed the case. And Williams, too, looked handy on the long runs during last week's second and final test.

You're probably thinking you've heard it all before — and you would be right. Pre-season testing is the great imposter, since no matter how rigorously you analyse the pace (which Ben Anderson has done in great depth over the page), you can never be certain how accurate the picture portrayed really is. But there is hope. And hope is what this stage of any sporting year is about.

There are many complaints about how predictable F1 is. And yet that's a lament in many sporting contests. At this stage of the season, we can still anticipate a possible surprise — in the knowledge that, until a week on Saturday in Melbourne's Albert Park, we won't know for certain what's happening in F1. And at this stage of a season, all fans are able to hope for something.

Realistically, we know who the protagonists are at the front. Sauber will not rise Leicester City-like to fight for the title. But we don't yet know precisely how 2016 will unfold, no matter how much it looks like the same old story.

Whatever happens, we can be sure it will be a dramatic season. After all, even the supposedly 'boring' years in F1 can be thrilling.







COVER IMAGECar: S Bloxham/LAT

FORMULA 1 TESTING

- 4 Is Mercedes really unbeatable?
- 12 Trackside view
- 16 Testing technical review

GRAND PRIX PREVIEW

- **18** What's new in 2016
- 20 The championship contenders
- 28 Button and Alonso wasted talents?
- 32 Meet the rookies
- 36 Introducing Formula 1's newest team
- 40 Ricciardo's plans to bounce back
- 44 Gary Anderson's team-by-team view
- 59 Race-by-race track guide and calendar

FEATURES AND REPORTS

- 72 Latvala off the mark in Rally Mexico
- 78 Montoya MkII and his lost title chance

RACE CENTRE

86 V8 Supercars; British Rally Championship

PIT+PADDOCK

- 88 Formula 1's halo safety test
- 90 Alan Henry 1947-2016
- 92 Rallying to lose its longest stage
- 95 Feedback: your letters
- 97 Ian Parkes: in the paddock

CLUB AUTOSPORT

- 113 BRDC F4 could become British F3
- 114 Ecurie Ecosse swaps to McLaren
- 117 Humble Pye

FINISHING STRAIGHT

- 118 What's on
- 120 From the archive: Nigel Mansell 1987
- 122 The bucket list: Monza

AUTOSPORT SUBSCRIPTION OFFER

98 Sign up and get a FREE pair of headphones

FIND US ON







facebook.com/autosport



instagram.com/autosportdotcom/



youtube.com/AUTOSPORTdotcom



the Apple App Store



digitalmagazine.autosport.com

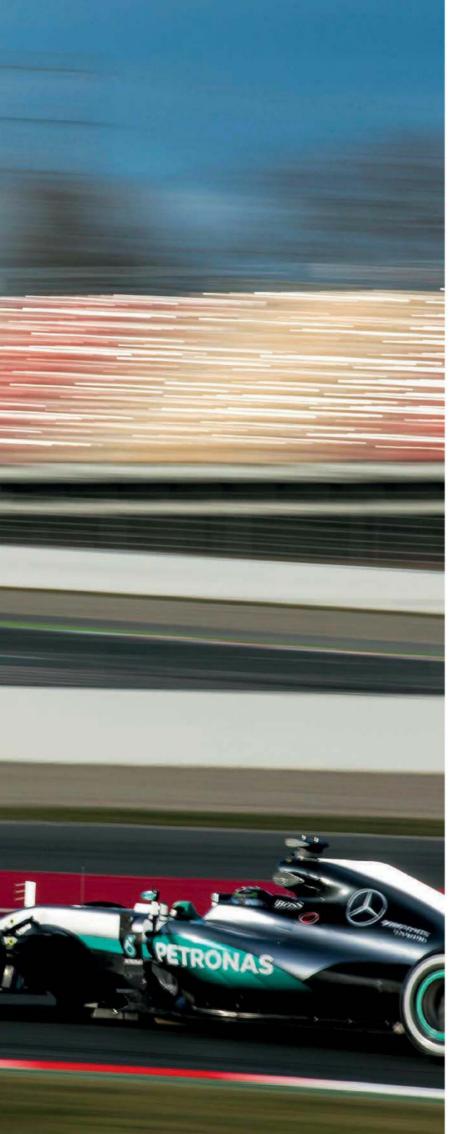


Apple News

Mercedes has the edge... or does it?

Pre-season testing form suggests it could be closer than you think come the season-opening Australian Grand Prix





early 9000 laps completed over eight days. That's almost 26,000 miles, which is roughly equivalent to taking a return trip from the UK to Melbourne and halfway back to Australia again.

They say it's 'only testing', that you can't read too much into what happens, and that it gives no real indication of where one team is relative

to the rest, but that amount of mileage still begins to build a picture of where the various squads stand as the countdown to the start of the new Formula 1 season nears its end.

It's not clear. Much more learning, understanding, work and development is already under way before the cars next turn wheels again in practice at Albert Park on March 18. But some interesting nuggets of information can be mined.

The two basic measures are naturally pace and reliability. Ideally, you want to prove (at least to yourself) that you have both these bases covered before you board the plane to Australia.

On the reliability score, Mercedes undoubtedly leads the way yet again. Last pre-season the champions completed 1340 laps across 12 days of testing. This year Mercedes resolved to do the same amount of work in four fewer days. The fact that the Wo7 did 1294 laps suggests the team got frighteningly close to achieving that target.

It would have got closer still had the transmission not failed on Lewis Hamilton's car approaching the end of his final morning. That was the only major setback in an otherwise faultless display from the frontrunners.

"It's been an incredible two weeks for the team," says Hamilton. "They've done an amazing job. I'm actually glad I broke the car. Better to have broken it now than to have found something in Melbourne."

Hamilton and team-mate Nico Rosberg had to split driving duties for each of the final six days to cope with Mercedes' punishing schedule, and new parts had to be fitted for the final day of running simply because the sheer volume of track time had worn some out to the extent that they started to show a drop-off in downforce levels in Mercedes' data!

Watching the Mercedes juggernaut in action is a mighty sight, both in terms of operational skill and on track. The fact that the world champion team was already throwing new developments at the Wo7 during the first test, while others were still trying to make sure their new machines weren't falling apart at the seams, is testament to the strength of Mercedes' development teams and the accuracy of its dynos.

This level of predictive testing currently seems beyond Ferrari, although it surely realises the need to invest heavily in the sort of infrastructure Ross Brawn made a priority before he left Mercedes at the end of 2013. When Mercedes chiefs talk of living through the Brawn legacy, this must be a big part of what they mean.

TABLE OF TOTAL LAPS COMPLETED ACROSS 2016 PRE-SEASON

POS	TEAM	LAPS
1	Mercedes	1294
2	Toro Rosso	1049
3	Williams	856
4	Ferrari	854
5	Red Bull	817
6	Force India	779
7	Renault	776
8	McLaren	710
9	Manor	484
10	Haas	474
11	Sauber*	406

*Only ran its 2016 car for four days

TORO ROSSO FACED A RACE against time to get its Ferrariengined STR11 ready in time, but still racked up an impressive lap count. The Red Bull junior squad lost many points to the poor reliability of last year's Renault engine, but things are looking much better already for Carlos Sainz and Max Verstappen, despite the lateness of the Ferrari deal and the difficulty of shoehorning the power unit into an established chassis design.

"Honestly we didn't know how well the car would work coming here," says Toro Rosso technical director James Key. "The

F1/SEASON GUIDE 2016

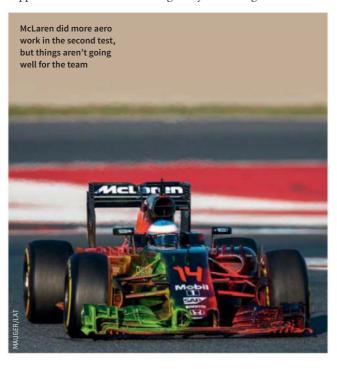
priority was to make sure we had a car ready to go in the best shape possible, but what kills you when you've got a very late decision is the lack of R&D you'd normally doto prove various systems. We did our best and the numbers stacked up, but you never know until you hit the track. To do so many laps has been a pleasant surprise. We weren't expecting a disaster, but we weren't expecting 160-odd laps a day either."

McLaren-Honda was much improved in this regard too, almost doubling its total from that disastrous 2015 pre-season. But the harsh realities of F1 hit home at Haas, which struggled badly with fuel system, turbo and brake-by-wire problems in week two, after a solid debut at the first test.

"The complexity of the cars and engines and what we are doing with them is way beyond anything I expected," says team owner Gene Haas. "It's a real challenge to get these cars to do what they do and I was kind of naive about what goes into making one of these cars run.

"It is a very complex process, it is a complex car, it's a complex way to race cars, and right now it's a little bit overwhelming to be honest with you."

There were niggling reliability problems for the works Ferrari squad too, but it improved markedly over the final two days of running, logging more than 130 laps each day and completing full race distances with Kimi Raikkonen and Sebastian Vettel following an engine change. Glancing at the headline times, things also look good for Ferrari in terms of pure pace. It topped the table on five of the eight days of testing held.



PURE PACE RANKING BASED ON OUTRIGHT TIMES				
POS	TEAM	DRIVER	TIME	TYRE
1	Ferrari	Raikkonen	1m22.765s	Ultra-soft
2	Mercedes	Rosberg	1m23.022s	soft
3	Force India	Hulkenberg	1m23.110s	(super-soft
4	Toro Rosso	Sainz	1m23.134s	Ultra-soft
5	Williams	Massa	1m23.190s	soft
6	Red Bull	Ricciardo	1m23.525s	Ultra-soft
7	Renault	Magnussen	1m23.933s	super-soft
8	McLaren	Button	1m24.714s	Ultra-soft
9	Sauber	Nasr	1m24.760s	soft
10	Manor	Wehrlein	1m24.913s	Ultra-soft
11	Haas	Grosjean	1m25.255s	soft

OBVIOUSLY THE TYRES CONSTITUTE A MASSIVE variable in the equation. All of Pirelli's five dry compounds were available, but the medium and hard are the only ones traditionally used in May's Spanish GP.

Pirelli says the hard compound does not work so well in winter testing, because the conditions are much colder, which is probably why most running is done on the soft and medium rubber.

As for the quickest tyres, they are not designed for the circuit, which perhaps explains why there was so much variation in laptime gain from one to the other, and why the gaps were not consistent even between drivers of the same car.

When Pirelli estimates a theoretical 0.5-0.6s gap from soft to super-soft, then another 0.6-0.7s from super-soft to ultra-soft, the differences between some drivers in the same car simply don't add up.

Valtteri Bottas managed almost identical 1m23.2s laps on the super-soft and ultra-soft tyres during his final two days in the FW38, both of which were slower than team-mate Felipe Massa's subsequent best time of the test for Williams, set on the soft rubber.

Of course there will be discrepancies between conditions and fuel loads on different days, which we cannot estimate accurately, but much else is rendered irrelevant if the tyres are not working correctly.

Mercedes didn't bother to use either of the softest two compounds during pre-season, even though the ultra-soft is new for this year, which tells you something about the suitability of that rubber for the Barcelona track in winter.

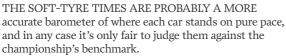
We don't have absolutely reliable data for the pace of each car on the soft and medium tyres, but we can build a rough picture from the laptimes we were able to spot throughout *Autosport*'s spell at Barcelona.





APPROXIMATE PURE PACE RANKING ON SOFT TYRI	ES

POS	TEAM	DRIVER	TIME
1	Ferrari	Raikkonen	1m23.0s
2	Mercedes	Rosberg	1m23.0s
3	Williams	Massa	1m23.2s
4	Toro Rosso	Sainz	1m23.9s
5	Force India	Hulkenberg	1m24.2s
6	Red Bull	Ricciardo	1m24.4s
7	Sauber	Nasr	1m24.7s
8	McLaren	Alonso	1m24.7s
9	Renault	Magnussen	1m24.9s
10	Haas	Grosjean	1m25.2s
11	Manor	Wehrlein	1m27.0s



Ferrari and Mercedes were neck-and-neck using this comparison, with Kimi Raikkonen and Nico Rosberg doing almost exactly the same laptime two days apart, both set during what we presume to be qualifying simulations in the morning.

"Ferrari has been very quick," agrees Rosberg. "All of the teams have their strategists, we know more or less what fuel the other teams are running and they know our fuel, so we know more or less where we are compared to Ferrari. That's why I say it's close. But we're not sure if we are ahead or behind."

Williams will also be massively encouraged by the time Massa set on the penultimate day of the second test, which puts the FW38 within striking distance of the top two and

well clear of the chasing pack.

"The last couple of days in particular have been very good for us," says Williams chief test engineer Rod Nelson. "We spent most of the first week looking at reliability and doing our homework, and now we've stretched the car a little bit and stretched the drivers a bit more.

"There's no doubt that Mercedes are extremely strong, Ferrari less so. We'd like to think we're slugging it out with Ferrari. It is close. Merc is gone, but we'd like to be second."

The rest of the order tallies with trackside observations, which place Toro Rosso's 2015 Ferrari-engined car as likely best of the rest, but not too far clear of Force India and Red Bull, which is clearly still lacking performance from its TAG-Heuer-badged Renault engine.

Toro Rosso man Sainz reckons Red Bull will still have an edge in this tight group, despite Red Bull boss Christian Horner's prediction that his team will start the season behind its junior arm. "Red Bull was 0.6s in front [last year] and the Ferrari engine should be those 0.6s, but Red Bull should do a massive [chassis] step compared to Toro Rosso during the winter due to budget," argues Sainz. "I expect them to be in front."

There is a significant gap between Red Bull and the works Renault team, which struggled with a few reliability issues throughout pre-season and hasn't reached the same level of chassis and engine integration as its customer squad. The RS16 also clearly lacks downforce compared to the RB12.

Sauber looks in slightly better shape than Renault and McLaren-Honda, which is perhaps surprising given the C35 did not appear until the second test. But the drivers were confident it would be a decent step forward, and so it appears to be.

McLaren-Honda has endured another difficult start. Honda has undoubtedly found more power and improved the energyrecovery systems, but it seems this has only raised the power unit to somewhere approaching Renault levels of performance.

On top of that McLaren struggled to get the MP4-31 chassis working properly during the final part of testing, which the team says is the result of some 2016 aerodynamic parts not being ready in time. A partial upgrade introduced on day six at >>>



F1/SEASON GUIDE 2016

Barcelona did not work properly in isolation, which explains why McLaren actually got slower as the test progressed.

The full 2016 aero package is expected for Melbourne, where McLaren will hope to cure the chronic oversteer that plagued its car over the final three days.

Haas has paid the price of limited mileage in the second test, but with a bit more refinement the car is fast enough to cling on to the Sauber, Renault, McLaren group, while the Manor-Mercedes — though respectable — is cut adrift slightly when you discount 'glory' runs on the softest rubber.

APPROXIMATE PURE PACE RANKING ON MEDIUM TYRES				
POS	TEAM	DRIVER	TIME	DAY
1	Mercedes	Rosberg	1m24.1s	Thursday
2	Ferrari	Vettel	1m24.6s	Thursday
3	Williams	Massa	1m24.8s	Thursday
4	Toro Rosso	Verstappen	1m24.9s	Thursday
5	Force India	Hulkenberg	1m25.2s	Thursday
6	Red Bull	Ricciardo	1m25.2s	Wednesday
7	Renault	Magnussen	1m25.8s	Wednesday
8	Haas	Gutierrez	1m26.6s	Tuesday
9	Sauber	Ericsson	1m26.8s	Friday
10	McLaren	Button	1m26.8s	Wednesday
11	Manor	Wehrlein	1m28.4s	Wednesday

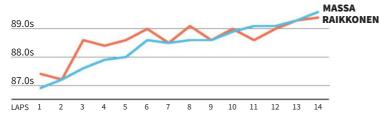
THE FASTEST MEDIUM-TYRE TIMES, USUALLY SET during the mornings, suggest Mercedes has a significant advantage over the rest, with Ferrari only fractionally ahead of Williams, and Toro Rosso not far behind. But the basic order is fairly similar to the soft-tyre ranking, except for Renault and Haas being a little more relatively competitive.

But F1 is not only about pure pace of course, and fortunately Mercedes and Ferrari provided us with race simulations during each afternoon of the final test (see tables, right).

Hamilton and Rosberg went first, on Tuesday and Wednesday, before Ferrari (having overcome those earlier reliability gremlins) went for it with Kimi Raikkonen on Thursday and Vettel on Friday. They all did a very short stint on softs to begin with, which is discounted on account of being too small to be meaningful. Mercedes then did three full stints (to complete a race distance) on mediums. Ferrari split strategies, with Raikkonen completing the final stint of his race simulation on hards, Vettel on mediums.

FERRARI VERSUS WILLIAMS

COMPARING A WILLIAMS LONG RUN ON THE HARD TYRES



MASSA WAS FRACTIONALLY FASTER ON AVERAGE THAN Raikkonen over a 14-lap run on the hard rubber, to the tune of about 0.03 seconds. This, combined with Massa's eye-catching soft-tyre effort over a single lap on the penultimate day, is probably why Williams feels confident of challenging Ferrari.

What we don't know is the absolute fuel loads of each car, or the exact engine modes they were running, but it still looks pretty close between Mercedes, Ferrari and Williams, depending on how much they all left on the table. That we won't find out until we get to Saturday afternoon in Melbourne.

FIRST STINT

Rosberg's and Vettel's opening stints were quite messy, perhaps because conditions were at their worst on Wednesday and Friday afternoons. Hamilton and Raikkonen were much more competitive. Daniel Ricciardo's stint is not directly comparable, but he completed a race run on Wednesday, which featured a long stint on medium tyres, so that's been used to give a reference to the rest of the pack.

AVERAGE LAPTIMES (11 LAPS)			
POS	DRIVER	TIME	
1	Raikkonen	1m29.464s	
2	Hamilton	1m29.618s	
3	Vettel	1m30.082s	
4	Rosberg	1m30.091s	
5	Ricciardo	1m30.290s	

MIDDLE STINT

The second stint was much closer, with Vettel fractionally faster than Hamilton overall and Raikkonen not too far behind. Rosberg was closer overall but still quite inconsistent.

AVERAGE LAPTIMES (12 LAPS)			
POS	DRIVER	TIME	
1	Vettel	1m28.800s	
2	Hamilton	1m28.858s	
3	Raikkonen	1m28.917s	
4	Rosberg	1m29.075s	

FINAL STINT

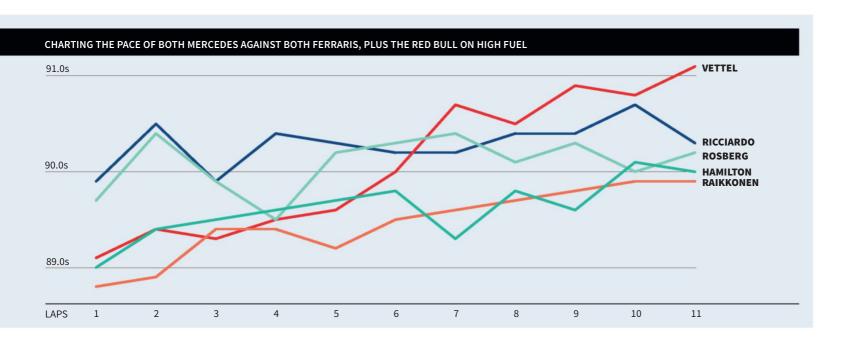
This is where the news got bad for Ferrari fans. Hamilton's final stint on the mediums was stunning – significantly quicker than anything Ferrari and even Rosberg could manage.

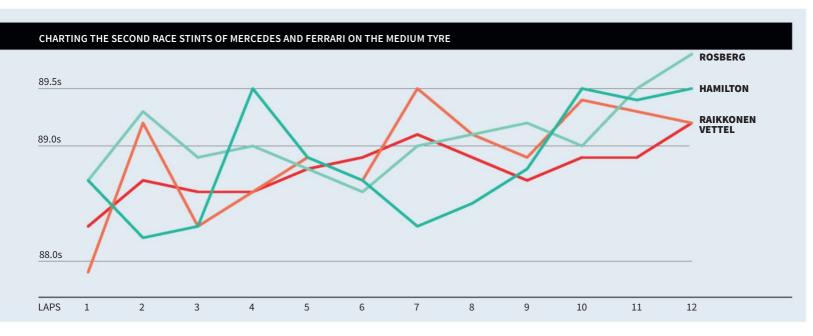
You'd expect Rosberg to tidy up his act when it comes to the real thing, because the average gap to Hamilton should not be well over 0.7s per lap.

Raikkonen's last stint is discounted, on account of him running the harder tyre. But Massa's Williams also did a long run on the hard rubber on Thursday, which makes for an interesting comparison.

AVE	AVERAGE LAPTIMES (12 LAPS)		
POS	DRIVER	TIME	

POS	DRIVER	TIME
1	Hamilton	1m27.383s
2	Rosberg	1m28.150s
3	Vettel	1m28.217s







Haas gets a Formula 1 reality check

THERE IS A SAYING THAT IF something is too good to be true, it usually is. So is the case with Haas – following a solid showing in the first pre-season test at Barcelona, the harsh realities of Formula 1 hit home in week two.

The VF-16 was very solid during week one, and was described favourably by Romain Grosjean, who knows a thing or two about good and bad cars given his time at Lotus.

Aside from a front-wing failure on the morning of the first day – attributed to a weakness in the construction of the attachment structure that was soon remedied – the car ran reliably for the rest of the week, with only the odd niggle here or there.

Grosjean and team-mate Esteban Gutierrez completed 281 laps between them – more than McLaren (257) and Manor (254) – and both posted decent times. The signs were extremely positive, and proof that a start-up team could be respectable.

But a week in F1 is a very long time, and Haas completed just 193 laps over the final four days of

"Haas has been served a reminder as to how unforgiving F1 can be"

pre-season, the fewest of all 11 teams, following fuel system, turbo and brake-bywire problems.

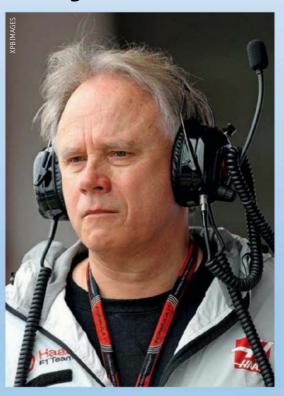
While it would be harsh to suggest what occurred is a wake-up call for team owner Gene Haas, certainly the 63-year-old American (right) has been served a reminder of how unforgiving F1 can be.

Much will depend on the team's relationship with Ferrari, with Haas conceding it is "relying very heavily" on assistance from the Maranello powerhouse. The upside is it's perhaps better to endure these problems now, rather than on Friday or Saturday in Melbourne.

"The first few years in NASCAR were quite a bit rougher than what we've experienced here," says Haas. "That was building a team without any knowledge.

"At least here we have some knowledge about racing cars, so we're further ahead going into this than when I started in NASCAR. It's all a learning process, but this could be a very tough learning process."

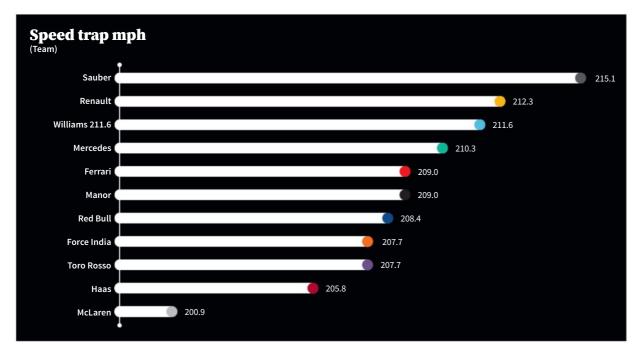
IAN PARKES





TESTING DATA BARCELONA, MARCH 1-4

2016 TEST STATISTICS



4810

Laps completed by all cars **324**

Most laps completed, by Nico Rosberg **49**

Fewest laps completed, by Esteban Gutierrez

3

Days on which a Ferrari

driver was fastest

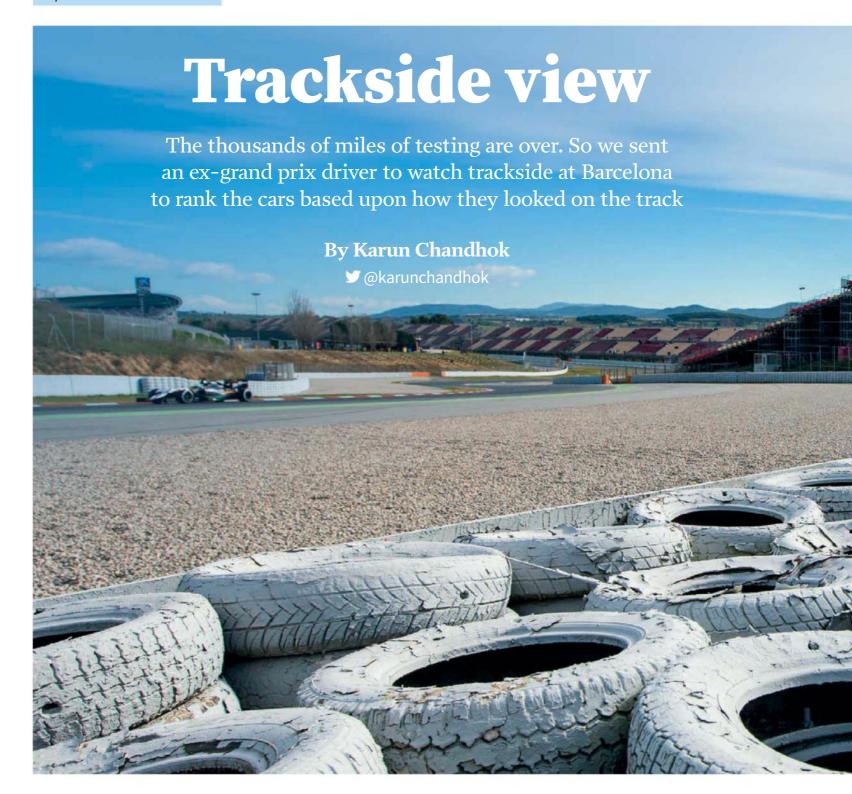
BAR	CELONA TEST TIMES	MARCH 1-4				
POS	DRIVER	CAR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
1	Kimi Raikkonen	Ferrari SF16-H	1m24.836s	-	1m22.765s	-
2	Sebastian Vettel	Ferrari SF16-H	-	1m24.611s	-	1m22.852 s
3	Nico Rosberg	Mercedes F1 W07 Hybrid	1m23.022s	1m26.298s	1m24.126s	1m26.140s
4	Carlos Sainz	Toro Rosso-Ferrari STR11	-	1m25.300s	-	1m23.134s
5	Felipe Massa	Williams-Mercedes FW38	-	-	1m23.193s	1m23.644s
6	Valtteri Bottas	Williams-Mercedes FW38	1m23.229s	1m23.261s	-	-
7	Nico Hulkenberg	Force India-Mercedes VJM09	1m25.336s	-	1m23.251s	-
8	MaxVerstappen	Toro Rosso-Ferrari STR11	1m25.176s	-	1m23.382s	-
9	Lewis Hamilton	Mercedes F1 W07 Hybrid	1m25.051s	1m23.622s	1m26.488s	1m24.133s
10	Sergio Perez	Force India-Mercedes VJM09	-	1m25.593s	-	1m23.721s
11	Kevin Magnussen	RenaultRS16	1m25.760s	1m23.933s	-	-
12	Daniel Ricciardo	Red Bull-TAG Heuer RB12	-	1m25.235s	-	1m24.427s
13	Jenson Button	McLaren-Honda MP4-31	-	1m25.183s	-	1m24.714s
14	Fernando Alonso	McLaren-Honda MP4-31	1m24.735s	-	1m24.870s	-
15	Felipe Nasr	Sauber-Ferrari C35	1m25.493s	-	1m24.760s	-
16	Jolyon Palmer	RenaultRS16	-	-	1m26.224s	1m24.859s
17	Pascal Wehrlein	Manor-Mercedes MRT05	-	1m27.064s	1m24.913s	-
18	Marcus Ericsson	Sauber-Ferrari C35	-	1m27.487s	-	1m25.031s
19	DaniilKvyat	Red Bull-TAG Heuer RB12	1m25.049s	-	1m25.141s	-
20	Romain Grosjean	Haas-Ferrari VF-16	-	-	1m27.196s	1m25.255s
21	Esteban Gutierrez	Haas-Ferrari VF-16	1m26.661s	notime	-	1m25.422s
22	Rio Haryanto	Manor-Mercedes MRT05	1m27.625s	-	-	1m25.899s

Red flags Total laps completed 70,98
Words written in autosport.com's live coverage Miles completed (Engine) 4608 2054 Ferrari '16 5016 4284 Mercedes 9872 Honda Ferrari '15 **Miles completed** (Team) 1 Mercedes 3743 2 Toro Rosso 3034 3 Williams 2476 4 Ferrari 2470 5 Sauber 2424 6 Red Bull 2363 7 Force India 2253 8 Renault 2245 9 McLaren 2054 10 Manor 1400

The fastest time for each driver is marked in bold

11 Haas

1371



Mercedes

MERCEDES IS THE CLASS OF THE FIELD AGAIN. The Merc just does everything the driver wants, as it has done for the past two years.

It's got good braking stability, traction and the high-speed change of direction is awesome. When you watch at Turns 1, 2 and 3, you see the front of the car goes where the drivers want and the rear really keeps up with it. It's in the medium-to-high-speed change of direction that it is really impressive to watch. And the car seems to be pretty much bulletproof.

This also tells you Mercedes has something in hand. Although Rosberg did a 1m23.0s on a soft-tyre run earlier last week, you could argue that Mercedes hasn't shown its full hand yet in terms of qualifying engine modes.





Ferrari

FERRARI IS BEHIND MERCEDES BUT AHEAD of Williams and Red Bull. The car is a definite step forward from last year. I remember this time last year watching at the same corners and the front end wasn't as responsive on entry, or as strong on change of direction as it seems to be this year.

It's impressive to see how aggressive Ferrari has been in changing this year's car design and the packaging around the rear is a good step.

Maybe Ferrari doesn't have Mercedes' levels of reliability, but a lot has changed on the car and I don't think the issues Ferrari has had are a concern. Pace-wise, if you try to break it down, both

Raikkonen and Rosberg did a 1m23.0s lap on soft tyres, but Nico did it on day one of this test, and Kimi did it on day three, so the track could have been a little bit better for Kimi. One thing that I thought was a little bit confusing was how little laptime improvement both Ferrari drivers found from the soft to the super-soft tyres.

We also don't know where they were on engine modes, but historically the Merc has been able to take a bigger jump forward in that regard. All things considered, you'd probably say that Ferrari is on average two or three tenths behind Mercedes. At some tracks it will be an equal and at others probably half a second away.



Williams

THE BATTLE FOR THIRD IS HARD TO READ.
I watched Felipe Massa a lot in the Williams when he was pounding around on the mediums and the car didn't look as good as the Toro Rosso, the Force India or the Red Bull.

But when they put the soft on and went for laptimes, both Massa and Valtteri Bottas seemed to be able to turn a fast lap. So does that mean Williams is running heavier fuel on the mediums and masking performance, or is it not able to get the tyres to work?

The car does seem tricky to drive on the longer runs. Felipe struggled to hit the same lines lap after lap with the ease that some other people did. It looked like he struggled to stop the car particularly at Turns 1, 4 and 5 on the medium-tyre runs. In the slow and medium-speed stuff, like Turn 5, even on the softs the front just doesn't turn in to the apex as well as the Toro Rosso, for example.

Williams ended last year as third best, but the pack has tightened up around it now. The team has got to work really hard and be a bit sharper with strategy to get everything correct.



Toro Rosso

THE TORO ROSSO LOOKS REALLY impressive on track. The high-speed balance and change of direction don't look as strong as the Red Bull, but still very good. In the low-speed corners, it looks really hooked up. At Turn 5 and Turn 1, and even the final sector, the nose really went into the apex well, and the drivers were able to get good drive off the corner. It

was pretty impressive to watch. If you took last year's car and bolted a Ferrari engine into it, it would offer a decent chunk of laptime. The fact that it did a time within three tenths of Vettel on the final day on the same tyre was a good sign.

Having the older engine will probably hurt Toro Rosso later in the season, but it starts with a good base.



Red Bull



THE RED BULL DOES EVERYTHING THE DRIVERS want – like a Merc, but without a Merc engine!

The Red Bull is definitely running more rake this year, and it's noticeable in Turn 3, where the car is under a lot of aerodynamic load. The front is buried in the ground through there, sparks are coming off the front skidplate, but you can actually see daylight under the rear floor.

You don't see that with any other car. It's very unusual and interesting that Red Bull needs to set the car up that way to get the floor to work. But the car looks comfortable to drive and very well balanced.

Force India

FORCE INDIA IS ALSO IN THE HUNT. THE headline times have been really impressive but the long runs are harder to judge. The headline times suggest it should be firmly third best, but the reality is that it's probably in the middle of the fight, along with three other teams.

The front of the car looks stiffer than most others and, on the entry to Turn 5, the inside-front wheel lifts off the ground more than others. It also has a bit more understeer built into it, but perhaps that's a trick to manage the rear tyres. Force India has probably realised that has helped score some big results in the past, when rear-tyre degradation is critical.



Renault

THE RENAULT LOOKS QUITE EDGY AND tricky to drive. Jolyon Palmer was struggling to hit the same lines lap after lap, particularly through Turns 1, 2 and 3. The car is lacking downforce and hasn't made a big step forward from where Lotus was over the winter.

Renault has got to invest so much this year, in infrastructure and R&D, if it wants to be a factory

team in the way Mercedes and Ferrari are. Renault wants to compete for the championship in five years, and it could actually take that long.

But the ingredients are there. Bob Bell, Fred Vasseur and Chris Dyer are all key cogs in the wheel. Vasseur is a very clever guy and runs a really good race team. He knows how to do it, but he needs time and money. If Renault can finish this year sixth that will represent a solid season.



Sauber

THE NEW SAUBER CAME TO THE PARTY a bit late, but it managed to get a decent amount of mileage in. It looks like a safe evolution of last year's car – a logical step, but not to the degree of the others. Having the 2016-spec Ferrari powertrain will be a big help early on, but McLaren will be aiming to get ahead of Sauber if they get their set-up issues sorted.



McLaren



THE RELIABILITY IS BETTER, BUT IT'S QUITE clear that driveability and outright power are still problems. Mid-corner to exit, on throttle, the car looks unpredictable and difficult to drive. The engineers are obviously trying things, because Alonso went from having a snappy rear end in the morning to quite a bit of understeer later in the day.

McLaren looks like a team that knows its engine

is not as competitive as it would like and therefore a lot of energy and brainpower are being spent on how to cover those deficiencies. I think the set-up problems are a consequence of that.

The chassis set-up doesn't look great and the car doesn't look easy to drive. Last year the McLaren chassis looked balanced and driveable, and the drivers could hustle it for a laptime, but they don't look comfortable in this one.

Haas

IF HAAS CAN GET OPERATIONALLY sorted, it can be in fighting at the front end of the four at the back. If not, it will be at the bottom end of the bunch.

On paper, the Haas car should be quite good. The team has a lot of support from Ferrari, and there are a lot of very clever people at Dallara. These are two very good organisations to have in your corner.

If Haas can keep up in the development race, and get the reliability and operational issues sorted, then attaining seventh-best team in the second half of the season may be possible – but maybe not seventh-best in the championship, because it will lose ground early on in the year.

On track, the car looks reasonably well balanced, and the team has applied a sensible approach of trying to do multiple laps rather than glory runs.



Manor

THE TEAM HAS CLEARLY MADE A STEP forward, because Wehrlein managed a 1m24.9s, which is only 2.2s off the quickest time we saw all week. That's a massive leap from where Manor was before. The problem is that Haas has arrived and is going to be ahead immediately.

The car looks much more basic than the others. It's a team that hasn't got the finances or the infrastructure, with only three months of refurbishment.

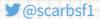
The powertrain has closed the gap; it's just a question of how much Manor can develop through the season.



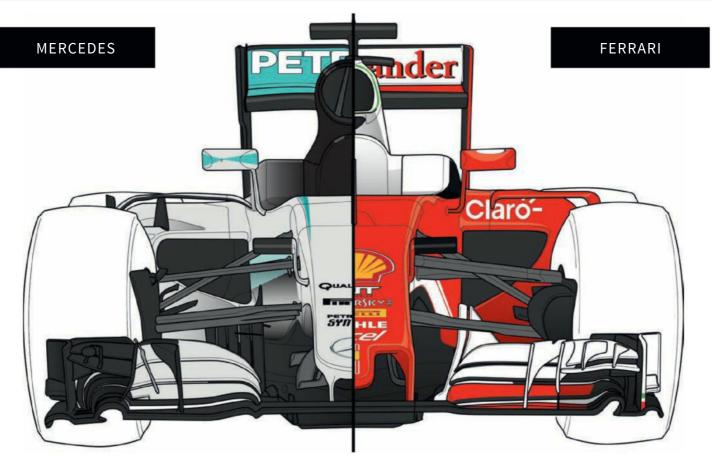
Second test technical insight

The development war accelerated during the second and final pre-season test at Barcelona. Here are some of the key technical trends

By Craig Scarborough, Technical Contributor



MERCEDES v FERRARI COMPARISON



THE DIFFERENCE IN THE APPROACHES TAKEN BY Mercedes and Ferrari is noticeable, not just in the former's preference for long runs and not using softer-compound tyres during testing, but also the diverging aero philosophy of the two teams.

Mercedes is focusing on splitting the airflow around the car at a later point than Ferrari. The intention of its new, slimmer nose with narrowspaced front wing mountings is to keep that out of the airflow and make the under-nose turning vanes and bat-wing do the work.

The Ferrari has a far wider nose, which, along with the front-wing mounts, turns the airflow around the car, obscuring the turning vanes while doing so.

The Mercedes aero strategy also extends to the new multi-segment bargeboards, which, due to the front-end design, have to work much harder to turn the air, hence their complexity. The Ferrari is sleeker

with large bargeboards aided by just a few slots.

As yet, we have seen only subtle front-wing changes. But the Mercedes is more aggressive, with the transition between the neutral centre section of the wing being worked harder. The outer tips still exhibit the same arched shape, but the Ferrari uses much more flowing lines than the Mercedes. Ferrari does use the blown front axle, which explains the massive difference in brake-duct size.

McLAREN AERODYNAMIC UPGRADES

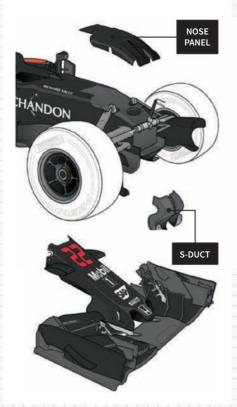
SOME OF THE NEW AERO UPDATES ONLY just made it to the test, but the basis of McLaren's new car is still hiding several secrets. The main area of interest is the front suspension, where the upper and lower wishbones are much closer together than on other cars. This is an aero-led design rather than one to improve the performance of the suspension.

Instead of the larger lower wishbone of the Mercedes, McLaren positions the wishbone legs closer together as a cascade to turn the front-wing airflow downwards. One trade-off is that the closer suspension elements suffer greater loads and need to be heavier for the same stiffness.

The other trade-off is that the raised lower wishbone makes it harder to get a good angle for the front pushrod. Normally the wishbone passes through the side of the monocoque, but McLaren has placed it over the top of the tub and the internal rocker projects vertically through the structure to meet the pushrod. This allows the pushrod a steeper angle.

McLaren has also repackaged its S-duct. The pair of lower inlets clean up the airflow passing along the nose's undersurface. Then the S-duct allows the airflow to exit over the nose's top surface, again keeping the airflow tidy. In McLaren's case, the S-duct means the nose's depth can be shallower, which creates less aero blockage between the wheels.

It's interesting to note that the Mercedes adaptation of the S-duct, with its inlet near the front of the nose, doesn't allow for a shallower nose.



SECOND (WATER) INTERCOOLER PIPE BETWEEN INTERCOOLER FIRST (AIR) INTERCOOLER

OIL & WATER COOLERS

FERRARI SPENT SOME OF ITS WINTER development-token allocation to repackage its power unit. This was primarily for better chassis performance and not purely for the engine itself.

With customer teams Sauber and Haas getting the same power unit and gearbox, we can now see how this has been rearranged. The two MGUs in the ERS have been moved forwards along the engine, creating a smaller turbo package and more space inside the gearbox to allow the inboard suspension elements to be packed in tighter for a slimmer and higher gearbox shape.

Also, Ferrari has adopted a large singleinlet plenum with variable-length inlets incorporated into it. This has forced a repositioning of the old water-to-air intercooler that sat in the engine's 'V'. Ferrari has gone for a two-stage intercooler set-up, with the turbo compressor blowing into a triangular air-to-air intercooler mounted over the gearbox. The partially cooled charge air then passes through a pipe alongside the engine into a second intercooler, this time a water-to-air set-up in the back of the fuel-tank area. This then passes the cooled charge air into the plenum to enter the inlets.

TURBO INSIDE GEARBOX CASE

This cools the air effectively, both from the efficient air-to-air intercooler, which, although mounted high over the gearbox, is very light so as not to upset the car's centre of gravity and the water-to-air intercooler. This also serves to keep the charge air temperature consistent, as it cools the air even if the car is not moving. This helps keep the air cool for more power before the race start and at pitstops.

CAR RAKE

EVERY TEAM IS INCREASINGLY PUTTING MORE rake into the set-up. Rake is the extent of the nose-down, tail-up attitude to the car. This provides more rear downforce from the entire floor being angled and acting as a front extension to the diffuser, while the front wing also sits lower, making it more efficient.

Red Bull was the first team to properly take advantage of extreme rake, with rear ride

heights over 100mm and front ride heights down to just 30mm. Now McLaren and Force India, in particular, are trying to set the car up with more rake to also gain this advantage.

But the compromises in sealing the diffuser, controlling rear ride height and front-splitter clearance create a series of development issues, as well as the unavoidable increase in the rear centre-of-gravity height.



What's new in 2016

Every grand prix season provides plenty of new things to get used to. This year we have a new team and a returning manufacturer to add to the rookie drivers — and a controversial new qualifying system

■ @autosport

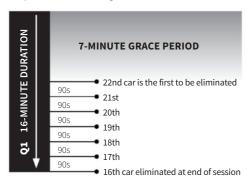
Qualifying knockout changes

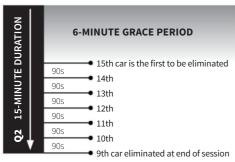
IN A LATE MOVE ONLY AGREED LAST WEEK, Formula 1's qualifying format will be changed this year. The three-segment session continues, but drivers will be eliminated as the segments progress, rather than being culled at the end of it.

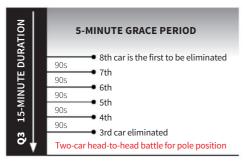
Q1 will run over 16 minutes. After seven minutes, the slowest car will be eliminated. This will be repeated every 90 seconds until there are 15 cars left. These proceed to the 15-minute Q2 session, with elimination starting after six minutes on the same basis until the field is whittled down to eight.

Q3 will be held over 15 minutes, with the elimination starting after five minutes to set up a head-to-head battle for pole position.

As Autosport closed for press, the final regulations had yet to be released – indicating just how last-minute this change has been. Expectations are mixed, but drivers were against the change when they discussed it during last week's Barcelona test.







Renault's new works team

FOR MUCH OF LAST YEAR, THE SAGA OF RENAULT'S acquisition of the Lotus team was the most interminable story. Eventually, a resolution was reached and the Enstone squad competes this year as a pukka works Renault team. Yes, that's the same Enstone team that raced as Renault from 2002-11.

The takeover was not completed until December 2015, so Renault starts the season on the back foot with an undercooked car heavily based on last year's Lotus. But significant investment means long-term ambitions are high.





Biggest ever calendar



THIS SEASON COMPRISES A RECORD-BREAKING 21 races, an increase of two over last year with the return of the German Grand Prix at Hockenheim and the new European Grand Prix at Baku in Azerbaijan on the calendar.

🔵 P59 SEE OUR IN-DEPTH TRACK GUIDE

Ultra-soft tyres

PIRELLI HAS ADDED A FIFTH SLICK-TYRE compound choice this year – the ultra-soft. As you would expect, it's a step softer and therefore grippier than the super-soft, and it will be used mainly on street tracks. Those who tried it in testing generally reported it did indeed give even more grip and didn't cause any surprises.



Haas and the American team dream



SIX YEARS AFTER THE USF1 PROJECT FELL APART without a car ever turning a wheel, there is an American F1 team back on the grid for the first time since the similarly named, but unrelated, Beatrice Haas team of 1985-86. Much has been made of the team's affiliation with Ferrari (both sides stress it is not a B-team), but, through its alliances with Maranello and the Italian constructor Dallara, things are looking promising for the new team.

P36 MEET F1'S NEW AMERICAN DREAMERS



Three rookies



JOLYON PALMER AT RENAULT PLUS RIO HARYANTO and Pascal Wehrlein at Manor make it three rookies on the Formula 1 grid this season.



Driver of the day

ANOTHER NEW INITIATIVE FOR 2016 IS THE opportunity to vote for the F1 driver of the day during every race. This will be awarded shortly after the finish, and is aimed at increasing fan engagement over social media.



Radio communications clampdown



FURTHER RESTRICTIONS HAVE BEEN PLACED ON pitwall-to-driver communications this year. Here's what you can tell the driver when he's on-track, or in pit entry or exit during reconnaissance laps:

- 1 If there is critical problem with the car, eg puncture warning or damage.
- 2 If there is a problem with a competitor's car.
- 3 To enter the pits in order to fix or retire the car.
- 4 To give marshalling information (yellow flag, red flag, race start aborted or other similar instructions or information from race control).
- **5** To inform about a wet track, oil or debris in certain corners.
- **6** To respect the maximum laptime provided it is clear that the driver is in danger of exceeding it.

And here's what you can't tell them:

- 7 To drive through the pitlane.
- 8 To make his way to the back of the grid.
- **9** To discuss a balance check.
- 10 To turn off the car.
- 11 To carry out a radio check.

This is what the teams can say when the car is in the pits before or between any reconnaissance laps:

- **12** Instructions to the driver for the following lap.
- **13** Reminding the driver to do a practice start at the pit exit.
- **14** Discuss a balance check with the driver.
- **15** Tell the driver to go to the back of the grid.
- **16** Carry out a simple radio-check handshake with the driver (ie "radio check", "got you loud and clear").
- **17** Tell the driver to come back through the pitlane.
- 18 Informing the driver of specific pitlane safety concerns such as the pitstop area being full of guests. This message (and only this message) may also be given in the pit entry.

Teams are also allowed to talk freely on the radio and pass any messages to a driver on the grid, or in the pitlane, until one minute before the start of the formation lap.

From the one-minute signal, and until the race-start signal, the only permitted messages are to tell a driver of a critical problem with the car, eg puncture warning or damage, or to inform him of a problem with a competitor's car.





Lewis Hamilton heads into the season as favourite to win the world championship, which would be his fourth. But there are three other drivers with the means, motive and opportunity to push him hard

By Ben Anderson, Grand Prix Editor

y @BenAndersonAuto

veryone without a vested interest hopes Ferrari can challenge Mercedes for the Formula 1 world championship this season.

Mercedes has won 84 per cent of the 38 F1 races held since V6 hybrid-turbo engines were introduced into F1. Only twice, in last year's Hungarian and Singapore Grands Prix, has neither of the German manufacturer's cars

failed to finish on the podium.

This success is extraordinary, achieved through technical genius, driving prowess and financial might. Such dominance is impressive, but has done little for the competitive reputation of F1 during times of pay-TV subscriptions and dwindling audience figures. It also means that Lewis Hamilton and Nico Rosberg have exclusively fought for the drivers' championship for two straight seasons.

This battle looked to have the potential to be explosive initially, as Hamilton and Rosberg engaged in warfare on and off the track, but then Rosberg clattered into Hamilton at Spa in 2014, Mercedes took strong action against him, and things have never quite been the same since. Hamilton won that title battle, and things were generally more civil at Mercedes as he romped to a third championship last year. If this fight had been tooth-and-nail all the way, settled by a handful of points each time, perhaps the clamour for a swift end to Mercedes' technical domination of the V6 formula might not be so vociferous.

Ferrari never even had a sniff in 2014, as Fernando Alonso and Kimi Raikkonen wrestled with the idiosyncrasies of a

recalcitrant car, but last year was much better as the team vastly improved its technical blueprint and new star driver Sebastian Vettel scavenged three wins when Mercedes slipped up.

That represented a very fine recovery, especially considering Ferrari's pre-season target was to win twice, and offers a glimmer of hope that F1 could potentially become a multi-team contest once again.

Ferrari has certainly set its sights high. When the wraps came off Ferrari's new challenger late last month, team principal Maurizio Arrivabene suggested that Maranello has to gun for ultimate glory in 2016.

Pre-season testing hasn't run as smoothly for Ferrari as it has for Mercedes, but the SF16-H does appear to have better handling and more power than its predecessor. That should give Vettel and Raikkonen a far sharper tool with which to attempt to slice through the impressive armoury Mercedes has built around its competitive advantage over the past 24 months or so.

The others are improving too, but it already looks as though Mercedes and Ferrari will again be a clear step ahead of the rest of the grid, which means there is realistically only a maximum of four potential title contenders set to do battle this season.

For all the undoubted importance of the technical packages, it's still the driver who ultimately makes the difference. After all, what use is a knife without someone to do the cutting? Hamilton, Rosberg, Vettel and Raikkonen look to have the best tools this year, but which of them has the best skillset to get the job done? >>>

SelectMotorRacing.com

INTERNATIONAL MOTORSPORT EVENTS > RACE TICKETS > HOSPITALITY & TRAVEL



Formula One
 Le Mans 24hr
 WEC - SPA - Nurburgring - Sakhir

TOUR PACKAGES	<u>DESTINATIONS</u>	
FORMULA ONE HOSPITALITY PACKAGES	ALL EVENTS	F1 Paddock Club Team Packages / Amber Lounge
FORMULA ONE 2016	ALL GRAND PRIX	UK Tour Travel Team Escorted Tours By-Air with Holiday options
FORMULA ONE COACH TOURS	SPAIN, MONACO, AUSTRIA, GREAT BRITAIN, HUNGARY, GERMANY, BELGIUM, ITALY	Escorted Holiday Tours Executive Coach Travel *All Events*
LE MANS / WEC-6HR	LE MANS 24HR SPA & NURBURGRING 6HR SAKHIR, BAHRAIN	By-Air, Coach Tours, Self Drive *All Events* By Air Packages
HISTORIC EVENTS	MONACO HISTORIC MILLE MIGLIA GOODWOOD FESTIVAL LE MANS CLASSIC GOODWOOD REVIVAL	Escorted Tour Package By-Air Coach Tours Self Drive *All Events*

Mille Miglia
 Le Mans Classic
 Monaco Historic
 Goodwood







LEWIS HAMILTON THE STATISTICS ARE STACKE Hamilton, given he's won 21





THE STATISTICS ARE STACKED OVERWHELMINGLY IN FAVOUR OF Hamilton, given he's won 21 times from his last 38 grand prix starts, plus two consecutive drivers' titles. But he is not infallible. If he is not at his best this year, others will be waiting to pounce.

QUALIFYING SPEED

Hamilton prides himself on being the fastest driver out there on any given day, but this was arguably an area of weakness in 2014, when Rosberg consistently got the better of him in qualifying.

Last year was a huge improvement, although Rosberg's late-season run of six poles in a row suggests Hamilton cannot relax.

But Hamilton will probably feel that he has the edge if he's at his best. There were times last year when Rosberg looked shellshocked by Hamilton's margin of superiority.

RACECRAFT

This is where Mercedes feels Hamilton really shows his class. He has extraordinary feel for the car under braking and his improvisational style in battle is always thrilling to watch.

Hamilton has consistently asserted himself over Rosberg in this department, starting with that thrilling victory battle in Bahrain 2014 and latterly with robust first-corner passes at Suzuka and Austin 2015.

Hamilton is merciless whenever he gets a sniff of victory, but he also showed with his radio whining, as Rosberg went on a late-season surge, that frustration can overcome him when he feels the limitations of team strategy and F1 physics are stifling his creativity.

He already seems disappointed with the revised tyre compounds for this year, which rivals could exploit if Hamilton is slow to adjust his expectations or his technique.

WORK ETHIC

You cannot win three world championships without extreme dedication, but Hamilton admits he went off the boil after clinching the title last year.

This highlights the extraordinary energy levels required to succeed at the highest level, even when you have the best car, but also suggests Hamilton isn't the sort to burn the midnight oil come what may.

MENTAL STRENGTH

This is not something many would associate with the Lewis Hamilton whose form swayed so erratically during his time at McLaren, but you get the sense that he has become stronger as he's got older.

Mercedes affords him the freedom to be who wants to be and do what he wants to do, and Hamilton appears more comfortable in his own skin as a result.

Finally winning that second title in 2014 was a massive boost, imbuing him with the fresh self-confidence that comes from success in the face of adversity.

TITLE-FIGHT EXPERIENCE

This is an area of real strength for Hamilton. He's raced in Formula 1 for nine seasons and fought for the championship more often than not.

More importantly, he's had a variety of experiences within that scenario: losing out at the final race as a rookie in 2007, winning at the final race in '08, being the outsider in the four-way showdown of '10, coming from behind to win again in '14, then dominating last season.

He's also won more often than not when he's had a real chance. Been there and done it. Many times. >>



MOTORSPORT TOURS

BABTAABTA No V8321



5 SEBASTIAN VETTEL





THIS IS A NEW ROLE FOR VETTEL, WHOSE RISE TO THE SUMMIT OF F1's mountain with Red Bull was meteoric. V6 turbo hybrids clipped his wings in 2014 and he finally looked human, rather than some kind of winning machine. Joining Ferrari last year seemed to rejuvenate him. If Ferrari can deliver a good enough car, Vettel looks the most likely to spoil Mercedes' party.

QUALIFYING SPEED

If anyone doubts Vettel's capacity for brilliance over a single lap, just watch the onboard video of his pole position in Singapore last year.

On a hot and bumpy track, using tyres that turn to chewing gum before you get to the end, Vettel was sublime – accurate, disciplined, but, most importantly, devastatingly fast.

The way Daniel Ricciardo regularly got the best of Vettel in 2014 caused many to call Vettel's abilities into question, but this is more a testament to Ricciardo's talents than Vettel's deficiencies.

Success in sport depends on complicated chemistry, and when all is right in Vettel's world he is right up there with the very best in qualifying.

RACECRAFT

Vettel is probably not as spectacular in this department as the likes of Hamilton, or newcomer Max Verstappen, but he is quietly effective.

Because Vettel has spent much of his F1 career starting on pole and driving off into the distance, it would be easy to think his racecraft isn't up to much, but he is relentlessly consistent, makes very few errors, and is extraordinarily difficult to beat once he gets into the lead.

He can go wheel-to-wheel with the best of them too. Recall his pass of Fernando Alonso round the outside on the grass at Monza in 2011, or his fight with Ferrari team-mate Kimi Raikkonen at Sochi last season. Both examples display the expert judgement of a top racing driver.

But he isn't infallible. Sliding wide on the last lap of the 2011 Canadian GP handed victory to Jenson Button, and he also went off twice during last year's Mexican GP, but these errors are usually few and far between.

WORK ETHIC

Vettel is unquestionably in the absolutely top bracket when it comes to work rate. There were none of the Hamilton-esque late-season dips in form after Vettel wrapped up his world championships.

He was below par in 2014, but that is arguably the only real blip in an otherwise spectacular career, and the impact he's made during his short time at Ferrari suggests his commitment is back to formidable levels.

MENTAL STRENGTH

There's not much weakness to be exploited by rivals here. He saw off the Aussie grit of Mark Webber while the two were Red Bull team-mates, and Vettel seems to revel in trying to get under the skin of the Mercedes drivers.

He looked off-colour during his final season at Red Bull in 2014, but refused to blame the team for that in any way.

Ferrari is clearly rebuilding around Vettel now, and that stability will only reinforce his mental fortitude.

TITLE-FIGHT EXPERIENCE

Vettel's record in title fights is imperious. On each of the four occasions he's had a realistic chance of taking the crown he's sealed the deal, winning that four-way showdown in 2010, dominating in '11 and '13, and clinging on against Alonso in '12.

It's hard to argue with a 100 per cent strike rate. >>



ROSBERG WILL BEGIN THE SEASON WITH THE QUIET CONFIDENCE OF knowing that he was unquestionably the strongest Mercedes driver over the final three races of last year. But he also knows a winter reset means he cannot be sure that form will simply continue. Can he be

QUALIFYING SPEED

the best when everything is on the line again?

For all the received wisdom that Hamilton is the fastest driver in F1, Rosberg can stake a valid claim to be at least his equal under the current rules. Since 2014, Rosberg and Hamilton have each qualified on pole position 18 times, and are tied 19 apiece in their intra-team battle (Hamilton is one ahead if you ignore the two sessions in 2014 when he encountered technical problems). Mercedes technical chief Paddy Lowe reckons Rosberg is up there with the best when it comes to a Saturday afternoon showdown.

RACECRAFT

This is an area Rosberg has had to work at. The way Hamilton bullied him out of victory in Bahrain 2014 established a dynamic of superiority, which Rosberg has had to fight to overturn. Hamilton will feel he is unquestionably a better racer than Rosberg. The ray of light for Rosberg is the way he recovered to a leading position in last year's US GP, passing Hamilton on-track with a proper move. He lost the race ultimately, but that switchback pass at Turn 13 was massive, proving he can bounce back in adversity, catch his team-mate, and overtake him fair and square.

WORK ETHIC

Rosberg does not shirk hard graft when it comes to his racing. Those who have worked with him closely attest to his fierce intellect, and determination and aptitude for working through data in detail to discover new ways to improve.

Against a rival as naturally talented as Hamilton, this is crucial. Rosberg's talent for engineering helps endear him to his team, although he is prone to stressed outbursts over the radio during races.

MENTAL STRENGTH

It is to Rosberg's credit that he has remained hungry and committed, despite two consecutive championship defeats to Hamilton.

Plenty of drivers would cave under the sheer weight of repeated intra-team defeat, the inferiority complex of which often leads to a sort of mental breakdown, followed by shouts of conspiracy from within.

Not Rosberg. He always keeps going, keeps believing, keeps striving to overturn the status quo, refusing to concede that the other driver is simply better.

He is the rival who just will not go away.

TITLE-FIGHT EXPERIENCE

Rosberg has much less title-fight experience than his main rivals, having only really run at the absolute front of the grid for two seasons. His 2014 title bid unravelled following the acrimony of Hungary (where Hamilton refused team instructions to let Rosberg past) and Spa (where Rosberg drove into Hamilton trying to take the lead),

and he also made too many mistakes at crucial times during the run-in. Last year, Hamilton was simply too strong a frontrunner across the first two thirds of the campaign.

Rosberg needs to come out swinging harder and faster this year, and make good decisions when the pressure of the title fight ramps up.



RAIKKONEN IS UNDOUBTEDLY ONE OF THE FINEST GRAND PRIX drivers ever to grace Formula 1, but he has been below par for the

This is the final year of his current contract, with no options or extension clauses. The hope will be that he can improve as significantly behind the wheel as Ferrari has tried to do technically with the SF16-H. He will need to if he wants to be a serious contender this year.

past two seasons, thrashed by both Fernando Alonso and Sebastian

QUALIFYING SPEED

Vettel since he returned to Ferrari.

Raikkonen has never been one of F1's most devastating qualifiers, and the last time he qualified on pole position (at Magny-Cours in 2008), the French Grand Prix was still on the calendar...

His recent form has been particularly unspectacular, often qualifying behind slower cars and not really troubling either of his team-mates. Of the current contenders, Raikkonen is clearly the weakest qualifier.

RACECRAFT

Raikkonen is far stronger in this area. He has won 20 grands prix but only started on pole 16 times in his career, which means he doesn't always need to start from the front to get there.

His 2005 Japanese Grand Prix victory is a testament to his prowess, but his ability to execute carefully judged tyre-management wins for Lotus in 2012 and '13 shows he has great feel for the big picture too.

As for the wheel-to-wheel stuff, F1's newest overtaker extraordinaire Max Verstappen credits the inspiration for his round-the-outside moves in Brazil last year to a 2012 pass Raikkonen made on Michael Schumacher.

On the downside, Raikkonen's collisions with fellow Finn Valtteri Bottas at the back end of last season were uncharacteristically clumsy.

WORK ETHIC

Raikkonen is not known for leaving no stone unturned in pursuit of refinement to his craft, but that's probably an inevitable consequence of being considered the most naturally gifted driver of his generation.

If sport is art versus science, and Rosberg is Newton, Raikkonen is probably something closer to Picasso...

But Raikkonen is a great team player - straightforward and apolitical, which is a dream come true for his colleagues.

MENTAL STRENGTH

Rosberg likes to talk of his Finnish 'sisu', a sort of stoic determination in the face of adversity, which he's needed in the face of Hamilton's relentless onslaught. This method seems to be one of absorption and reaction, whereas Raikkonen tends to let the tide wash over him.

He is utterly resolute in his own inimitable way, but closer to a rock in a riptide than a surfer atop a wave.

TITLE-FIGHT EXPERIENCE

Raikkonen has a 25 per cent success rate when it comes to taking title chances. He came within three points of denying Michael Schumacher in 2003 as a rank outsider, was thwarted by McLaren's unreliability in '05, nicked the '07 crown from Lewis Hamilton and Fernando Alonso at the death (with some help from Felipe Massa), and dropped out of contention early with a poor mid-season run in '08.

Hamilton and Vettel have a sharper edge when it comes to title fights. For Raikkonen it's been a long time since he had a real sniff, but we know he's only interested in winning, so maybe a genuine title chance is what is needed to wake the Iceman from his winter hibernation. #



Stars in an unreasonably slow car

McLaren has been wasting the talents of Alonso and Button, and needs a culture of honesty to keep them, says the team's Eric Boullier

By Ben Anderson, Grand Prix Editor

@BenAndersonAuto



ith races this year, especially at altitude, we've really struggled. Basically cars are disappearing into the distance. If you're not winning, but

you enjoy. But the whole time trying to hold on to the back of the field - it's not really much fun...'

That's how Jenson Button summed up his 2015 season driving for McLaren-Honda. How enormously frustrating it must have been for Button and team-mate Fernando Alonso to race at the tail end of F1's midfield, especially when between them they have won 47 grands prix, stood on the podium 147 times and been crowned world champion three times...

These guys are good, among the best in the world undoubtedly, but they are not miracle workers. Racing for McLaren-Honda last season must have felt similar to trying to iceskate with slippers on. With both legs tied

"It's fragile – they've had so much bullshit in their racing lives"

together. While wearing a blindfold.

Honda has made a number of improvements, but the early signs are that they are not likely to be life-changing. Certainly, McLaren-Honda is not looking set to challenge Ferrari and Mercedes for the world championship in 2016.

That suggests another season of toil awaits its drivers. It may be better than the last, but probably not worthy of the talents of two of the best drivers on the grid. Neither Alonso nor Button can be considered spring chickens any more, so time is of the essence if they are to get back to winning ways before they retire, or retirement is forced upon them.

Alonso repeatedly vocalised frustration at Honda's lack of competitiveness last season, and there were persistent rumours (attributed to Alonso's former Renault team boss and manager Flavio Briatore) that Alonso could sit out 2016 if the car did not improve substantially. Meanwhile, Button

admitted towards the end of last year that he had considered walking away from F1 entirely, before eventually committing to the final season of his current two-year contract with McLaren.

Caught in the middle of all this is McLaren racing director Eric Boullier, who was instrumental in luring Alonso back to McLaren and who must manage the egos and expectations of two world champion drivers while the team endures the worst competitive period of its recent history.

"They are world champions, they are talented, but they also have the experience and they understand the full picture," says Boullier. "They have been there before. They have both been champion, but they have not been champion every year, so that means there is always a build-up process.

"They know that if you want to be winning in Formula 1 there is clearly a process. You have to be at the right time in the right place. You can jump into a team that is about to win, or you can also jump into a team and help them to build up. This is where we are now."

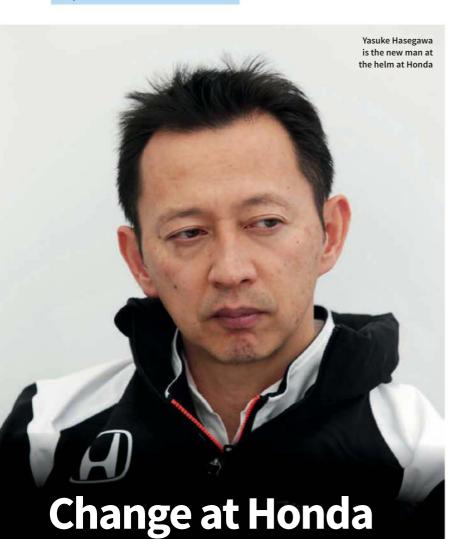
> Boullier now has a tough balancing act to perform. On the one hand his drivers are both experienced enough and talented enough not to have to prove anything to anyone, but their track record also makes them less

likely to hang around if McLaren-Honda continues its competitive drift at the back of the grid.

As Boullier puts it they will "step out straight away" if the reformed Anglo-Japanese alliance fails to progress fast enough. "The only downside now is maybe less patience, but at the same time they have more understanding about the situation," Boullier adds. "It's a very fragile situation. They are not patient but they have the understanding. And you can keep both of them [balanced], but I promise you it's very fragile.

"Especially because they have been bullshitted too much already. That's the discussion I had with both of them. They have been bullshitted so many times in their racing lives it is something I am very, very cautious about.

"In motor racing you can get easily excited. Simulation, numbers, calculations, engineering goals, whatever – you can be misled very easily." >>>



HONDA HAD LITTLE choice but to make big alterations to its engine for 2016, to combat the poor performance and reliability suffered during its first season back in F1, but there has also been some significant upheaval away from the dynos.

The company's motorsport chief Yasuhisa Arai has stepped down from F1 duties to make way for Yasuke Hasegawa. This change is claimed to be unrelated to Honda's poor performances on track, instead being part of a natural succession as Arai approaches his compulsory retirement age in 2017.

Hasegawa was hand-picked by Arai, and holds the advantage of prior F1 experience gained as a senior engineer during Honda's last F1 project, first with BAR and latterly the works team. Hasegawa will also focus purely on F1, rather than dividing time between F1, Japanese domestic motorsport and managing Honda's R&D facility in Sakura, as Arai has done.

The hope on McLaren's side is that Hasegawa's streamlined role and previous experience will bolster communication between the two companies and accelerate Honda's pace of development, which has so far frustrated McLaren management.

Arai will work alongside Hasegawa initially, to help his protege get up to speed, but will likely leave F1 before McLaren-Honda starts delivering the Mercedes-beating performances expected of this reformed alliance.

"I think I was put in place to do a specific role and I did the best I could," says Arai. "Whether or not I was able to achieve the results everyone was expecting is different.

"It's not for personal glory, it's a long continuance of the task. I fulfilled my part of the task in a way I feel is the best I could do. I don't see it as reaching the end. I know Hasegawasan is the best man to take over the project. I have no doubts in that."

With basic 2016
engine specifications
homologated at the end
of February and Arai
having set Honda's initial
in-season development
plan, Hasegawa will have
limited scope to make an
impact initially.

Though featuring much improved energy recovery systems, the new Honda engine does not yet look close to matching Mercedes and Ferrari, which means McLaren-Honda may struggle to achieve even Hasegawa's initial target of making Q3 regularly.



Although Alonso was the most vocal in his criticism last year, he has at least consistently reaffirmed his commitment to the McLaren-Honda project since those rumours of a potential sabbatical surfaced. That message remained firm after his first day driving the new MP4-31 at Barcelona in February.

The double world champion has a history of fragile relations with the teams he's driven for, but he looks happy and relaxed back at McLaren, despite the ongoing problems. The lack of performance is clearly frustrating for one of the best drivers on the current grid, but it hasn't yet placed a huge strain on his relationship with the team.

McLaren's racing operation is also a very different proposition under Boullier to the one Alonso walked away from after 2007, which undoubtedly helps. "I'm a racing guy and he is also very racing oriented," Boullier reckons. "As long as you don't bullshit [things will be fine]. The problem of racing — it's always been this way through my career, from day one — you have the proper racers and the bullshitters. And there are a lot of them in racing, because laptime you cannot cheat.

"It's like golf — you are playing against yourself. A lot of golfers are shit and they cheat. But at the end it doesn't make you a better person or a better player. It's the same in racing. Laptime is laptime.

"So my philosophy is I'm a racer, let's put everything in place and it will work [eventually]. We will win, but I'm not a bullshitter and I think Fernando appreciates that. There is a trust now because everything I tell him is going to happen or not going to happen is true."

While not exactly ideal in terms of the team's PR, the drivers are encouraged to express themselves — even if that means railing publicly against a 'GP2' engine, as Alonso did in Japan last year. Boullier wants to foster a culture of honesty within Woking, because being open about failings is the only way McLaren-Honda will progress.





"You have to address the right points. If you address the wrong ones you will never win again," Boullier argues. "For me the trust is the most important thing you can build in the people, and today we know we aren't winning, we are frustrated, but clearly the good thing is you can feel the atmosphere in McLaren now — everybody is honest and everybody is doing their best. If there is something wrong we help each other, rather than blaming each other.

"Yes with the races there is obviously some emotion sometimes, but these are just normal pure racing emotions. It is frustrating not only for the drivers; this is something they understand as well. Ron [Dennis] and myself are as frustrated as they are — maybe even more, because we have the burden of this responsibility.

"I am a racer and Ron is a racer as well, so we are maybe more frustrated because we are the people facing everybody in the company — who are also frustrated by not winning. But again, honesty is the policy for me. We have to be the best, we

know where we have to go, and McLaren knows how to do it, but you cannot build everything in one day."

Managing this scenario must be no easy task, given that Alonso and Button are in their mid-thirties and do not have time on their side to permit McLaren-Honda's 'building-up' process to run off schedule.

But, again, the key is to be open about the situation in order to properly manage expectations. That way there is a better chance of either driver choosing to extend their tenure should more time be needed, rather than walking away when their current contracts expire.

"We cannot provide the timescale," confirms Boullier. "You cannot say in racing, 'In three years we will be world champions'. The guy who says this will be wrong. You can say, 'We will be world champion between three and five years'. To this, I agree. But you can't say we will be world champions in 2017.

"Sure they [the drivers] have the concern, but the key is to be as transparent as possible and then at least they know where we are, they know how much we progress and I think they can see progress. So far we are not too much into the concern of missing the window

"The thing is, it's a cycle. Formula 1 teams are like big supertankers. You start to steer and nothing happens, then little by little they start to turn and turn faster and faster. When I joined the big McLaren mammoth nothing was moving and now it is reacting. Now we are moving faster along the [progress] slope. This is good."

But McLaren-Honda cannot remain in rebuilding mode forever. Whether it's next year, the year after, or even 2019, eventually the team will have to deliver on its promise.

Otherwise it will no longer be seen as one of Formula 1's technological powerhouse teams, instead cast as a former giant resting on the faded laurels of a glorious past. If it comes to that then McLaren really will have wasted the talents of two of the best drivers of their generation. **

Meet the rookies

Three of the 22 drivers making the trip to Melbourne for next week's season opener will be making their Formula 1 race debuts. What should they expect from their first grand prix and their rookie season?

By Lawrence Barretto, F1 Reporter

y @lawrobarretto





JOLYON PALMER

NEW BRIT ON THE FORMULA 1 GRID

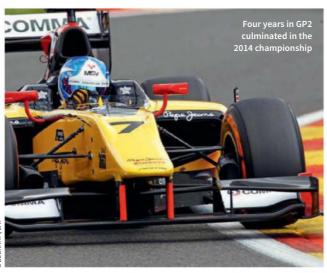
When Renault confirmed that it would take over Lotus late last year, after months of protracted negotiations, a chap in Clapham breathed a huge sigh of relief. Jolyon Palmer was to make his Formula 1

debut. There would be a third Briton on the grid.

The 25-year-old took an unorthodox route to F1. He competed in Formula Palmer Audi and F2, championships run by his father — ex-F1 driver Jonathan — rather than the more conventional route of Formula Renault/BMW and Formula 3, prior to moving to GP2. It ultimately put him at a disadvantage.

"I reached GP2 with relatively little experience," he says. "I then had a lot to learn in a short period of time. But I can't complain. It's worked out fine. And it was a cheap way to go racing in comparison to Formula 3 or World Series."

During four seasons in GP2, Palmer caught up on the experience he had missed relative to his rivals. He refined his racing skills and learned to work with a professional racing team. It culminated in the 2014 title. "The previous couple of years, I'd shown some speed, some racecraft and then in 2014 I just put it together and showed that I can be a complete package," he says.



"The first half of the season should be the hardest part of 2016"

Success and a shrewd bit of business — Palmer studied business management at Nottingham University as a 'Plan B' in case his racing career didn't pan out — secured him a reserve deal with Lotus for 2015, but Palmer and his father were already thinking ahead. It is believed a clause was added to the deal guaranteeing him a race seat for the following year, provided he could raise funding, thought to be in the region of £5-6 million.

Palmer had a relatively luxurious four days of testing and 13 Friday practice sessions last year. That's a total of 1934 miles — an unusually high amount for a young driver. "It's good from an F1 mileage point of view, and also because the car is not that dissimilar — it's like an evolution of the E23 — I didn't feel like there was a massive amount to learn," he says. Crucially, though, he was embedding himself into the team and fostering a good relationship with the engineers, many of whom have turned out to be his race engineers this term. It's a solid foundation in which to make a good impression.

And he has a strong team-mate to measure himself against in the form of Kevin Magnussen, who will also be keen to prove himself after being discarded by McLaren. "I'm quite pleased Kevin has come in because he's a very good driver," he says. "He had a good year in F1 already, been on the podium and I get on really well with him. It's a very good benchmark."

The challenge facing Renault is vast. The late decision has meant this year's RS16 is a compromise. Proving yourself in the midfield is a difficult challenge, but Palmer remains hopeful of progress in the knowledge that Renault is plotting a long-term path to success. "The first half should be technically our hardest part because of the late arrival of everything, but I hope we're not playing a massive catch-up," he says. "We're not going to be shocking the world when it comes to Melbourne, but so long as we have a solid base point we can work quite quickly and hopefully move forward." It's a pragmatic outlook and one that stands Palmer in good stead if he is to prove he is quick enough to keep his place at the top table for the foreseeable future. >>>



PASCAL WEHRLEIN

THE NEW YOUNG GUN FROM MERCEDES

One day last month, late in the evening, Pascal Wehrlein got the call he had been waiting for. "Congratulations, Pascal, you're a Formula 1 driver."

It was Mercedes team boss

Toto Wolff confirming to the German manufacturer's protege that he would drive for Manor Racing. "Toto called me," he says. "It was quite late, but that was fine. We were always in contact. It was 'maybe' and then in the next one or two weeks it was 'it's looking good'. Every day I was expecting a call and then one day it happened."

It had been a long wait, one that stretched back to the DTM finale at Hockenheim. "It wasn't so easy but I always knew I was going to be a DTM driver or F1 driver, and if I'm a DTM driver I would be a Mercedes F1 reserve driver again," says Wehrlein, who became DTM's youngest champion last year, one day before his 21st birthday.

While fellow rookie Jolyon Palmer used GP2 as a catapult to F1, DTM was Wehrlein's path. It was a decision influenced by Mercedes, which had backed him since 2012 when he contested his one full season in Formula 3 with Mucke Motorsport. "It was the right decision," he says. "It's not the easiest way to go from a single-seater to a touring car then back to a single-seater. But it was helpful to be in a very professional environment. If you

Wolff (right) and Mercedes DTM boss
Ulrich Fritz (left) with Wehrlein

are in an F3 team, there are maybe 20 people working with you — in DTM there are more than 200."

Mercedes' backing has undoubtedly been key to Wehrlein getting his chance in F1. His one-year contract is believed to be worth around €5-6 million to Manor, but he's clearly got the ability too. Before 2012, the majority of his experience was limited to racing in his native Germany but he was able to get straight on the pace when he got his chance in F3. It was the same when he moved to DTM.

"It was always one of my strengths to be quick and to adapt to new conditions," he says. "So when I changed from karting to single-seaters [Formula ADAC], I was on the podium already on my first weekend. When I changed to Formula 3 I achieved a second place in my first year in the championship. In DTM, I was leading in my first race so..."

Alongside his DTM duties, Mercedes began Wehrlein's F1 education. He spent time at the team's Brackley HQ, logged thousands of miles in the simulator and got his chance behind the wheel of an F1 car through opportunities with Force India and Mercedes during testing. "I hadn't been in a single-seater for nearly two years before I did a Formula 1 test," he says. "I had to prove that I could change my driving style. I mean, for me it's fine, it's no problem."

His performances last season in DTM were impressive — he was more often than not the best Mercedes driver out there.

"To go from a touring car to a single-seater is not the easiest way"

"I knew I had to show the performance quickly to get the chance in F1, because if I win the [DTM] championship in six or seven years no one will care and it's too late to go into F1. It's pressure from me but I'm just used to it."

So what is Wehrlein expecting in his rookie season? "Last year the gap was quite big to the second-to-last team, so the first goal is to catch up. Then it is to fight with them and if we do a good job maybe we can score some points." Sensible targets but ones you would back him to hit based on his achievements so far.

RIO HARYANTO

OF AN ENTIRE NATION

Rio Haryanto's Formula 1 deal with Manor was big news in Indonesia. The 23-year-old was plastered across national front pages and the TV news

headlines. A press conference announcing the news lasted five hours. He had to speak to some 200 media. He was even the subject of debate in parliament.

For Indonesia, a country with a population of more than 250 million, it was a proud moment to have one of their own representing them in a global sport. For Haryanto it has yet to sink in, weeks after the announcement.

"It still feels a bit unreal," he says. "It's a dream come true. I have to thank the whole of Indonesia who have supported me. They have waited a long time to have an F1 driver. I have huge support." Part of that support is financial – Haryanto brings substantial backing from state oil company Pertamina with an overall package believed to be around £8 million.

Haryanto grew up among a family that loved motorsport. "My father used to race motorbikes and touring cars and my brother did go-karting and Formula 3 as well, so we have a racing background in the family," he says. "Not many know that's how it all started for me. I got my first go-kart when I was six and from then my brother and I would spend every weekend at a karting track."

Like Palmer, Harvanto had a 'Plan B', "just in case I didn't make it". He studied Business Management at university in Singapore, but racing was always his main aim: "I knew it would be difficult because it is expensive but I just kept my head down and focused on winning races and improving as a driver."

While his accolades can't match those of fellow rookies Palmer and Wehrlein, champions in GP2 and DTM respectively, Haryanto has some solid racing credentials. He won races in GP3, including a sensational drive on slicks in the wet at the Nurburgring in 2011. Progress on graduation to GP2 was slower, and it wasn't until his fourth season that he secured his first win. Two more followed, although, admittedly, all came from reversed grids. "I would say my qualifying wasn't brilliant," he admits. "There are things to improve but I'm still learning and trying to put it all together."

Across the season, he was never stunningly fast in races but his consistency and racecraft shone through and his management of the Pirelli tyres was particularly impressive. "The first couple of seasons were tough, but as I got to know the team, the car and the tyres, things improved and last year it all came together," he says. "I'm not that aggressive on the tyres, so that is one of my strengths. I was able to defend at the front for quite a long time."



"I'm not that aggressive on the tyres, so that's one of my strengths"

After protracted negotiations, it was announced that Haryanto had fended off competition from Will Stevens and Alexander Rossi for the final Manor seat. "There were some stressful moments," he says. "It would have been nicer to know earlier so I could prepare myself better. But I'm here now."

Harvanto's relationship with Manor stretches back to 2010, when he raced for the sister GP3 team. A test with Virgin F1 at the end of the year was his first chance in an F1 car. Two more days in F1 machinery with Marussia followed in 2012, and he was back in the car for Manor in December's Pirelli tyre test.

"The goal is to learn as much as possible during my rookie year," he says. "We want to be midfield runners. If there is the possibility to score some points, I will definitely go for them." &





Meet F1's new American dreamers

The Haas team looks set to redefine expectations of what start-up operations can achieve in F1, and could even get into the points on its debut in Australia, with a little help from Ferrari and Dallara

By Dieter Rencken, Special Contributor

y @RacingLines



ince the inception of the world championship in 1950, around 140 operations have entered F1. This number is made up of approximately 65 start-ups, with the balance being mainly teams under second (or more) ownership, or customer squads. These statistics equate to an average of one new team per year of the championship. Of that lot, just 10 survived at the end of 2010.

Among the casualties were hard-headed businessmen and dreamers hoping for lucky breaks. Others were major motor manufacturers with boardroom eyes on global glory, but little understanding of this most complex of pursuits.

Ten start-ups should have hit the grid in the first decade of this millennium, with five since then. The actual number is just four as, between 2001 and '10, four teams — Toyota, Caterham, Manor and HRT — made it, with USF1 stillborn despite passing the FIA's due-diligence process. All are gone save Manor, now under its third owner after reaching agreement with creditors. From 2011-15, not a single new team appeared.

These statistics illustrate how extraordinarily difficult it is to break into F1 despite the sport's constant platitudes about lowering costs, and removing barriers to entry.

Into this fraught environment has come the Haas F1 Team, the first US-based operation in three decades, and an offshoot of Haas Racing, the motorsport empire headed by Gene Haas, Californian machine-tool magnate and petrolhead deluxe. Not only does the 62-year-old compete in desert racing, but he owns Windshear, motorsport's largest and arguably most advanced windtunnel.

These are, though, minor portfolios when compared with the NASCAR team Stewart Haas Racing, run in conjunction with legendary driver Tony Stewart and one of only four teams to win rounds of the Sprint Cup, Xfinity Series and Truck Series — the latter win coming courtesy of Cole Custer, son of Joe Custer, the man who oversees Haas's racing activities.

It was to Custer that Italian emigre Gunther Steiner turned with his concept for an all-American team, initially as a third-car operation run in conjunction with Ferrari. When F1 snubbed third cars, a satellite Ferrari operation was considered. But this, too, failed to fly. Undeterred, Steiner sought and found loopholes in the prevailing regulations that enabled him to establish a Ferrari-based team.

So Haas provides a unique business model for F1. The >>>

find work in the commercial sector, using the experience to invent new processes. Subsequent wealth funded **Haas CNC** Racing, which won NASCAR's Sprint Cup in 2011 with Tony Stewart as Stewart-Haas Racing. F1 should take note of the trajectory, and Haas's commitment to motorsport. He is one very tough guy and it shows.



regulations specify that teams hold the intellectual property to their car's so-called 'listed parts' and are permitted to procure the balance from outside contractors. Steiner decided that Ferrari would be that sub-contractor, with (most) non-listed parts supplied by Maranello. The listed parts include the monocoque, survival cell, front-impact structures, the rollover structures, bodywork, wings, the floor and diffuser.

Listed parts would be designed by Steiner's team, working in conjunction with a proprietary supplier of racing hardware — in this case, Dallara, with which Steiner had previously dealt while working in WRC, F1, Indycars and NASCAR.

Blueprint in place, he approached Custer, who put the proposal to Haas, then in the throes of expanding his machinetool empire globally, and in need of international exposure in industrialised territories. Given F1's footprint and automotive 'fit', F1 provided the ideal platform, and Haas readily agreed to back the project, provided Steiner was able to sell it. In March 2014, Haas F1 Team received the FIA's 'nod'.

Steiner and Haas, having been peripherally involved with USF1, knew that hasty overambition killed that dream, so they delayed their debut until 2016. They put the additional time to good use: 180 staff were recruited, including chief designer Rob Taylor, who worked with Steiner during his tenure as technical director at Jaguar.

Steiner's core team consists of Taylor, ex-Ferrari and Red Bull aerodynamicist Ben Agathangelou, ex-Marussia sporting director Dave O'Neill, and former McLaren logistics man Peter Crolla, who in turn all head up their own departments.

"I was involved in everything," Steiner says. "I got the people together, got good people, then when they have to work we discuss it, evaluate it and try to make the best decision we can. These are good people. You need a lot of supporting staff as well — administration, finance, doing contracts, all that stuff."

While they did much of the legwork, Steiner was involved every step of the way, involving himself in the full manpower recruitment process and undertaking final interviews to ensure the cultural 'fit' within what blossomed into an international crew under Italian management, but US ownership.

Around 70 heads — on 'soft' contracts — are employed at Dallara under Taylor, with 60 operating out of the former Marussia base in Banbury, in the UK. Fifty heads provide administrative, marketing, machining, CFD and windtunnel services out of Haas Racing's campus in Kannapolis, North Carolina — which also houses the NASCAR team.

Steiner does not see the team expanding much in the near future, suggesting a sound foundation. Certainly, cars, kit and folk present at the opening test looked 'battle-ready' from the off, with every aspect — from car reveal through media sessions to track debut — running to schedule. Attention to detail — a hallmark of all successful F1 teams — was epitomised by starspangled flags on the race trucks, despite their UK registrations.

The VF-16 (the name's roots are in the VF-1 — Very First One — title given to the first machine manufactured by Haas's CNC business in 1988) is a neat design, which clearly draws heavily on Ferrari DNA — logical given certain component commonality — yet is far from the SF-16 clone many had expected. The car is true to Steiner's oft-repeated dictum: "If you get too sharp, you cut yourself."

Early on, Taylor established the need for a user-friendly maiden car to provide a solid technical basis for evolution. "We intend making a car which we're comfortable is safe, but will be competitive enough to allow us to take advantage of the Ferrari aid and the Ferrari powertrain," Taylor told *Autosport* in May 2015, and the finished product clearly lives up to those targets.

In persuading Romain Grosjean to spearhead the fledgling team's first season, Steiner clearly exploited the fast, fearless Franco-Swiss's frustrations at Lotus. Charismatic and well-liked, his team-orientated ethos contributes a crucial team building block, while an outgoing demeanour provides Haas Automation with a fresh marketing 'face'. Ten career podiums and a best of second surely provide a proven performance base.

Filling the other cockpit is Mexican Esteban Gutierrez, former

of motorsport

on both sides

of the Atlantic

Having started in rallying, a

move to Ford's

WRC team

as technical

director was followed by

a transfer to

F1 with sister operation

Jaguar Racing. When Jag was

Bull, he crossed

the Atlantic to

head the drinks company's

NASCAR effort,

his carbonfibre

company, but

the lure of F1

and he kept developing his

concept until

Haas agreed to

come on board.

was irresistible,

coming into

Haas's orbit. He left to start

sold to Red

during his 30-year career.



"If we finish the race in Australia, that's a bonus"

Sauber (Ferrari-powered) pilot and latterly Ferrari test driver, whose support from the super-wealthy Slim family opens doors for Haas. Together, they provide the nascent team with a solid blend of track and virtual experience, youth, ambition, commercial nous and potential — precisely what Haas F1 Team needs in its first season.

True, Haas hit hiccups during testing, with a fuel issue and turbo troubles blighting two test days. But, given the complexity of modern F1 and the team's steep learning curve, that was to be expected. Indeed, Haas struggled less than many seasoned teams did, and Steiner impressively shrugged off the inevitable disappointments and long nights.

Notwithstanding reliability problems, Grosjean and Gutierrez completed 474 test laps between them — close to Manor (484), and during which both drivers posted respectable times that place the team squarely in the midfield.

"It is two days like this..." Steiner said after yet another lost day's running. "You get over it, the frustration. You think forward to tomorrow and do better tomorrow. Just to learn of what we have done and not done in the last days, but you are still wanting to get there [to Melbourne] being respectable."

Gene Haas, who intends attending half the races despite busy professional and NASCAR schedules — the plan is for Custer to visit the balance — was philosophical but clearly frustrated, an attitude that should drive the crew to solve its teething issues.

"People were expecting us to falter a little bit, but we came out strong, got a lot of laps in [during the first week], now



KEY PLAYERS

ROB TAYLOR Taylor joined

Haas as chief designer in April 2015 from Marussia. Previously, Taylor was senior design team leader at McLaren from April 2006 through to December 2010, and before that occupied the role of head of vehicle design for Red Bull, Toro Rosso and Jaguar (where he first met Steiner). beginning in 2002. Currently working out of Dallara in Italy, the softly spoken Oxford resident has spent 28 of his 56 years in the sport. a tenure that has provided a range of experience in all disciplines of F1, including stints at Cosworth and Benetton.







this week we've not done as many," he said, as testing drew to a close and the first race in Australia beckoned.

"What we're facing is more the reality of what racing is all about. We have a lot of new components to our team, and making them all work together is a challenge."

Custer has set the team clear-cut objectives. "It's easy to get excited when things are going well," he said during testing, "but I'm sticking to goals we set months and months ago: to arrive [in Barcelona] with cars and equipment fully prepared. The next goal is to present a car in Melbourne and make it through practice and qualifying. If we finish the race, that's a bonus. I feel our first goal is solidly met here..."

Steiner, too, points out that the team hit every milestone, whether set by the governing body, Ferrari, or management. This momentum is sure to carry the team during its debut weekend.

The buzz is not so much that Haas is a new team, nor the first all-US operation in 30 years, but that it systematically reinvented F1's business model. That could only happen in America...

Top: It remains to be seen how the Haas crew will perform in races

Middle: Romain Grosjean gives the team a genuine top-liner in the cockpit

Bottom: We saw Haas F1 in action for the first time at Barcelona tests

Will Ricciardo and Red Bull rise again?

After his breakthrough two years ago, Daniel Ricciardo came back down to earth in 2015. He expects more of the same this year, for the first half of the season, at least

By Lawrence Barretto, F1 Reporter

y @lawrobarretto

aniel Ricciardo was the star of 2014.
The Australian took the first three wins of his Formula 1 career and was the only non-Mercedes driver to reach the top step of the podium, finishing ahead of his team-mate and reigning champion Sebastian Vettel in the points standings in his first season with the Red Bull team. He even

achieved the number-one spot in Autosport's driver rankings. It was the kind of performance that got people talking and left Ricciardo harbouring ambitions of the title the following season. He didn't even come close. Renault's power unit was woeful, both in terms of performance and reliability. Coupled with Red Bull's struggles in realising the full potential of its chassis, it quickly became clear that 2015 would be a long year.

The trademark smile remained but, while he dealt well with the frustration initially, it began to boil over as the engine penalties racked up. His form briefly went awry before he got

his head together. Red Bull made a breakthrough with its chassis in Hungary and Ricciardo took full advantage, fighting for victory. In Singapore, he kept Vettel's Ferrari honest all the way to the flag. They were flashes in an

"Realistically, it has to be better than last year, and I think it will be"

otherwise tired campaign that yielded just two podiums, but proved that the speed he showed in 2014 was no fluke.

At the time, Ricciardo admitted it was "quite painful" to deal with the fact that he had gone from contender for victories to scrapper for points. But his maturity shone through. He reset his mind, got his emotions back in check and readied himself for a hard slog. "I made the transition last year where I said that the situation is what it is," he says, relaxing back into his chair and letting his gaze drift as he considers the complete contrast in fortunes in the past two seasons.

"I found a way to change perspective on not only my goals but the sport as well, and I was able to find enjoyment out of it again, so this season I still love the sport a lot. I'd love to say I will be here for another 10 years. But to do that I have to make sure I'm doing what I have got to do, which is rocking up at every race prepared and ready to go, lean and mean and all

the rest of it. That's enough motivation. I know when I hop in the car I'll be ready."

It's clear he has lost none of his drive, but Ricciardo has understandably revised his expectations for this term. He is not making any bold claims, but he's not being pessimistic either. If anything, he's even hungrier to succeed. "I'm going to be reserved with my expectations but realistically it has to be better and I think it will," he says. "It's likely we won't be starting on pole, so there will always be a target in front of me. If I get to smell a little bit of blood, the fire is lit and it's a matter of when I will let it go."

In Daniil Kvyat, Ricciardo has a team-mate who had a shaky start to his Red Bull career, before maturing as the season went on and ultimately justifying his promotion to a seat with the senior team. But Ricciardo generally had the measure of him, and the quality of his performances suggested the Australian was the quicker and stronger Red Bull driver. Those victories in 2014 still remain a source of confidence for Ricciardo, while the difficulties of last year have clearly matured him. When

asked if it's important to beat Kvyat, he answers smartly: "My targets are beyond Dany, because if I'm just looking at Dany then I'm not looking far enough in front. If I just compete with Dany, I'm not going to get the most out of myself. If we just

look at each other — and it's the same for him as well — we're probably just going to run around in a circle. We've got to set our targets on the teams in front. That will naturally push us on."

For the team, Ricciardo believes that Williams — which finished one place clear of Red Bull in last season's constructors' championship — must be the initial focus, before it even considers trying to catch Mercedes and Ferrari. "Williams can be a good initial target," he says. "In terms of development, I don't think they will make a massive step. It's just a prediction, nothing I know for a fact. We should start the season similar to where we ended, and we ended close enough to them that, in the first few races, we should hopefully have a chance to battle them."

Despite the difficulties of 2015, Ricciardo was linked with Ferrari. Nothing came of it, with Kimi Raikkonen retained alongside Vettel. Ricciardo conceded at the time that he



F1/SEASON GUIDE 2016

regarded the interest as "a compliment", but he added that leaving Red Bull was unlikely as he retained faith in the team. He says he's not thinking about his future just yet, although he concedes that the driver market for 2017 could be busy. "It's interesting," he says. "A lot of drivers are out of contracts at the end of the year. There are also some potentially big rule changes for 2017.

"The next question is what is going to be the seat everyone wants? Is it going to be one at Mercedes or is it time for another team to step up and be successful? There are going to be lots of names and offers thrown around. It's not going to be as easy as, 'I'm jumping in that', but rather, 'OK, let's weigh it up, let's see who is going to be competitive in '17 and '18', because most likely, whoever signs contracts, it's not just going to be for one year."

But, with Ricciardo believed to be on a long-term deal at

"I see myself as a complete driver now. But I can always evolve"

Red Bull, he's not yet looking beyond the opening few races of the season. "I don't tend to look too far ahead anyway as a lot of things can happen," he says. "I definitely want to get the season started on the right foot and get myself where I need to be, and then as the season reaches the mid-point you can start thinking about 2017 and all the rest of it."

Ricciardo admits that his two years with Red Bull have been "pretty different", but he believes the experience, particularly the struggles of last season, have had a positive effect: "I've had highs and lows and I've seen the morale of the team swing. We've gone through quite a bit together and now we have some good stability. I see myself as a pretty complete driver now. I don't want to be naive — I can always learn and keep evolving. I think I'm prepared for the situation. I just want to race, I want to get that competition out of me and start battling."

Ricciardo was offered an opportunity to explore motorsport



Ricciardo won three times in 2014 – including in Hungary – but only made the podium twice during last season

outside F1 when he was invited to try one of NASCAR superstar Dale Earnhardt Jr's entries in the stock car category's secondtier Xfinity Series. It came at a time when F1 was proving to be a struggle. "If I did it, I'd want to do it properly," he says. "I would hate to go there and get my ass kicked, basically, and then it looks bad on F1 as well. The cars would be so different, I would want to make sure I tested and got comfortable."

Ricciardo didn't get round to asking team boss Christian Horner for permission, because he'd already decided that now wasn't the right time to do it. For now, he has a bigger priority. "One day, I think I will take up his offer, hopefully racing alongside him," he says. "That would be cool. But now, not only is it a bit rushed, but I've definitely got targets here in Europe, in Formula 1, which I want to tick off first. I've ticked off the winner's column, but the world title is the real one."

Ricciardo could easily have let his career stall after last season's disappointment, but he's managed to turn it into a positive. He has his mojo back and, while he is under no illusions that this year will be tough, he looks to have matured into a driver who is capable of taking opportunities when they present themselves.

Regarding Ricciardo as a 'complete driver' may be a touch ambitious this early in his career, especially given that he's yet to challenge for a world title, but he has so far demonstrated that he has the ingredients to become one.

After two very different seasons, much will depend on how the third one pans out, and whether he'll soon be in a position to upgrade his title of race winner to that of F1 champion.



Red Bull's initial ambition is to start the year challenging the Williams team



LAST YEAR WAS SOLID BUT unspectacular for Daniil Kvyat. His first five races with Red Bull were disappointing, and questions were raised about his future. But a fourth place in Monaco lit the fire and, as the car developed,

In the end, Kvyat finished ahead of team-mate Daniel Ricciardo in the standings, albeit by only three points, and his drives in Belgium and Mexico were particularly impressive.

so did Kvyat's form.

But that sort of form was too sporadic, and the feeling was that Ricciardo was the quicker of the two. "The start of the season was difficult," says Kvyat. "It was a bit painful at the time, but it has taught me a lot. I'm a better driver now. It was a useful experience."

The pain caused by a
Renault unit that was not
only unreliable but also down
on power was made worse
by the fact that Kvyat was
still getting used to his new
working environment. As a
result, everything just took
longer and was more stressful.

With one year under his belt, he feels comfortable in the team. But that does also mean that there can be no excuses this season. "This year, coming to the factory or to a test or something like that, already many things are happening a lot more automatic," he says. "I know who does what, I know who I have to ask for something. Everyone is more used to each other. It's just easier."

Kvyat insists that he does not feel under pressure from Red Bull's Toro Rosso starlets Max Verstappen and Carlos Sainz Jr. "As long as I do my job well, I'm confident it will go OK," he says.

To do that, he'll need to raise his game. He cannot afford another slow start to the season, particularly given that Toro Rosso is likely to be ahead of Red Bull on pace early on. The party line is that he doesn't have any expectations, but he knows what is required – to kick on and cut out the mistakes. His career arguably depends upon it.





Mercedes

After back-to-back seasons of dominance, testing has gone ominously well. So there's no reason to look past the Silver Arrows for title-favourite status



Mercedes F1 WO7 | Starts 127 | First GP France 1954 | Wins 45 | Poles 53 | Fastest laps 38 | 2015 1st

ince the new power units were introduced at the start of the 2014 season, Mercedes has been the dominant force, winning 32 of 38 grands prix.

It looks like we could see that level of performance again this year, judging by what has happened in testing, with the car looking quick and completing a vast number of miles straight out of the box. The Mercedes also features some good detail work to find small aerodynamic improvements and to ensure that the best car of the past two years can carry that form into the 2016 season.

It should not come as a surprise if, as expected, Mercedes is still on top. While car performance throughout the grid does usually converge when rules are stable, not least because it becomes harder and harder to climb another rung on the ladder when you are closer to the ultimate potential, Mercedes still had a big advantage last year and usually won comfortably.

Even if that advantage is halved this season, it will still have enough of a margin over Ferrari to make the championship fight a twohorse race between its two drivers.

The team is well run and has built on the foundations laid during the Ross Brawn years from 2010-13, and is in the same zone as Red Bull was a few years ago. It knows better than anyone how to get the best out of its car and engine package, understands what it is trying to achieve and has a well-drilled team where winning now comes naturally.

As for weaknesses, there have been moments over the past two years when some mistakes have been made under real pressure, so it will be interesting to see what happens on the day when Ferrari is snapping at its heels.

But, beyond that, Mercedes has the best car and all the resources it needs. So there's no reason to expect the story to be any different this year - unless the team itself finds some way to trip up. #





HAMILTON

NICO ROSBERG





2015 championship position —





Age		31	Age		კს
Starts		167	Starts		185
First GP	Australia	2007	First GP	Bahrain	2006
Wins		43	Wins		14
Poles		49	Poles		22
Fastest lap	os	28	Fastest laps		14

HE IS NOW A TRIPLE WORLD

champion, and you have to say it would be a big surprise if Hamilton didn't have a fourth title to his name come the end of the season. Hamilton's strengths have been clear for a long time and, after some ups and downs on his way to winning the 2014 drivers' championship, he seemed to be much more consistent last year. Sometimes it seems that the only thing that can beat Hamilton is the man himself so, provided he stays focused and keeps doing what he's been doing, it's difficult to imagine how the Briton can be beaten this year.

ROSBERG FINISHED 2015

going great guns, with three consecutive victories putting his team-mate firmly in the shade. By that time, of course, Hamilton had already won a second consecutive world championship. Rosberg has now had a title-winning car for two seasons, and he has to make the most of it this year or I fear he will never win a title. When things are going well, he can drive superbly, although there have been times when he seemed to be trying too hard behind the wheel to get the car to do what he wanted. He will need to start this year as well as he finished last year.



Ferrari

Last year's biggest improver needs to become a genuine title contender. But based on pre-season testing, it's still got a step to make to threaten Mercedes



Ferrari SF16-H | Starts 902 | First GP Monaco 1950 | Wins 224 | Poles 208 | Fastest laps 233 | 2015 2nd

here's no doubt that Ferrari has progressed since last season, but judging by pre-season testing it's looking like another race-winning, rather than title-winning, car. So there is some work to be done.

The car has plenty of small improvements, and it's good to see James Allison and his technical team have adopted the short-nose concept every other serious team has moved towards, plus the pushrod front suspension - for whatever reason, Ferrari didn't seem able to make the pullrod system work. The result is a car that is less understeery than last year's, to the satisfaction of the drivers, but is it fast enough?

There have also been upgrades to the power unit, and changes to the packaging that allows the whole car to be a little tidier. But it was concerning to see Ferrari struggling to keep up with the mileage Mercedes was doing straight out of the box in testing. Even if the

changes do add up to a big chunk of the average deficit of 0.7-0.8 seconds - and I'm not convinced they will do – Ferrari risks going to the first race in Australia underprepared by comparison.

So, while there is no serious threat from behind, it seems that Ferrari could start the season in a similar position to the way it finished last year. For the sake of a good championship fight, we have to hope it can very rapidly build on the package early in the season, and there is talk about the potential to make quick progress.

The closer you get to the front of the field, the harder it is to make a big step. After making strides from 2014 to '15, it looks like another, smaller, improvement has been made this year, but it's going to take a lot more than that. Doubly so, given that Mercedes has also pushed on aerodynamically, thanks to concerns about Ferrari's potential this year.

So, expect more of the same this year - at the start, at least. #



SEBASTIAN







2015 championship position —





28	Age		36
158	Starts		230
USA 2007	First GP	Australia 2	2001
42	Wins		20
46	Poles		16
25	Fastest lap	S	42
	158 USA 2007 42 46	158 Starts USA 2007 First GP 42 Wins 46 Poles	158 Starts USA 2007 First GP Australia 2 42 Wins 46 Poles



with Ferrari, Vettel has established himself as the team's number-one driver. With a year of experience at Maranello under his belt and the chance to settle in and get the team interacting with him the way that works best, he can only be stronger this year. As we saw during the years of Red Bull dominance, if you give Vettel a winning car he can be unstoppable and dominate every race. The question is whether he has a car able to win enough to mount a title challenge. If it is at least snapping at the heels of Mercedes, he will be in the hunt.

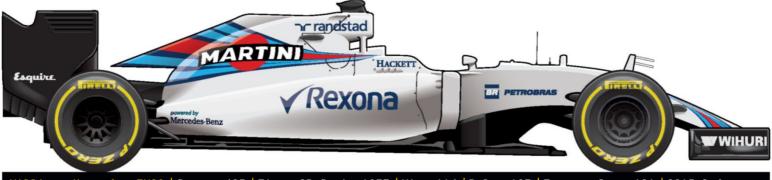
KIMI RAIKKONEN IS

fundamentally a very good driver, and you don't win the world championship without having serious ability. But his past two seasons at Ferrari have been disappointing and, if he wants to have a future in F1 beyond the end of this season, he has to up his game. The question is whether he wants to. He seemed happier with the car in testing, but it's difficult to see him being anything other than a support act to Vettel. There was some bad luck in 2015, but there were also too many mistakes for a driver of his experience. He must do better to justify his place.



Williams

After finishing third in the championship for the past two years, but not managing to win a race, it looks set to be more of the same for the venerable team in 2016



Williams-Mercedes FW38 | Starts 625 | First GP Spain 1977 | Wins 114 | Poles 127 | Fastest laps 131 | 2015 3rd

was a bit worried about Williams after the first pre-season test. While it usually runs on heavy fuel loads in testing, there wasn't much evidence that the car was the improvement the team kept saying it was. Things looked better in the second test, so the objective of being best of the rest behind Mercedes and Ferrari still seems perfectly possible. But it's hard to see Williams doing any better than it has for the past two years.

Good progress has been made recently, but it's important to remember that Williams is a customer team without the budget of the big squads. I would like to see more progress with the car, which seems to be a fairly standard step forward from last year. For the past two years, the car has been weaker in low-speed corners and terrible in the wet, so those are the areas where it needs to get better.

It will also still be a car that maintains the very aerodynamicefficient characteristics of the past two years, but probably lacks the overall downforce levels produced by Mercedes or Ferrari. That produces its own problems, and definitely contributes to the difficulties with tyre warm-up, and especially overall grip in the wet, both of which have caused big problems for Williams.

The team has come on a lot in the past couple of years, with Pat Symonds showing strong technical leadership and Rob Smedley doing a good job of improving the team operationally - although there are still a few too many errors for my liking – but there is no reason to expect a team with these resources to do more than stay where it is. With new rules in 2017, those resources will have to be carefully balanced between developing this year's and next year's car.

There have been a couple of times when Williams has been in the position to challenge for a win in the past two years, but getting onto the top step of the podium will be even harder this year. #



VALTTERI







2015 championship position — (6th)



26
56
2013
2nd
2nd
1

)	Age		34
)	Starts		229
	First GP	Australia	2002
l	Wins		11
l	Poles		16
	Fastest lap	S	15

BOTTAS IS A GENUINE STAR

of the future, but I would have liked to have seen him take a bigger step forward last year. Even so, he came very close to beating Raikkonen to fourth in the championship in 2015, and he is still showing why he's regarded as a potential future Ferrari driver. Both the Williams team and Bottas himself, who is a free agent at the end of the year, need to have a strong first half of the season, so the motivation to deliver will be there. How this season goes could dictate whether he never quite fulfils that star-of-the-future potential, or becomes a real star of the now.

WHEN MASSA IS HAPPY AND

comfortable, he can produce very good performances. After getting out of Ferrari, he had a good 2014 and improved again last year. You know there will be some good days and bad days, but he seems to fit in very well with the Williams team and stacked up well compared to Bottas last year. Williams should be able to count on him to score very consistently and maybe nick the odd podium finish if the car is up to it. You can't dispute that, even after over 200 starts, he's still motivated to do a good job and remains one of the most popular drivers.



Red Bull

Formula 1's erstwhile dominant force came down to earth with a bump last year, failing to win a race for the first time since 2008. This season will also be tough



Red Bull-Renault RB12 | Starts 203 | First GP Australia 2005 | Wins 50 | Poles 57 | Fastest laps 47 | 2015 4th

ast year could not have been much worse for Red Bull. Not only were the results poor, with no wins for the first time since 2008, but it fell out very publicly with Renault and ended up in the embarrassing situation of having to fight very hard to get any kind of engine deal. The result is we have two Red Bull-TAG Heuer cars on the grid this year, thanks to eating some humble pie and doing a badging deal for the same Renault power units that gave the team so much trouble last year. Don't expect things to run like clockwork.

With Adrian Newey having taken a back seat, we have yet to see whether Red Bull is capable of delivering the kinds of performances it did in dominating from 2010-13, although it is still pretty strong on the aerodynamic side and has all the facilities it needs to excel. The chassis was reasonable last year and got better as the season progressed, although I disagree with those who suggested it was superior to the Mercedes. There were definite weaknesses there.

This year, we can expect more of the same (without the verbal abuse of Renault) from Red Bull. for the first half of the season at least. Renault has promised some significant improvements later in the season and the potential for this team is tied to that. So maybe the podiums are more likely in the second half of the year.

A lot depends on whether Red Bull can get its house in order. The TAG Heuer/Renault deal is currently only for 2016 and there will be yet more politicking as Red Bull tries to sort out an engine supplier for 2017. It's important that this is not allowed to distract the team from the job at hand.

This will be a quiet season for Red Bull, and it needs to be after the problems it created last year. The target will be to lay the foundations for a return to titlecontending form in the future. #



DANIEL







Age

Starts

First GP

Best finish

Fastest laps

DANIIL

2015 championship position -

37

2nd

4th

Australia 2014

Age





Start	S		
First	GP	G	reat
Wins			
Best	gri	d	pos
		-	

3 sition 2nd Fastest laps



Best grid position

finished the season ahead of Ricciardo last year. Had you predicted that at the start of the season, people would be hailing him as the next superstar. On the other, Ricciardo had more misfortune and Kvyat continued to be erratic at times, with a few too many mistakes. But perhaps that is what you would expect of a driver in his second year. He's fast and has a year's experience in a big team under his belt, so we can expect an improvement, but he will know he has to deliver to keep his place at Red Bull in the long term and justify the confidence placed in him.

AFTER A SUPERB FIRST YEAR

in a frontrunning car in 2014, Ricciardo found himself back in machinery that wasn't capable of winning races last year. He continued to perform well and there's little doubt that he's a fast driver who is able to deliver consistently good performances, thanks to the level of experience he has built up. The only question mark is over how good the car is. He's upbeat about getting more regular podium finishes in the second half of the season and he can now be counted on to get the best out of the car - but he will need to keep an eye in the rear-view mirror on Max Verstappen.



Force India

After finishing fifth in the championship last year, the Silverstone-based squad has its sights set on more giantkilling, and perhaps even a few more podiums



Force India-Mercedes VJMO9 |Starts 150 |First GP Australia 2008 |Wins 0 |Poles 1 |Fastest laps 3 |2015 5th

fter finishing fifth last season, the highest it has been since my old Jordan team transformed into Force India in 2008, testing suggests it is ready to build on that this year. The B-spec car, introduced in the middle of last season and developed with the help of the Toyota windtunnel in Cologne, has created a good foundation point. And, in building on that, Force India looks to have the chance to take the fight to Williams and Red Bull in the battle for the top four in the constructors' championship.

It's very positive to see that there has been no attempt to reinvent the wheel with the car - it's an evolution of last year's B-spec. That's the right move, as there is clearly more potential to be exploited from that solid foundation and especially considering how competitive Force India's car was at the end of the 2015 season. So the

team should be able to hold its own in development, provided everything is as it should be at base with the budget.

The problem is, as always, resources. The organisation of the team and the people there are both strong – we saw that with the results in the second half of last year — but the overall level of investment still falls some way short of F1's biggest teams.

There has been a podium finish in each of the past two years, and there's no reason it can't do that again. If Force India can be consistently in Q3 and picking up points finishes every race, maintaining fifth in the championship should be the minimum expectation, but it's still a case of a relatively small team making all the right decisions to get the best out of what it has. And it needs to, because teams such as Toro Rosso and Renault pose a real threat from behind. even with its advantage of the Mercedes power unit. #









2015 championship position-



Age 26 Starts 93 First GP Australia 2011 Best finish 2nd Best grid position 4th Fastest laps

Age 28 94 Starts First GP Bahrain 2010 Best finish 4th Poles Fastest laps



his season at McLaren, it took Perez a while to rebuild, but last year I felt we saw him grow up as a grand prix driver and deliver on his potential. He knows how to manage the tyres, which is going to continue to be important this year, and seems to have cut out a lot of the mistakes in races. That led to him putting together a strong season last year and scoring a lot of points. It will be interesting to see if he can continue to outperform Hulkenberg like he did for parts of last year, because if he can then you have to ask if he was rejected by the big teams too soon.

I THINK 'THE HULK' WOULD

have to admit that he wasn't guite at his best at times last season. But he is still a very good driver capable of running at the front of grands prix, and should be more consistent with not so many errors this year. He's never stood on an F1 podium, unlike his team-mate, but we've seen some very high-quality drives from him over the years. Probably the only question mark is whether he's lost a bit of edge after too many years missing out on the big seats. Still one of the best drivers on the grid, but needs to deliver to the standard we know he can.



1

SCHROTH RACING WE HAVE THE FIELD COVERED









Wide range of HANS Devices, Harness Belts & Racing Nets

Visit www.schroth.com/racing to learn more about our products.



Follow us on Facebook www.facebook.com/schrothracing

Renault

The team formerly known as Toleman, Benetton, Renault and Lotus is now called Renault again, thanks to the French manufacturer buying back its old operation



Renault RS16 | Starts 300 | First GP Great Britain 1977 | Wins 35 | Poles 51 | Fastest laps 31 | 2015 n/a

fter so much uncertainty, it is very good to see the chance for some stability at Enstone. The team has lost a lot of good people over the years, but still retains some personnel and a way of working that have made it into a championship-winning team both in the 1990s and the 2000s. Given how late the takeover by Renault and the rebranding from Lotus were completed, it goes into 2016 very underprepared with a car that isn't a dramatic step forward from last year, so this can only be considered a foundation year.

What will be interesting is how things develop in the second half of the season. This will give us an indication of whether Renault can live up to its ambition of winning world championships. Expectations are being managed at the start of the campaign, but more pace needs to be found as it goes on.

There are certainly some encouraging signs. Frederic

Vasseur has a huge amount of experience running racing teams outside of F1, and has a big part to play. And for all Renault's recent struggles, this is the manufacturer that powered Red Bull to four years of domination from 2010-13.

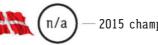
The key question is exactly where Renault can get its power unit to in terms of performance. Mario Illien has become involved through Red Bull, so there will be some good ideas there, but if you compare the progress it made from 2014 to '15 with the massive stride made by Ferrari, it's clear there are some serious problems to be tackled at Viry.

The hope is that the engine package will be stronger in the second half of the season, by which point the car should have improved. So, if Renault can be scoring regular points, that would represent a job well done. But, for the short term, the priority has to be on rebuilding a team that has been badly damaged by several years of underinvestment. **





KEVIN JOLYON MAGNUSSEN PALMER



2015 championship position -





0

Age	23	Age
Starts	19	Starts
First GP Australia	2014	First GP
Best finish	2nd	Wins
Best grid position	4th	Poles
Fastest laps	0	Fastest laps

AFTER BEING CHEWED UP

and spat out by McLaren, it was great to see Magnussen get another chance when Pastor Maldonado's cheque failed to come through ahead of this season. Remember, this is a driver who finished second on his grand prix debut and, while there were inevitably ups and downs during that first season with McLaren, he is clearly a driver with ability. That year on the sidelines will have also given him plenty of time to think, so you would expect him to be determined to make the most of this chance. After all, second chances are rare enough, let alone third ones.

WE SAW PLENTY OF PALMER

on track last year for Lotus but, as all his running was in testing or on green tracks on Friday morning, it's difficult to draw many conclusions. But he's a GP2 champion and has looked the part pre-season. The key for him is to win the battle with team-mate Magnussen, even though the Renault will start the season further down the grid than you would expect of a manufacturer team. He's got good speed and showed he has the racecraft in GP2, so Palmer clearly has ability. The question is whether he can match or beat a strong team-mate who has a full year's F1 experience.



Toro Rosso

Red Bull's second team has switched to 2015-spec Ferrari engines, but this should still be a step forward from the Renault power units it struggled with last year



Toro Rosso-Ferrari STR11 | Starts 185 | First GP Bahrain 2006 | Wins 1 | Poles 1 | Fastest laps 0 | 2015 7th

here is a lot to like about Toro Rosso, which last year produced a very good chassis under the technical leadership of James Key, and showed what is possible for a smaller team. The only problem was that it was stuck with a Renault power unit that wasn't up to the standards set by the car.

That weakness has been eliminated this year and, although the switch to Ferrari engines is a positive, there is a catch - it is using the specification of engine that finished the 2015 season, rather than the 2016 version used by the works team and fellow customers Sauber and Haas.

On the positive side, the 2015-spec engine will have done a lot of miles last year in the Ferrari, so will be reliable for the critical points-scoring first part of the season. Also, the lateness of the deal means Toro Rosso had to make some packaging compromises in the car, although Key says that

this has been done without a detrimental effect either on aerodynamics or cooling. It could have been a lot worse.

I've always favoured young, hungry drivers and Toro Rosso has a very good line-up in Max Verstappen and Carlos Sainz. I'd rather have motivated drivers who are willing to learn instead of experienced ones who are set in their ways and there just to pick up a pay cheque. Both drivers have real ability, Verstappen in particular, so Toro Rosso has arguably the most exciting pairing on the grid.

The comparison with Red Bull will be interesting. At times early in 2015 it seemed that Toro Rosso got better performance out of the Renault engine than its big-brother team and, with the 2015 Ferrari likely to start the season better than the '16 Renault, there could be a few surprises. There has been talk of podium finishes but, if Toro Rosso can give Force India and Red Bull a hard time, that would be a good result. 34





MAX VERSTAPPEN SAINZ



2015 championship position -





Age	18
Starts	19
First GP Australia	2015
Best finish	4th
Best grid position	6th
Fastest laps	0

Age	21
Starts	19
First GP Australia	2015
Best finish	7th
Best grid position	5th
Fastest laps	C

GOING INTO LAST SEASON,

everybody was asking stupid questions about whether someone too young to hold a road-driving licence would be safe in F1. While there were a couple of incidents involving him, that was perfectly acceptable for any rookie. Outside of that he was very fast and, if anything, more consistent than you would expect in the races. You can see why so much hype is building up around him, and Toro Rosso is the perfect place for Verstappen to learn. He can only get better this year, and it would be a surprise if some big teams weren't knocking on his door for 2017.

I FELT A BIT SORRY FOR

Sainz last year, as he tended to be in the shadow of Verstappen. He had more bad luck than his team-mate and the points difference between the two (49-18 in Verstappen's favour) doesn't do Sainz justice. All Sainz can do is keep doing what he's doing and hope that things go more smoothly. If that happens, he should be able to contribute a larger proportion of the team's points. He did a good job last year and should do so again, although I suspect he will not hit quite the same heights as his team-mate. But he still has a good future ahead of him in F1.



Sauber

After a terrible first year of the new regulations in 2014, Sauber had a solid season last year. Expect F1's perennial midfielder to stay firmly in the midfield in 2016



Sauber-Ferrari C35 | Starts 400 | First GP South Africa 1993 | Wins 1 | Poles 1 | Fastest laps 5 | 2015 8th

fter a terrible season in 2014, Sauber did a solid job last year to recover. But it's difficult to know where it's going beyond that, because it's hard to see the potential for it to climb into the battle involving teams such as Toro Rosso higher up the midfield. The Ferrari powertrain package is a proven quantity and Sauber has good facilities, but it's no secret that money is tight.

The car itself is more about tidying up the 2015 car than any major steps, although, with Mark Smith coming in as technical director last year, there are signs that things are changing in how the team operates that could help it climb the grid. Smith knows how to get the best out of a small team and, while his influence on the new car will not have been as big as he would have liked, you can be sure that Sauber will be more focused on moving forward and working better on the technical side.

The real question is what the future holds for Sauber. Remember, this was a team that was able to win a race under BMW ownership not long ago, and that is what it needs to aspire to again. For now, all it can do is tread water and try and pick up the results when it can. It's been a few years since Sauber was able to snap at the heels of the big teams, and that's a level it will be hoping to get back to, but for now that's probably too optimstic.

I'd expect Sauber to be in the lower half of the midfield this year, but it needs to look very carefully over its shoulder at the Haas team. It shares the same Ferrari engine package, and it isn't impossible to imagine the Sauber team ending up slipping behind Haas if the car doesn't get the development investment that it needs.

That will be the key — and whether, under Smith, development accelerates during the season. If it doesn't, Sauber will struggle to score as regularly as it should. **











— 2015 championship position—





Age	23
Starts	18
First GP Austra	lia 2015
Best finish	5th
Best grid position	n 8th
Fastest laps	0

Age 25
Starts 35
First GP Australia 2014
Best finish 8th
Best grid position 9th
Fastest laps 0

THE BRAZILIAN DID A

decent job last season and picked up a couple of big results – fifth in Australia in his first grand prix and sixth at Sochi later in the year – that helped him contribute the lion's share of Sauber's points. He's certainly capable of scoring more consistently if the car is. Nasr was never very comfortable with the way the car felt under braking last year, but seemed happier in pre-season testing, so perhaps that will allow him to kick on in his second year. A good driver, but I'd like to see more before saying he's a contender for a move up the grid.

I WASN'T VERY IMPRESSED

with what I saw from Ericsson during his 2014 season at Caterham, but perhaps it shouldn't be a surprise that he looked better in a Sauber team that was far more stable than his previous employer. But, while he was good on his day, there were also a few too many mistakes, such as throwing it off the road in Malaysia while on course for a good result. He brings decent money to the team and there will be enough good days to justify his place, even if he isn't quite as consistent as his team-mate – on his day, Ericsson is capable of being genuinely quick.





High performance on the track.

Another gram lighter, another second faster, a cubic centimeter less - in motorsport precision equals performance. This is where the rational motion story begins.



Next level precision, when and where it's needed. Victory or defeat decided in the smallest of factors.



HIGH SPEED & DIRECT DRIVE ELECTRIC POWERTRAIN

PMSM (Permanent Magnet Synchronous Motors) 320-450V & 500-750V internal rotor oil/water cooled 100-250kW



POWER ELECTRONICS (INVERTER)

3 & 6-phase water cooled IGBT technology



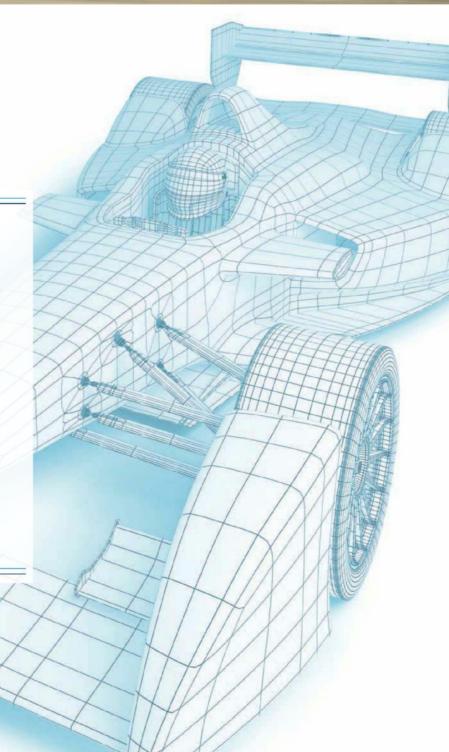
ENERGY STORAGE (BATTERIES AND CAPACITORS)

Super cap 30 & 60 cells 162 packs



VEHICLE MANAGEMENT UNITS

12V DC PowerPC architecture Multi-core CPU



McLaren

After last year's disaster, things will be better in 2016. But not by enough for a team of this size, resources and history – and Honda power is still the weak point



McLaren-Honda MP4-31 | Starts 780 | First GP Monaco 1966 | Wins 182 | Poles 155 | Fastest laps 152 | 2015 9th

cLaren-Honda needs to do better this year. Based on testing, that will be the case - but it's only going to be a little better. This is not good enough for a team of this standing, which has the resources, the people and the drivers to be doing far better than fighting in the midfield for minor points finishes.

It's hard to see McLaren struggling like this - I take no pleasure in it. After all, I was chief mechanic there in the late 1970s and have a lot of respect for everything it has achieved. But it has not won a race since 2012. If you put a Mercedes power unit into the place of the Honda, would McLaren be fighting with Mercedes for the world championship? I don't think so.

Testing suggests the car has taken a step backwards in terms of handling, while the Honda package is still a worry. There have been some improvements to the ERS

system, but it's still not very strong in the speed traps. Having used works Honda engines at Jordan in the past, my experience is that the company isn't always very good at accepting its weaknesses and tackling them. And doing that is going to be essential if the McLaren-Honda partnership is to live up to its massive potential.

So, expect another difficult season for McLaren. There should be more points finishes than the six it managed last year, a return that is terrible for an operation of this size, but is it going to be enough? Judging by testing, the best we can expect is for some big improvements in the second half of the season, but without that it's going to be another disappointing season for those at Woking.

Those in charge need to look very closely at understanding what could have been done much earlier to avoid getting into the position the team was in during 2015, and why that action wasn't taken. This can't be repeated. #











2015 championship position —



Age	36	Age		34
Starts	284	Starts		252
First GP	Australia 2000	First GP	Australia	2001
Wins	15	Wins		32
Poles	8	Poles		22
Fastest la	ips 8	Fastest l	aps	21



BUTTON PERFORMED PRETTY

well in difficult circumstances last year, reminding everyone how good he is by stacking up well compared to teammate Alonso. He always needs a car that gives him the ability to carry the speed through the middle of the corner, with predictable rear-end stability, and the modest improvements in the McLaren-Honda should help. As usual, we can expect him to have some great days and some less-impressive ones but, unlike in the past, that won't make the difference between finishing first and third, given where the car will be. Points will be the main ambition.

ALONSO'S RETURN TO

McLaren didn't go very well in terms of results, but the fact that the partnership has lasted into a second season this time around is encouraging. At 34, he is running out of time for that third world championship but, as long as he sees progress by the team towards getting back to where it should be with its history and resources, then he should be happy enough. But if things don't progress well, then we could see some fireworks. He's one of the best on the grid and will get the most out of the car, but he will also make it very clear if he's unhappy with things.

Manor

A new livery, a new engine-supply deal, two new drivers and some new faces in management positions adds up to a new start for the ex-Virgin/Marussia team



Manor-Mercedes MRTO5 | Starts 111 | First GP Bahrain 2010 | Wins 0 | Poles 0 | Fastest laps 0 | 2015 10th

he big change for Manor this year is the switch to the Mercedes engine. Seeing as it's a minor miracle that the team exists at all, to have the best power unit in Formula 1 is a big step forward. Manor also claims this is an all-new car, so that should mean a big step improvement on last year, when the team ran a 2014 Marussia and a year-old Ferrari engine.

While the future looks more solid for this team, even after the departure of founders Graeme Lowdon and John Booth, that does not mean we should expect anything too dramatic this year. Manor spent all of last year some way off the back and never got to within five per cent of the pace, so if it can be just at the back of the pack - rather than miles off that will be a good result.

There are some good people at the team. John McQuilliam is technical director and knows his stuff, while bringing in former

Ferrari man Pat Fry will strengthen the team on that side, but we'll have to see how it comes together. There's also a new sporting director in Dave Ryan – who was scapegoated after the lying-to-thestewards controversy in the 2008 Australian Grand Prix - who knows exactly how to get a team working. So, personnel-wise, Manor looks like it's capable of becoming a handy small team.

The key will be the relationship with Mercedes. A team with a small budget must do everything it can to focus as much as possible on areas that will make the car go faster and, in the long term, developing closer ties with the Mercedes works team - along the lines of Haas – could help Manor to punch above its weight.

Currently, the car is the simplest on the grid, with an old-fashioned long nose, but that gives it a solid base to build from. Getting into the points might be asking a lot, but it will be a big improvement on last year. 24











2015 championship position -





Age Starts First GP Wins Poles Fastest laps Age Starts First GP

Wins Poles

Fastest laps

IF YOU CAN WIN THE DTM



HARYANTO ISN'T A DRIVER

who has grabbed my attention in his career so far, despite how famous he is in his native Indonesia, but he's capable enough as he's won races in GP3 and GP2. He could be in for a tough season, as he has a very fast team-mate and will spend most of the year at the back. He seems to be at his best in race conditions and did a good job with the Pirelli tyres in GP2, but qualifying could be a problem. He also made a few mistakes in testing, but that's what testing is for, so we can only judge him on what he does once the season starts and he has built some experience.

title before your 21st birthday and convince Mercedes that you are good enough to be helped into F1, then you are clearly a driver with talent. Wehrlein is not a driver I have seen much of, but he has done a good job in his previous tests for Mercedes and Force India, and looked quick during pre-season testing. He's going to be learning his F1 trade at the back, where it is tough to make an impact, but it's going to be very interesting to see how the German performs, given that Mercedes clearly sees him as a potential works driver for the future.

Haas

The first American outfit to make it to the Formula 1 grid since the mid-1980s benefits from an alliance with Ferrari, which some argue makes it a 'B-team'



efore the new Haas-Ferrari started running in testing, I was sceptical about this team and its optimistic claims that it would be able to score points in its first year. But, thanks to its partnership with Ferrari, the car looked perfectly capable of running respectably in the midfield bunch.

The approach the team has taken makes a lot of sense, and you can see why Gene Haas has been successful in NASCAR. There was the realisation that it's incredibly hard to build up an F1 team from scratch, as the new teams that came in for 2010 showed. So, by using building blocks from Ferrari and the knowledge of Dallara, it has short-cut much of that process.

When you are a team with limited resources, the more short cuts you can make, the more you can focus on the key areas for improving performance. Haas has to make the so-called listed parts itself, so that includes the

monocoque and the aerodynamic package. That is where it can find performance on top of the platform it gets from Ferrari. With the driver line-up it has, all of that should translate into a car that can get some decent results in 2016.

But producing a car that can turn a decent lap, as it did in testing, is just one box ticked. It won't be until Australia that we see how sharp it is in race conditions and at pitstops, and there's no way to bypass that learning process. It's important that Haas doesn't get carried away with what happened in testing, especially as there were a few problems, such as the front-wing failure on day one and the slow start to the second test with a fuel-system problem.

Remember, this year is about Haas establishing itself in the top 10 - so ahead of Manor as a minimum – and ensuring that it does enough work on 2017 to improve next year. So it's had a promising start, but there's a lot of hard work still to do. #

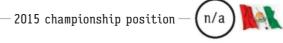


ROMAIN GROSJEAN



ESTEBAN GUTIERREZ





29
83
2009
2nd
2nd
1

Age	24
Starts	38
First GP Australia	2013
Best finish	7tł
Best grid position	9th
Fastest laps	1

GROSJEAN IS VERY FAST

and has proved he can deliver consistently, so he deserves to be in a much better position than driving for a brand-new team. Fortunately for him, the Haas has looked good in testing and there's no doubt that, if the car can score points, he will be able to deliver. That makes him a major asset for Haas as, at 29, he still has that hunger harnessed to a decent level of experience. I expect Grosjean to establish himself as the lead driver at the team and, if he can deliver, he will put himself in the shop window for a Ferrari seat.

GUTIERREZ IS BACK AFTER

a year on the sidelines as Ferrari's reserve driver. He had a few good moments during his two years with Sauber, but he's going to have his work cut out alongside Grosjean at Haas. He had a good spell during the second half of his first season with Sauber in 2013, but there were a few too many errors the year after. He has some speed but he needs to work on delivering consistently, and he will have his work cut out to live with his team-mate. He is a decent second driver and I am sure he opens up the Mexican sponsorship market for Haas.





Every practice, every qualifying, every race. The only place to see it all live.



2016 circuits

The tracks, the stats

FORMULA 1 CROSSES A RUBICON in 2016 as the calendar exceeds 20 grands prix for the first time, promising to more action than ever before. We also explore new territory in the form of a street race around Baku, the capital of Azerbaijan.

Sky Sports F1's commentator Martin Brundle knows a thing or two about street circuits, having made his name by finishing second on the road in Detroit in 1984. Here he gives us the lowdown on what to expect at Baku and from the other 20 circuits. >>



1 Australian GP March 18-20



2 Bahrain GP April 1-3



3 Chinese GP April 15-17



4 Russian GP April 29-May 1



5 Spanish GP May 13-15



6 Monaco GP May 26-29



7 Canadian GP June 10-12



8 European GP June 17-19



10 British GP

July 8-10



11 Hungarian GP



12 German GP



13 Belgian GP



August 26-28



September 2-4



15 Singapore GP September 16-18







18 US GP October 21-23



19 Mexican GP October 28-30

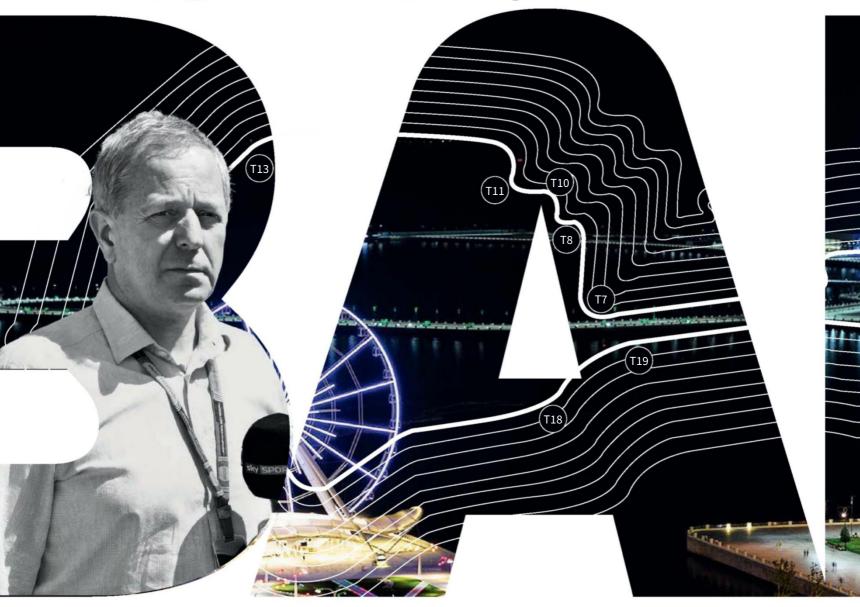


20 Brazilian GP November 11-13



21 Abu Dhabi GP November 25-27





Think Sochi-meets-Macau-meets-Valencia-meets-Singapore.
A glamorous new addition to the Formula 1 calendar
is sure to pose some fresh challenges

By Martin Brundle, Sky Sports F1 Commentator

y @MBrundleF1





A NEW VENUE IS ALWAYS INTERESTING AND THE RACE IN BAKU THIS JUNE WILL BE something we haven't experienced before. No doubt there will be challenges for all the teams, the engine manufacturers, Pirelli and of course for the drivers, but, with my television hat on, I'm quite a fan of new races.

From what I've seen of the layout, it's quite a long circuit -3.732 miles to be precise - which would make it the second longest lap of the season. It'll be between Spa (4.352 miles) and Silverstone (3.66 miles). Circuit designer Hermann Tilke is saying a typical F1 lap should be about 101 seconds, with an average speed of 130mph. So you'd expect the length of the grand prix to be around an hour and 40 minutes. That's in the ballpark of what we normally have.

My Sky Sports F1 colleague Ted Kravitz visited Azerbaijan recently and told me there was a lot of track-surfacing work to do. My reaction to that was: bumps! In an F1 car they're like mini-mountains. >>

SKY SPORTS, YOUR HOME OF F1®

Every practice, every qualifying session, every race: the only place to see it all live.

Watch every race weekend in full, live on Sky Sports F1°. This includes exclusive live coverage of the season-opening 2016 Formula 1 Rolex Australian Grand Prix.

Expert analysis returns

The Sky Sports F1® team returns for a record-breaking year of F1 with more races than ever before. Commentary will come from Martin Brundle and David Croft, with expert analysis provided by Damon Hill, Anthony Davidson and Johnny Herbert. The coverage will be presented by Simon Lazenby, with reporting from Ted Kravitz.

Ways to watch Sky Sports F1®

Sky TV customers with Sky Sports can watch live on TV with Dolby 5.1 surround sound, via Sky Go or using Race Control accessed via the red button, or the Sky Sports app for iPad. Non-subscribers can also follow the 2016 FIA Formula One World Championship™ without a contract through online TV streaming service NOW TV by purchasing a Sky Sports Day Pass for £6.99 or Sky Sports Week Pass for £10.99.

Round-the-clock Formula 1 coverage will also be brought to customers on Sky Sports News HQ, skysports.com/f1 and @skysportsf1 with the hashtag #SkyF1.



The F1 logo, F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX and related marks are trademarks of Formula One Licensing BV, a Formula One group company. All rights reserved.

I've heard that Baku is a beautiful city, a bit of a cross between Istanbul and Barcelona, so it has that mix of ancient and modern. Plus, it's on the seafront, so as a venue it might have the feel of the Valencia street circuit that Formula 1 raced at between 2008 and '12.

The lap has some similarities to Sochi in that there's a series of 90-degree left and right-handers, but they come just after the start in Baku. On the start/finish straight, which looks very long indeed, engine power will really come to the fore. After the 90-degree turns, the circuit winds its way around the old town. So it goes from a very fast section into a technical one and then a very narrow and twisty section — that reminds me of Macau. I think it'll be just as important to get down the straights on maximum power as it will be to have a car that has the grip and traction to handle the twisty sections.

It gets very narrow in places in the old town, but no more so than, say, the Anderson Bridge in Singapore. There's also a cobbled part that runs around an old castle and I get the impression they'll lay asphalt over the cobbles for the grand prix and then take it up again, as they do for Formula E races.

It sounds like it's going to be quite an interesting combo on every lap, with some generally anonymous modern sections that could be anywhere in the world, and something in the narrower streets that will look thoroughly recognisable — and very unusual.

I thought Azerbaijan would be quite Russian, but



Sky Sports F1® heads to Baku's old town to scope out the best angles ahead of Azerbaijan's maiden grand prix in June



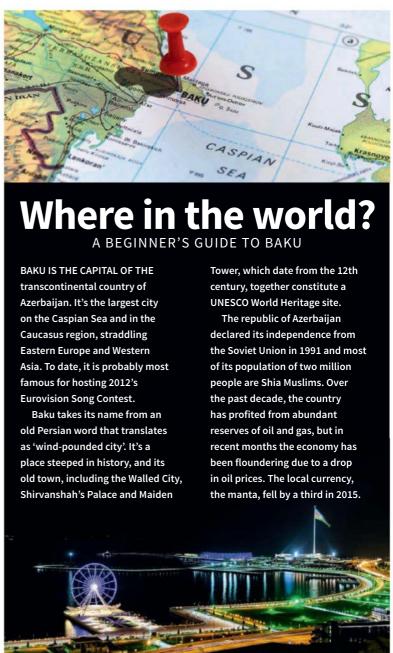
"On the start/finish straight, which looks very long indeed, engine power will really come to the fore"

people say it's much more similar to Turkey and the race we used to have in Istanbul. And that's an example of a great track we've had that's now lost. We've lost South Korea, Valencia and India too. I'm all for going to new venues, and it's exciting each year when we get a new driver or a new team, such as Haas F1 this year, but when we go to new countries such as Azerbaijan it's important that we don't lose the likes of Spa, Monza or Silverstone.

We've been to new locations and found some wonderful venues. As well as Istanbul, Austin was a great new circuit, which I also love. Austin has got a fantastic layout; it's got interesting features and it really works well. I'm quite open-minded about new circuits. I know they have to stay within the regulations, so you'll find a lot of run-off and safety aspects, but Tilke tries to incorporate some local feel to the venue wherever he can - as he did with Bahrain, for example.

I understand that in this first year, both qualifying and the race are going to have to start quite late on each day, close to 6pm, and that's to avoid a clash with Le Mans, which ends on the Sunday. They're not planning on putting any lights around the track, but as it's the middle of June there should still be enough daylight – although there won't be any scope for delays from long red-flag periods.

But all in all it should be tremendous fun - and I'm looking forward to it. #





Australia

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "This is a challenging track because it's so slippery, which is tough on new teams and drivers. It's a great race with a top atmosphere, and a good way to start the season."

RACE DATA

Circuit name

Melbourne GP Circuit

First GP 1996

GPs held 20

Laps 58

Circuit length 3.295 miles

Race distance

191 117 miles

Direction Clockwise

Winners from pole 9

Race start (UK) 5am

LIVE ONLY on Sky Sports F1®





LAST YEAR

Winner Lewis Hamilton

Margin of victory 1.360s

Fastest lap 1m30.945s, Hamilton

Race leaders 2

Safety cars 1 (3 laps)

Pitstops 17

Overtakes 11



Bahrain

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Bahrain looks spectacular at night because of the floodlights. Races here can go either way: dull or amazing. But there's always plenty of action on the run down to Turn 1."



Circuit name Bahrain

International Circuit

First GP 2004

 $\mathsf{GPs}\ \mathsf{held}\ 11$

Laps 57 **Circuit length**

3.362 miles Race distance

191.53 miles

Direction Clockwise

Winners from pole 5

Race start (UK) 4pm

LIVE on Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 3.380s

Fastest lap 1m36.311s, Kimi Raikkonen

Race leaders 3

Safety cars 0

Pitstops 43

Overtakes 35



ROUND 3/21 SHANGHAI, APRIL 15-17

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "I'm fond of the hairpin at the end of the long straight here followed by the unsighted left. That section often tends to generate controversy, incident and overtaking."

RACE DATA

Circuit name Shanghai International Circuit

First GP 2004

GPs held 12

Laps 56

Circuit length

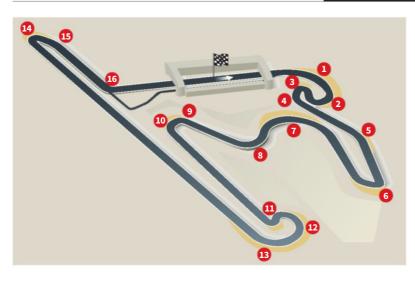
3.387 miles

Race distance

189.559 miles

Direction Clockwise

Winners from pole 7 Race start (UK) 7am LIVE ONLY on Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 0.714s

Fastest lap 1m42.208s, Hamilton

Race leaders 3

Safety cars 1 (4 laps)

Pitstops 38





Russia

ROUND 4/21 SOCHI, APRIL 29-MAY 1

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Sochi saw some action last year, with Raikkonen and Bottas colliding at the end of the race and Romain Grosjean crashing his Lotus on the super-long left-hander!"

RACE DATA

Circuit name

Sochi Autodrom

First GP 2014

GPs held 2

Laps 53

Circuit length

3.634 miles

Race distance

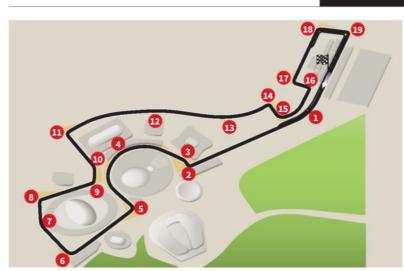
192 467 miles

Direction Clockwise

Winners from pole 1Race start (UK) 1pm

LIVE ONLY on

Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 5.953s

Fastest lap 1m40.071s, Sebastian Vettel

Race leaders 2

Safety cars 2 (8 laps)

Pitstops 19

Overtakes 31



Spain ROUND 5/21 BARCELONA, MAY 13-15

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Locations don't come much better than Barcelona. The Spanish GP has it all: good racing, culture, restaurants and nightlife - and it's a great start to the European season."



RACE DATA

Circuit name

Circuit de Barcelona-Catalunya

First GP 1991

GPs held 25

Laps 66

Circuit length

2.892 miles

Race distance

190 826 miles

Direction Clockwise

Winners from pole 19

Race start (UK) 1pm

LIVE on

Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 17.551s

Fastest lap 1m28.270s, Lewis Hamilton

Race leaders 3

Safety cars 0

Pitstops 46

Overtakes 27

Monaco

ROUND 6/21 MONTE CARLO, MAY 26-29

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Monaco has such a great tradition: it's like Wimbledon or the FA Cup. It's got all the glamour, but it's a bit of a chess match; be patient and something dramatic will happen."

RACE DATA Circuit name

Circuit de Monaco

First GP 1929

GPs held 73

Laps 78

Circuit length

2.074 miles

Race distance 161.734 miles

Direction Clockwise

Winners from pole 28 Race start (UK) 1pm

LIVE ONLY on

Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 4.486s

Fastest lap 1m18.063s, Daniel Ricciardo

Race leaders 2

Safety cars 1 (7 laps)

Pitstops 31

Overtakes 13

65



Canada

ROUND 7/21 MONTREAL, JUNE 10-12

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "This is a proper old-school circuit. It's narrow, slippery, a bit bumpy, and if you take a risk to find time then there's a very good chance you'll end up in the wall."

RACE DATA

Circuit name

Circuit Gilles Villeneuve

First GP 1978

GPs held 36

Laps 70 **Circuit length**

2.710 miles

Race distance

189 686 miles

Direction Clockwise

Winners from pole 16 Race start (UK) 7pm

LIVE ONLY on

Sky Sports F1®





LAST YEAR

Winner Lewis Hamilton

Margin of victory 2.285s

Fastest lap 1m16.987s, Kimi Raikkonen

Race leaders 2

Safety cars 0

Pitstops 25

Overtakes 36



Europe ROUND 8/21 AZERBAIJAN, JUNE 17-19

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "I'm surprised this is running back to back with Montreal. Getting all the cars and equipment from Montreal to downtown Baku is going to be an epic logistical challenge."



Baku City Circuit First GP 2016

GPs held 0 Laps 51

Circuit length

3.732 miles

Race distance

190.171 miles

Direction Anticlockwise

Winners from pole N/A

Race start (UK) 2pm

LIVE on

Sky Sports F1®





The Grand Prix of Europe will be the first Formula 1 race ever to be held in Azerbaijan, taking place on a street track around its capital, Baku. The circuit will combine a narrow uphill section through the old city with a long blast along the seafront in the modern district.



ROUND 9/21 SPIELBERG, JULY 1-3

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "I miss the Osterreichring, as it actually used to frighten me, which is why I liked it. This new circuit is the opposite as it's sort of made for TV. But it's still a great place."



Circuit name Red Bull Ring First GP 1970

GPs held 27

Laps 71

Circuit length

2.688 miles

Race distance 190.773 miles

Direction Clockwise

Winners from pole 7

Race start (UK) 1pm

LIVE ONLY on Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 8.800s

Fastest lap 1m11.235s, Rosberg

Race leaders 3

Safety cars 1 (6 laps)

Pitstops 21





Great Britain

ROUND 10/21 SILVERSTONE, JULY 8-10

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "This is one of the great tracks of the world. The new Turn 1 is mindblowingly fast, as are Copse, Becketts and Stowe – they are fantastic corners whatever you're driving."

RACE DATA

Circuit name

Silverstone Circuit

First GP 1948

GPs held 51

Laps 52

Circuit length

3.660 miles

Race distance

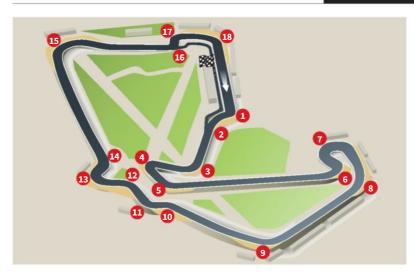
190 262 miles

Direction Clockwise Winners from pole 17

Race start (UK) 1pm

LIVE on

Sky Sports F1®





LAST YEAR

Winner Lewis Hamilton Margin of victory 10.956s Fastest lap 1m37.093s, Hamilton

Race leaders 4

Safety cars 2 (5 laps)

Pitstops 33

Overtakes 14



Hungary

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Hungary is just relentless; it's like a kart track. The unsighted Turn 4, at the top of the hill, is one of the toughest corners of the year. It's full-on for 70 laps - a wonderful race."

RACE DATA

Circuit name

Hungaroring

First GP 1986

GPs held 30

Laps 70 **Circuit length**

2.722 miles

Race distance

190.531 miles

Direction Clockwise Winners from pole 13

Race start (UK) 1pm

LIVE on

Sky Sports F1®





Margin of victory 15.748s

Fastest lap 1m24.821s, Daniel Ricciardo

Race leaders 2

Safety cars 1 (7 laps)

Pitstops 60

Overtakes 32



Germany ROUND 12/21 HOCKENHEIM, JULY

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "After a two-year break we go back to Hockenheim, and if I were to design an ideal F1 track I'd use the section from Turn 1 to the hairpin. It guarantees incidents and controversy."

RACE DATA

Circuit name

Hockenheimring Baden-Wurttemberg

First GP 1970

GPs held 34

Laps 67 **Circuit length**

2.842 miles

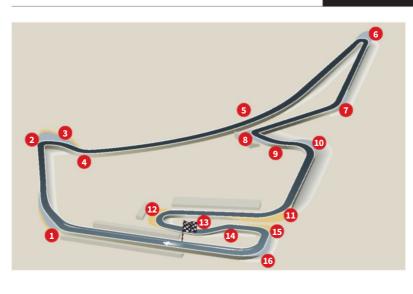
Race distance

190 424 miles

Direction Clockwise

Winners from pole 18

Race start (UK) 1pm LIVE ONLY on Sky Sports F1®





WHAT HAPPENED IN 2014?

Winner Nico Rosberg

Margin of victory 20.789s

Fastest lap 1m19.908s, Lewis Hamilton

Race leaders 1

Safety cars 1 (2 laps)

Pitstops 55



Belgium ROUND 13/21 SPA-FRANCORCHAMPS, AUGUST 26-28

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "I've been coming here since 1981 and every time I look up at Eau Rouge it always seems steeper and tighter than I remembered it. It's an amazing track - especially in the rain."

RACE DATA

Circuit name

Circuit de Spa-Francorchamps

First GP 1925

GPs held 58

Laps 44

Circuit length

4.352 miles

Race distance

191.415 miles

Direction Clockwise

Winners from pole 16

Race start (UK) 1pm LIVE on

Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 2.058s

Fastest lap 1m52.416s, Nico Rosberg

Race leaders 2

Safety cars 1 (2 laps)

Pitstops 38

Overtakes 19



Italy ROUND 14/21 MONZA, SEPTEMBER 2-4

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "When I walk the circuit for Sky on a Friday, it's exactly as I remembered in the early '80s. As I move through the forest, I can hear the exhaust notes bouncing off the trees."



Circuit name

Autodromo Nazionale Monza

First GP 1922

GPs held 80

Laps 53

Circuit length 3.6 miles

Race distance

190.587 miles

Direction Clockwise

Winners from pole 23

Race start (UK) 1pm

LIVE on

Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 25.042s

Fastest lap 1m26.672s, Hamilton

Race leaders 1

Safety cars 0

Pitstops 23

Overtakes 31



SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Physically, this is the toughest race of the season. Drivers compete for two hours in intense heat and humidity. Under floodlights, it's probably our showcase race of the year."

RACE DATA

Circuit name

Marina Bay Street Circuit

First GP 2008

GPs held 8

Laps 61

Circuit length

3.147 miles

Race distance

191.897 miles

Direction Anticlockwise

Winners from pole 6 Race start (UK) 1pm

LIVE ONLY on

Sky Sports F1®





LAST YEAR

Winner Sebastian Vettel

Margin of victory 1.478s

Fastest lap 1m50.041s, Daniel Ricciardo

Race leaders 1

Safety cars 2 (10 laps)

Pitstops 42





Malaysia

ROUND 16/21 SEPANG, SEPTEMBER 30-OCTOBER 2

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "This was built up to 20 metres wide in places to promote overtaking, but you just end up with one line where the rubber's laid down and everyone follows each other."

RACE DATA

Circuit name

Sepang International Circuit

First GP 1999

GPs held 17

Laps 56

Circuit length

3.444 miles Race distance

192 879 miles

Direction Clockwise

Winners from pole 9

Race start (UK) 8am

LIVE on

Sky Sports F1®





LAST YEAR

Winner Sebastian Vettel Margin of victory 8.569s

Fastest lap 1m42.062s, Nico Rosberg

Race leaders 2

Safety cars 1 (3 laps)

Pitstops 50

Overtakes 60



Japan

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Suzuka is one of the tracks you want to drive as a racing driver. It's quite compact, it's a figure of eight, it's narrow and it's a place where the driver can make all the difference."

RACE DATA

Circuit name

Suzuka International Racing Course

First GP 1987

GPs held 27

Laps 53 **Circuit length**

3.608 miles

Race distance

191 054 miles

Direction Both

Winners from pole 12

Race start (UK) 6am

LIVE ONLY on

Sky Sports F1®







LAST YEAR

Winner Lewis Hamilton

Margin of victory 18.694s

Fastest lap 1m36.145s, Hamilton

Race leaders 1

Safety cars 0

Pitstops 44

Overtakes 26



United States

ROUND 18/21 AUSTIN, OCTOBER 21-23

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "This is a brilliant place for a grand prix. The track is superb and the city is perfect. Austin reminds me of Adelaide: it's the right size, it becomes an F1 town and the track's a gem."



Circuit of the Americas

First GP 2012

GPs held 4

Circuit name

Laps 56

Circuit length

3.426 miles

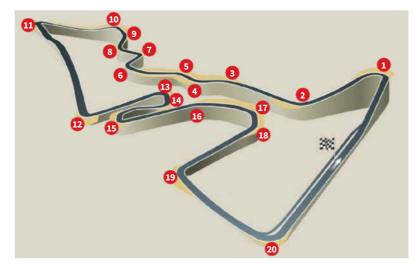
Race distance 191.634 miles

Direction Anticlockwise

Winners from pole 1

Race start (UK) 7pm

LIVE ONLY on Sky Sports F1®





Winner Lewis Hamilton

Margin of victory 2.850s

Fastest lap 1m40.666s, Nico Rosberg

Race leaders 3

Safety cars 4 (16 laps)

Pitstops 47





Mexico

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "Mexico returned to the calendar last year and they've changed the circuit a lot since I last raced there. But the stadium section looks great with all those passionate fans."



Circuit name

Autodromo Hermanos Rodriguez

First GP 1962

GPs held 17

Laps 71

Circuit length

2.674 miles

Race distance 189.738 miles

Direction Clockwise

Winners from pole 8

Race start (UK) 7pm LIVE on

Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 1.954s

Fastest lap 1m20.521s, Rosberg

Race leaders 2

Safety cars 1 (6 laps)

Pitstops 38

Overtakes 27



ROUND 20/21 INTERLAGOS, NOVEMBER 11-13

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "In the past you could crash by yourself on a bump here, but they've smoothed the track out now, which makes it less challenging. There's such a great carnival atmosphere here."

RACE DATA

Circuit name

Autodromo Jose Carlos Pace

First GP 1973

GPs held 33

Laps 71

Circuit length

2.677 miles Race distance

190 083 miles

Direction Anticlockwise

Winners from pole 13

Race start (UK) 4pm

LIVE ONLY on Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 7.756s

Fastest lap 1m14.832s, Lewis Hamilton

Race leaders 2

Safety cars 0

Pitstops 49

Overtakes 31

Abu Dhabi

SKY SPORTS F1'S MARTIN BRUNDLE SAYS: "The season finale does look fantastic on TV, with the Yas Marina Hotel lit up and the track under floodlights. It's still an enjoyable place to visit and has superb facilities."

RACE DATA

Circuit name

Yas Marina Circuit

First GP 2009

GPs held 7

Laps 55

Circuit length

3.451 miles

Race distance 189.739 miles

Direction Anticlockwise

Winners from pole 2

Race start (UK) 1pm

Sky Sports F1®





LAST YEAR

Winner Nico Rosberg

Margin of victory 8.271s

Fastest lap 1m44.517s, Lewis Hamilton

Race leaders 2

Safety cars 0

Pitstops 42

Overtakes 26

LIVE on

Every fastest lap Every shredded tyre Every pole position Every failed pit stop Every dehydrated driver Every lock up Every duel Every chequered flag **Every fight**



Every practice, every qualifying, every race. The only place to see it all live.



72

Latvala keeps cool to win in Mexico

Jari-Matti Latvala made the most of Sebastien Ogier's running-order disadvantage to seal his first win and points of the season

By David Evans, Rallies Editor



t's not often that, driving out from the end of a stage, you are flagged down by the rally leader. Jari-Matti
Latvala was out of the car and looking concerned.
It was Sunday morning, the 50-mile Guanajuato

stage was in his rear-view mirror and there was just the powerstage remaining. And he was starting that one with a minute in hand over everybody.

The bespectacled Finn leaned into the car through the open window.

"I made a mistake," he said, in a typically apologetic Latvala fashion. "When we got to the end of the long stage, the organisers were giving out the T-shirts to the drivers and co-drivers. Miikka [Anttila, co-driver] got one. I thought he had one for me as well, but I was wrong. Could you go back to the stop line and get me one, please?"

The T-shirt was OK, it was red and told the world that you had completed the Guanajuato stage. But it was just a T-shirt.

That's Jari-Matti: that kind of thing means so much to him; he's a rally fan first and a professional rally driver second.

Last week in Mexico, he was the consummate professional. And he turned in one of his best ever performances. He was fastest pretty much everywhere. Oddly, that wasn't the point. In his position, running eighth on the road, the Finn was in the perfect place on a surface swept clean of the loose gravel and giving considerably more grip than the man at the front would be enjoying. More of the man at the front later.

In all honesty, if Latvala hadn't been quickest, he should have been dismissed on the spot. Speed's not an issue for Latvala, never has been — how could it be for a man unbeaten in Finland since 2013? Getting to the finish of an event has been. Still is. Dare we say 'was'? Not yet.

But Mexico was a major step forward. He took his time. He didn't rush himself. He didn't snatch at seconds. He didn't take risks. He knew the advantage was his and he let it come to him in the kind of way that Sebastien Loeb would have done.

Just over 30 seconds up on secondplaced Sebastien Ogier on Friday night, eyebrows were raised. Shouldn't he have expected more? There was no stress. He had another day in the perfect place to come. Yes, Sunday was all about 50 miles in one hit, but the approach for the road there was a little more about catching monkeys: slowly, slowly.

Predictably, Latvala had a full and detailed explanation, not to mention the usual interesting backstory.

"I remember," he said, "when I was here in 2012 — the speed was amazing. The first day I was attacking and leading, then I hit the rock and we broke the suspension arm. We managed to get service, then we attacked some more. Next day we got the puncture and lost 30 seconds. And on the last day, still I tried to attack and finally I rolled!" There's a pause and a smile at the recollection.

"That," he said, "was not good. But now, I think I am learning. It's coming more instinctive for me to slow down. I have to stay calm."

He stayed perfectly calm on the baking North American stages last week.

Two thirds of the way through Sunday's Guanajuato marathon, he began to lose the brakes at the rear of his Volkswagen Polo R WRC. Still, calm. He lost 25.3s to Ogier — pretty much what he'd planned and expected to lose, with the second-placed winner of the first two rounds now right ahead of him on the road. Everything was under control.

For the first time in Mexico, and for the first time since Corsica last October, Latvala and Anttila stepped onto the roof of their Polo and celebrated.

"I feel I have turned a bit of a corner here," he said. "It's not about 110 per cent all of the time." Was that the sound of a penny dropping?

"It's so important for me to take this win," he added. "Now we have something on the board for this year." He's pointless no more.



Above: Ogier was only happy out of the car after what he called a "boring rally"

The difference in mood from one side of the Volkswagen camp to the other was marked. From the minute Latvala's driveshaft broke at the end of the first stage of Rally Sweden last month, victory had been on the cards here. Equally certain was a powerstage win for Ogier.

The Frenchman's mood was dark on Friday — and that was only partly due to finding a herd of cows in his way on SS5. Epic save ("It would have been bad for us, but worse for them!"). That mood darkened further over the weekend. By Sunday, he was wearing the look of a man who wanted to be elsewhere.

"This," he said, "has been a boring rally." No fights, no nothing. A boring rally."

Ogier grew tired of talking about the running order regulations a long time ago; he had no appetite to go over old ground, and it's a brave man who brings it up at such a juncture.

Understandably, he hates the fact that success is penalised, while apparent mediocrity — for whatever reason — is celebrated with a preferred position on the road. He wants the level playing field. He wants the fair fight. Yes, he could slow down and perhaps even miss a rally to level the playing field himself, but why should he? He's persecuted for perfection. The championship's shortcomings that force us down the road of such manipulation are of no interest to Ogier and neither should they be.

Ogier arrived at the start of Mexico on the back of the perfect 56-point start. At the finish, I ventured that his perfect start had continued. He'd always said Latvala was in a different rally on a different road. He'd asked to be measured against his nearest rivals — against Andreas Mikkelsen, Mads Ostberg and Hayden Paddon, those closest to him on the road. Predictably, he'd taken them all to the cleaners.

A reminder of that brought a wry smile. "It's true," he said, "there was no way for me to do anything better than this. So, for that, this is still the perfect start. It's frustrating, but what can we do? People expect the unexpected from







"I feel I have turned a bit of a corner here... It's not about 110 per cent all of the time"

me because we did some crazy results when we were winning events like this one, Sardinia and Australia last year. But before the start I was thinking it would be good to just get on the podium. You know, this is not against Jari-Matti — he is the nicest guy and the most honest guy around. He is just doing his job, what else was he going to do here?"

Looking at the results, it was hard not to argue with Ogier's appraisal of this being a boring rally: two, three, four, even 14-minute gaps littered the top 10. But there was more to this event than a split-second battle. This was 250 miles of pure adventure and, after four hours and 25 minutes, Latvala got that.

"Rallies are not always the big battle," he said. "Not every rally is like Finland — that's how it is. I had a boring rally in Sweden, when I had a problem and I had to drive the whole day with the broken car. I understand for Seb, he couldn't fight and he is not feeling comfortable with that. I understand. But some rallies are different."

Mexico was certainly that. And there were few further down the order who would reach for the same adjective as the defending champion when it came to describing their event.

Hyundai's Dani Sordo drove well to take his first podium on an all-gravel rally since the 2013 Acropolis - briefly. He was subsequently demoted to fourth, thanks to a two-minute penalty for using one more tyre than permitted during the rally, but the Spaniard's measured approach had once again paid dividends. Although there wasn't much measuring going on when he was in the thick of a battle with Mikkelsen. Pushing hard for another

Volkswagen podium lock-out, just 4.5s shy of Sordo, the Norwegian went off the road six miles from the end of the second run through Otates.

Mikkelsen's countryman Ostberg picked up fourth and was later promoted to third as a result of Sordo's penalty, in M-Sport's front-running Fiesta RS WRC.

Paddon was fifth. The Kiwi's speed between breaking suspension arms (the first on the same Las Minas bridge which ruled Meeke out in 2014) was another reason for Hyundai cheer.

The Koreans had come to Mexico with a shot at winning. Pre-event, there was plenty of humility and talk of podiums, but Thierry Neuville has demonstrated rally-winning speed here last year before crashing out of second place on the afternoon run at the El Chocolate stage. This time his hopes were extinguished first time around down the same stretch of road, when he damaged the car's steering. Worse was to come when he crashed heavily in Otates a day later. Neuville's nightmare continues.

One man who'd endured every driver's nightmare 12 months ago was Ott Tanak, when he rolled his Fiesta into a Los >>

Above: Neuville crashed out of the rally in Otates



POSTCARD FROM GUANAJUATO

IF YOU'RE GOING TO WRITE A POSTCARD PIECE, there's no better place to write it than from within the postcard itself. Sitting at the end of the Guanajuato stage, I'm in that postcard.

Travelling with WRC Live reporter George Donaldson is always a worthwhile experience. As a former director, manager and co-ordinator of some of the world's most successful rally teams, GD's a stickler for planning and approach. Predictably, we've arrived in plenty of time – having negotiated sleeping policemen of both varieties. The sun's just cresting the top of the hill behind us, meaning the cockerels in the valley below are ahead of their time. And now they've woken the dogs up.

Ground temperature, George assures me, is 4.6C. Our Volkswagen Jetta confirms an air temperature 2.4 higher. It's chilly. But not for long.

The gentle rumble of an all-American V8 marks the arrival of a fully laden GMC Sierra – fully laden, that is, with locals who have ridden the four miles from the nearest village in the back of the pickup truck. Their excitement is as tangible as it is contagious. They don't care about running order or regulations. They're here for the spacemen from another planet.

Tomorrow, this place will go back to being just another beautiful part of the world, with rolling and breathtaking – in every sense – cacti-littered mountains for 360 degrees. Tomorrow, the vast majority of these folk will be back to the daily grind of an ever-developing Leon.

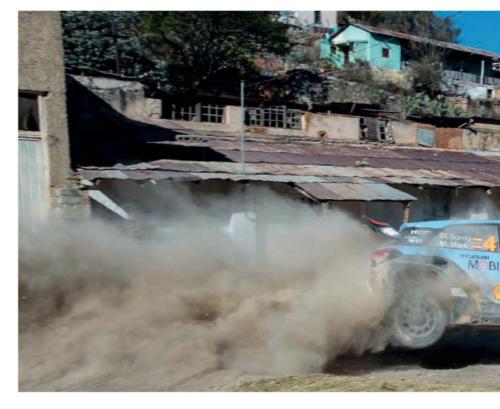
Today, tomorrow can go figure. The world has come to them, their backyard and this postcard.

The anticipation builds as the helis hover overhead. Dust billows in the distance, briefly painting the pale blue skies and then the noise of a full-bore World Rally Car dominates everything. Fifty miles up the road from the start, the first car arrives at the finish. To a man, woman and child, the place erupts.

Who is it? Who cares? Their world is complete.

DAVID EVANS





Mexicanos lake. The organisers avoided that stretch of road this time around. For Tanak, it was simply a case of putting miles beneath the wheels.

"I wouldn't have minded going back to that stage," said Tanak, "it was a nice stage! For us, we are waiting for the new tyre, which comes hopefully in Portugal. We had to finish here, that was the important thing."

If the Latvala win was telegraphed, one part of this year's Rally Mexico story came as a complete surprise — the continued use of soft tyres on the morning loop of stages. Granted, temperatures were as low as seven degrees when the cars were put into stage mode for the first time each day, but still this remained a major challenge to tyres.

Michelin's rally manager Jacques Morelli admitted he was surprised by what he saw. "This soft tyre," he said, "is exactly the same — the same compound and construction we are using in Wales. And the temperature is not like this in Wales in November!"

The explanation involves the high altitude and low temperatures, but there are two further facets: the depth of gravel and down-on-power engines.

"When you are early on the roads," said Mikkelsen, "there's a lot of loose stones on the surface, so you're not actually giving the tyres any work to do because we're not scratching through to the base of the road. And, of course, the power is not the same because of the altitude."

Morelli was keen to see some of the credit going the way of Clermont Ferrand.

"We introduced this new soft tyre in Finland two years ago," he said, "and we could see straight away the chemistry in the rubber and the construction of the tyre was good — it made it much more durable. That's what we've seen here."

But what about the other part of the Mexico story? What impact would tyres have on the most talked about stage in years? For the first time since the 1986 Tour de Corse, a competitive stage ran to 80 kilometres, 50 miles.

Guanajuato was a significant chapter in this year's Mexican tale. But surely this would go beyond Michelin's soft compound. Not quite. First on the road (courtesy of the forceful removal of a wheel on Saturday's Ibarrilla stage), Eric Camilli's Fiesta was delivered to the stage finish seventh fastest and still with tread beneath it.

The anticipation of Guanajuato was huge, the challenge apparently even greater. Fifty miles through a stage which varied greatly in character and tempo, going for miles with the cars bouncing off the limiter in top, to sections so technical and tight that they were reminiscent of the pitilessly twisty Motu Road stage in New Zealand, complete with overhanging vegetation and accompanying varying grip level. There were drainage ditches, cobblestones and peaks nudging 9,000 feet.

But the part which really caught the imagination was the competitive use of Derramadero. Usually reserved for a road section, it was the chance of a lifetime to see the cars literally flying into the village, landing on cobbles and then threading down the main street between the houses.

Waiting to talk to the crews at the end of the stage, there was no chance for me to enjoy such a sensory assault. Colin McMaster, the man who took most of the pictures you're looking at, did.

"I'm not over-egging it when I say it was unbelievable," McMaster said. "They were down through the houses at over



100mph. Fantastic. You'd have loved it!"
The story at the stage end wasn't anything like as dramatic.

In fact, 50 miles in 50-odd minutes didn't really do much for anybody. There had been talk of cars coming to the finish with wheels hanging off, punctures galore, drivers on the verge of collapse. In fact, the zero car was the only one of the front runners demonstrating any kind of impact, with its rear bumper hanging off.

Ogier admitted it had been a nice stage; Latvala only wanted 60km (probably in the hope that his brakes would last that long), and Ostberg?

"I didn't enjoy it at all. Why should I? It's too long. OK, there were some nice sections, but it's just so long. You end up just doing the same, the same and the same again. We need rally stages, not endurance. I understand the argument, but it's not for me."

None of the drivers looked desperately out of shape at the finish, but Paddon was one of the most fresh-faced.

"I'd quite happily turn around and go and do it again," he smiled. "I enjoyed it. For me, we should have longer stages like this in the championship; rallying's not all about balls-out stages, it's about tactics and stages like this make you think a little bit more."

Ultimately, the long stage failed to deliver the expected drama. The same could be said for Rally Mexico in terms of pure competition. But, as ever, from the underground stage and frankly bonkers reception from the locals in the city of Guanajuato on Thursday night to the WRC's longest road in three decades, this event provided something different. Something different, not least, because it was a rally Ogier didn't win.

Latvala won. And he got the T-shirt... *



1 Jari-Matti Latvala (FIN) Miikka Anttila (FIN) Volkswagen Motorsport Volkswagen Polo RWRC 4h25m57. 2 Sebastien Ogier (F) Julien Ingrassia (F) Volkswagen Motorsport Volkswagen Polo RWRC +1m05. 3 Mads Ostberg (N) Ola Floene (N) M-Sport WRT Ford Fiesta RS WRC +5m36. 4 Dani Sordo (E) Marc Marti (E) Hyundai Motorsport Hyundai i20 WRC +5m37. 5 Hayden Paddon (NZ) John Kennard (NZ) Hyundai Motorsport N Hyundai i20 WRC +6m22. 6 Ott Tanak (EST) Raigo Molder (EST) DMACK World Rally Team Ford Fiesta RS WRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RS WRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (II) FWRT Ford Fiesta RS WRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39.	RESULTS ROUND 3/14, RALLY MEXICO, GUANAJUATO (MEX), MARCH 4-6							
2 SebastienOgier(F) JulienIngrassia(F) VolkswagenMotorsportVolkswagenPoloRWRC +1m05. 3 MadsOstberg(N) Ola Floene(N) M-SportWRTFordFiestaRSWRC +5m36. 4 Dani Sordo (E) Marc Marti (E) Hyundai Motorsport Hyundai i20 WRC +5m37. 5 Hayden Paddon (NZ) John Kennard (NZ) Hyundai Motorsport N Hyundai i20 WRC +6m22. 6 Ott Tanak (EST) Raigo Molder (EST) DMACKWorld Rally Team Ford Fiesta RSWRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RSWRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RSWRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	POS	DRIVER	CO-DRIVER	TEAM	TIME			
3 Mads Ostberg (N) Ola Floene (N) M-SportWRTFord Fiesta RSWRC +5m36. 4 Dani Sordo (E) Marc Marti (E) Hyundai Motorsport Hyundai i20 WRC +5m37. 5 Hayden Paddon (NZ) John Kennard (NZ) Hyundai Motorsport N Hyundai i20 WRC +6m22. 6 Ott Tanak (EST) Raigo Molder (EST) DMACK World Rally Team Ford Fiesta RS WRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RS WRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RS WRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	1	Jari-Matti Latvala (FIN)	Miikka Anttila (FIN)	Volkswagen Motorsport Volkswagen Polo RWRC	4h25m57.4s			
4 Dani Sordo (E) Marc Marti (E) Hyundai Motorsport Hyundai i20 WRC +5m37. 5 Hayden Paddon (NZ) John Kennard (NZ) Hyundai Motorsport N Hyundai i20 WRC +6m22. 6 Ott Tanak (EST) Raigo Molder (EST) DMACK World Rally Team Ford Fiesta RS WRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RS WRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RS WRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	2	$SebastienOgier({\tt F})$	Julien Ingrassia (F)	$Volkswagen {\it Motorsport Volkswagen Polo RWRC}$	+1m05.0s			
5 Hayden Paddon (NZ) John Kennard (NZ) Hyundai Motorsport N Hyundai i20 WRC +6m22. 6 Ott Tanak (EST) Raigo Molder (EST) DMACK World Rally Team Ford Fiesta RS WRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RS WRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RS WRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	3	MadsOstberg(N)	Ola Floene (N)	M-SportWRTFordFiestaRSWRC	+5m36.4s			
6 Ott Tanak (EST) Raigo Molder (EST) DMACK World Rally Team Ford Fiesta RSWRC +9m59. 7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RSWRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RSWRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RSWRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	4	DaniSordo(E)	Marc Marti (E)	Hyundai Motorsport Hyundai i 20 WRC	+5m37.9s			
7 Martin Prokop (CZ) Jan Tomanek (CZ) Jipocar Czech National Team Ford Fiesta RS WRC +12m58. 8 Lorenzo Bertelli (I) Simone Scattolin (I) FWRT Ford Fiesta RS WRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGS Worldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	5	Hayden Paddon (NZ)	John Kennard (NZ)	Hyundai Motorsport N Hyundai i 20 WRC	+6m22.6s			
8 Lorenzo Bertelli (i) Simone Scattolin (i) FWRTFord Fiesta RSWRC +14m09. 9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGSWorldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RSWRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36	6	Ott Tanak (EST)	$RaigoMolder({\sf EST})$	DMACK World Rally Team Ford Fiesta RS WRC	+9m59.5s			
9 Teemu Suninen (FIN) Mikko Markkula (FIN) TGSWorldwide Ou Skoda Fabia R5 +18m01. 10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36	7	Martin Prokop (CZ)	Jan Tomanek (CZ)	${\it Jipocar Czech National Team Ford Fiesta RSWRC}$	+12m58.5s			
10 Valeriy Gorban (UA) Volodymyr Korsya (UA) Eurolamp WRT Mini John Cooper Works WRC +32m37. OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36.	8	Lorenzo Bertelli (I)	$SimoneScattolin {\it (I)}$	FWRT Ford Fiesta RSWRC	+14m09.6s			
OTHERS 13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36	9	Teemu Suninen (FIN)	Mikko Markkula (FIN)	TGSWorldwideOuSkodaFabiaR5	+18m01.8s			
13 Benito Guerra (MEX) Borja Rozada (E) Ford Fiesta RS WRC +44m39. 16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36	10	Valeriy Gorban (UA)	Volodymyr Korsya (UA)	Eurolamp WRT Mini John Cooper Works WRC	+32m37.3s			
16 Eric Camilli (F) Nicolas Klinger (F) M-Sport WRT Ford Fiesta RS WRC +1h09m36	ОТН	ERS						
·	13	Benito Guerra (MEX)	BorjaRozada(E)	Ford Fiesta RSWRC	+44m39.2s			
R AndreasMikkelsen(N) AndersJaegerSynnevaag(N) VolkswagenMotorsportIIVolkswagenPoloRWRCSS15-accided to the property of the proper	16	Eric Camilli (F)	NicolasKlinger(F)	M-SportWRTFordFiestaRSWRC	+1h09m36.4s			
	R	And reas Mikkelsen (N)	Anders Jaeger Synneva ag (N)	$Volkswagen {\it Motorsport II Volkswagen Polo RWRC}$	SS15-accident			
R Thierry Neuville (B) Nicolas Gilsoul (B) Hyundai Motorsport Hyundai i 20 WRC SS12-accide	R	Thierry Neuville (B)	NicolasGilsoul (B)	Hyundai Motorsport Hyundai i 20 WRC	SS12-accident			

DRIVERS' CHAMPIONSHIP

1 Ogier, 77; 2 Ostberg, 42; 3 Mikkelsen, 33; 4 Sordo, 30; 5 Paddon, 29; 6 Latvala, 27; 7 Tanak, 24; 8 Neuville, 15; 9 Lefebvre, 10; 10 Solberg, 6.

MANUFACTURERS' CHAMPIONSHIP

1 Volkswagen Motorsport, 97; 2 Hyundai Motorsport, 61; 3 M-SportWRT, 46; 4 Volkswagen Motorsport II, 30; 5 DMACK World Rally Team, 26; 6 Hyundai Motorsport N, 24.

STAGE TIMES			
STAGE	FASTEST	LEADER	SECOND
SS1 Street Stage Guanajuato 0.68 miles	Neuville 59.1s	Neuville	Bertelli +0.1s
SS2 SuperSpecial 1.43 miles	Ogier 1m38.9s	Ogier	Neuville +0.9s
SS3 SuperSpecial 2 1.43 miles	Ogier 1m38.1s	Ogier	Neuville +1.7s
SS4 El Chocolate 1 33.68 miles	Latvala 38m48.1s	Latvala	Ogier +19.0s
SS5 Las Minas 1 9.54 miles	Latvala 11m00.1s	Latvala	Ogier +22.4s
SS6 StreetStageLeon1 0.85 miles	Mikkelsen 1m19.0s	Latvala	Ogier +21.2s
SS7 El Chocolate 2 33.68 miles	Latvala 38m16.3s	Latvala	Ogier +31.2s
SS8 Las Minas 2 9.54 miles	Latvala 10m57.7s	Latvala	Ogier +31.7s
SS9 SuperSpecial 3 1.43 miles	Latvala 1m39.1s	Latvala	Ogier +32.5s
SS10 SuperSpecial4 1.43 miles	Ogier 1m38.1s	Latvala	Ogier +32.1s
SS11 Ibarrilla 18.88 miles	Latvala 17m41.8s	Latvala	Ogier +51.9s
SS12 Otates1 26.48 miles	Latvala 29m39.8s	Latvala	Ogier +1m13.6s
SS13 El Brinco 1 4.44 miles	Latvala 4m00.5s	Latvala	Ogier +1m16.3s
SS14 AguaZarca1 10.23 miles	Latvala 10m07.6s	Latvala	Ogier +1m21.9s
SS15 Otates2 26.48 miles	Latvala 29m17.8s	Latvala	Ogier +1m34.1s
SS16 El Brinco 2 4.44 miles	Latvala 3m57.3s	Latvala	Ogier +1 <i>m</i> 36.3s
SS17 SuperSpecial 5 1.43 miles	Sordo 1m39.2s	Latvala	Ogier +1 <i>m</i> 37.5s
SS18 SuperSpecial 6 1.43 miles	Ogier 1m38.1s	Latvala	Ogier +1 <i>m</i> 36.8s
SS19 StreetStageLeon2 0.85 miles	Ogier 1m18.6s	Latvala	Ogier +1 <i>m</i> 35.7s
SS20 Guanajuato 49.71 miles	Ogier 48m06.8s	Latvala	Ogier +1m10.4s
SS21 AguaZarca2(PowerStage) 10.23 miles	Ogier 9m57.1s	Latvala	Ogier +1m05.0s





Has Montoya MkII's best chance gone?

The Colombian was denied a remarkable championship success in the most dramatic fashion last season. He and his rivals believe there is more to come

By Bruce Martin, American Editor

■ @BruceMartin_500

sk Juan Pablo Montoya if the 2015 IndyCar Series season was his last, best shot at winning a championship and be prepared for a direct answer from the 40-year-old Colombian. "Eh, I've won a championship already,"

Montoya says, referring to his 1999 CART title. "People remember you for how many times you've won the Indianapolis 500. I've done that twice. I've done a lot of great things. I won the

Monaco Grand Prix and two Indianapolis 500s. 2015 was a good year, but we have to step it up this year."

Montoya appeared to be unstoppable in last year's championship. After winning the season-opening St Petersburg round on March 29, he had created a path to lead the points from flag to flag for the entire season. When he arrived at the final race of the season, at Sonoma on August 30, it was going to take a highly unusual set of circumstances for a driver other than Montoya to celebrate as champion.

The unusual came to pass on a lap 39 restart, when Team Penske team-mate and 2014 champion Will Power tried to pass Scott Dixon for the lead and Josef Newgarden was setting up to pass Power at Turn 5. Power pulled out in front of Montoya and the two Penske cars collided.

"It was aggressive on a restart but Will was doing what he needed to do to win the race," Montoya recalls at the recent Phoenix IndyCar test. "We ended up in the crossfire."

Title outsider Dixon did exactly what he had to do by leading the most laps and winning the race. Montoya was able to race his way back to sixth position and both drivers finished the season tied on points, but Dixon won his fourth IndyCar title thanks to three wins to Montoya's two.

Ironically, when Montoya won his only championship as a rookie in CART in 1999, he finished tied with Dario Franchitti but won on the same tie-breaker — seven wins to Franchitti's three. But he didn't take being on the other end very well last year.

"It sucks, but when you make double points the last race in a road course, and you change the tyre, and you do everything you did for this weekend, and you put so many variables, it doesn't even matter what >>>

INDYCAR/PREVIEW

you do all year," Montoya said afterwards. "Dixon had a shit season all year and had one good race, and we paid the penalty."

Several months later he's still not really enamoured with the concept of double points. OK, Montoya cashed in last year with victory in the Indy 500 — the other double-points race on the schedule — but if you eliminated the idea entirely then he would have won the title narrowly from Dixon.

"The funny thing is, if you take everything out of double points and into single points, I would still be leading the points — I would still win the championship," Montoya points out. "You need to be consistent, but last year I had pretty much a race distance over Scott Dixon and finishing sixth [in the final race] wasn't enough. It's really screwed up when, in a normal race, if you finished 20th, you would have still beat him [in the championship]."

Fuming about it he still may be, but in the meantime Montoya has been preparing his 2016 campaign. On the afternoon of August 30 last year he suffered the bitter disappointment of title defeat; on August 31 he was having lunch with his Team Penske race engineer Brian Campe to plot the strategy for another championship run. "That's the way we work," Montoya says. "That's the reason we're so good. That's why we led the championship all year. That's why we won the Indy 500. We execute, we perform and we do what it takes.

"I'm very passionate. Roger Penske hired me to get the job done and I do my best to get the job done. I love working for Team Penske and I work hard at it. There is a lot of anticipation on my side what will happen this year. I think last year I proved I was quicker. I have evolved really well through my group of guys and engineers.

"We'll start the season and see how good we are or how bad we are, and how much work we have to do. If you do a good job — move on to the next one. If you do a bad job — you still have to move on to the next one. It's about running smart, take what it gives you and then see what happens."

Penske team manager Jon Bouslog, who serves as Montoya's race strategist, believes his charge has what it takes to go one better than he did in 2015. Bouslog has been part of 11 Indy 500 wins at Team Penske but Montoya's dramatic drive from the back of the pack to the front in the 99th running of the event was Bouslog's first Indy 500 success on top of the timing stand.

He believes that the way Montoya lost the championship last year only fuels his desire to win it all in 2016.

"I think he still has a lot of good years in him," Bouslog says. "He is definitely very focused. He has a lot of unfinished business now and a lot of pressure to seal the deal. A lot





ANDRETTI AUTOSPORT



CARLOS
MUNOZ (CO)
AGE 24
STARTS 37
WINS 1
DEBUT 2013
BEST 8TH ('14)



 MARCO

 ANDRETTI
 (USA)

 AGE
 28

 STARTS
 168

 WINS
 2

 DEBUT
 2006

 BEST
 5TH ('13)



RYAN
HUNTER-REAY (USA)
AGE 35
STARTS 186
WINS 16
DEBUT 2003
BEST 1ST ('12)



ALEXANDER
ROSSI (USA)
AGE 24
STARTS 0

SCHMIDT PETERSON MOTORSPORTS



JAMES
HINCHCLIFFE (CDN)
AGE 29
STARTS 74
WINS 4
DEBUT 2011
BEST 8TH ('12, '13)



 MIKHAIL

 ALESHIN
 (RUS)

 AGE
 28

 STARTS
 18

 BEST FINISH
 2ND

 DEBUT
 2014

 BEST
 16TH ('14)







TEAM PENSKE



 JUAN PABLO

 MONTOYA
 (CO)

 AGE
 40

 STARTS
 75

 WINS
 14

 DEBUT
 1999

 BEST
 1ST ('99)



HELIO
CASTRONEVES (BR)
AGE 40
STARTS 312
WINS 29
DEBUT 1998
BEST 2ND ('02, '08,
 '13, '14)



WILL
POWER (AUS)
AGE 35
STARTS 156
WINS 25
DEBUT 2005
BEST 1ST ('14)



SIMON
PAGENAUD (F)
AGE 31
STARTS 85
WINS 4
DEBUT 2007
BEST 3RD ('13)

ED CARPENTER RACING



ED
CARPENTER (USA)
AGE 35
STARTS 160
WINS 3
DEBUT 2003
BEST 12TH ('09)



JOSEF
NEWGARDEN (USA)
AGE 25
STARTS 67
WINS 2
DEBUT 2012
BEST 7TH ('15)

of things went our way last year. We need to make a lot of things go our way this year, which is going to be tough. Simon Pagenaud [team-mate] is going to run better. He has a year with the team — he is going to be a lot tougher, Helio Castroneves and Will Power too.

"I think we really need to start where we left off."

Bouslog believes the downfall to Montoya's championship charge did not occur in the final race of the season. He had suspension failure early in a race at Iowa Speedway in July and was the first driver out of the contest. He was also the victim of an ill-timed yellow flag when he made a pit stop at Mid-Ohio in August that ended his chance at challenging for victory.

"There are a lot of things in sports that have been decided by one point or one place," Bouslog says. "It hurts a lot to be that close. We did a lot of things right and we were fortunate a lot of time during the season. We would like to have some things back that we didn't have, like Iowa.

"But it's just the way it happened. It wasn't meant to be.
There were a lot of things we did well. He drove incredibly well.
The star of the team was him. We were dead last at Indianapolis and we end up winning the race. That was the drive of a lifetime there. I expect him to be as good, if not better, there this year."

When Montoya made the decision to leave the NASCAR Sprint Cup at the end of 2013 to return to IndyCar, it took him a while to adapt to this form of racing again. A win at Pocono

Raceway in July 2014 started a one-year stretch where Montoya was among the top drivers in the series.

"Winning gave him a lot of confidence," Bouslog says. "He was running well before Pocono. The win at Pocono proved he could do it. A lot of these guys have questions when they go through their careers — can they still be competitive? Yes, he can be competitive.

"There is a lot more to him than people realise. We were fairly conservative last year with him in our strategy, but there is a lot more he can do. He is a great racer. To use his strengths and racecraft in 2016 is something we might use to capitalise on more."

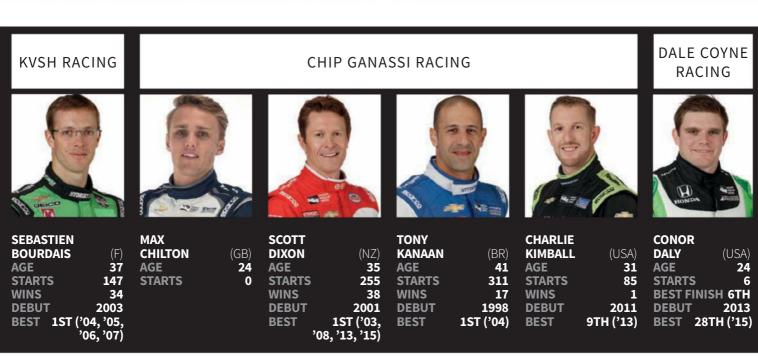
Montoya has plenty of competition for this year's title, including his three team-mates at Team Penske. Power is as fierce as ever and Pagenaud is hoping to rebound from a disappointing season where he finished without a win and out of the top 10 in points. And, at 40, Castroneves has not slowed down, even though some seem to want to overlook the three-time Indy 500 winner from Brazil.

Montoya has some talented team-mates but he'll put his record against all of them.

"Has Simon won any Formula 1 races?" Montoya said.
"Has Helio? Has Will? Have they won the 24 Hours of
Daytona? Any of them won any NASCAR Cup races? Well,
I have won all of those, so that should keep me on the radar.







Has Honda caught up with Chevrolet?

THE GAP HAS BEEN narrowed between the Chevrolet and the Honda kits as IndyCar enters year two of the 'era of aero'. Last year, the advantage of extra downforce and less drag for Chevrolet teams upset the competitive balance.

The aero-kit project was designed to differentiate between the two brands in looks as well as having a competitive influence. Over the winter, Chevrolet and Honda were both allowed to make changes to three areas of the car known as 'volume boxes', but Honda got an extra boost when it proved it had a competitive

disadvantage. Its changes include two thirds of the sidepods – the leading edge and upper third are unchanged from 2015 – and the rear tyre 'ramps' just ahead of the rear wheels.

Both manufacturers have updated the front and rear wings and rear wheelpods.

Honda's front wings now resemble those on the Chevrolet while Chevy's rear winglets above the rear fender guard resemble the Honda kit from 2015. Honda did not receive any permitted upgrades to its superspeedway kit, other than the same three 'volume boxes' as Chevrolet

- which has not rolled out all of its changes and will debut a new rear bumper pod for the opening race, before focusing on the other two 'boxes' later on.

Wirth Research, which was involved in the original design, worked with the aero/chassis department at Honda Performance Development on the superspeedway kit, after HPD took on greater responsibility for the main design. The Honda teams were pleased with the increase in downforce and performance from the updates in testing at Phoenix in February.

"We won't know all the gains we've made until we get to St Pete"

"I know the new kit is more inviting to the driver," said Ryan Hunter-Reay of Andretti Autosport. "It gives you more confidence behind the wheel. The other kit would always try to snap on you and bite you – always trying to come back at you. This one just allows you to

drive it harder, hustle it more. It has a bigger margin for error. That's downforce. Chevy had a massive advantage on us when it came to downforce on a road course. Now, we have some of that back. We'll see where it is and the gains that Chevy made and where we'll stand, but we won't know some of that until we get to St Pete."

Team owner Michael
Andretti had objected to the
aero-kit project because he
believed it was a needless
expense and would destroy
the competitive balance.
Tellingly, he is much more
upbeat this year.



"I think I'm really good and I think we have really good team-mates. It's a matter of getting the job done. It's not about what we have done; it's about what we do."

Young Josef Newgarden is another driver capable of stepping up to the next level at Ed Carpenter Racing. He won two races in 2015 and is targeting a title challenge this time round. Similarly, fellow American Graham Rahal finally had a breakout season last year, and was the lone Honda driver to achieve success with the underperforming aero kit. Rahal won three races and finished fourth in the standings, and his ability to table consecutive championship challenges is another key question for the coming season.

"We expect more of ourselves than anyone else will ever expect out of us," says Rahal, who will once again largely be a solo runner for his father's Rahal Letterman Lanigan Racing team, albeit joined by reigning Indy Lights champion Spencer Pigot for three races. "We were good at a lot of places last year and maximised points at a lot of places, but there were also several places where we didn't. With all the work Honda has put in this year I have no doubt the car will be an improvement — we'll close the gap and be even better."

With two victories and one second-place finish in the final four races of 2015, Ryan Hunter-Reay was the hottest driver at the end of the year, the 2012 champion's form indicating that Andretti Autosport was another Honda team to have got on top of running with the new aero kit.

"By the time we knew it, we were midway through the season without anything to show for it," Hunter-Reay recalls. "We kept working. We kept our heads down. We were resilient.

"The Iowa victory [Hunter-Reay's first of the season] was massive. That was one of the biggest wins of my career because of how much of an upside it was and how much of a turnaround point it was. It was a statement win. We really had to dig deep to win that one. I remember crossing the finish line and being so happy I didn't have the energy to lift my arms to celebrate."

And then there is Dixon, the four-time IndyCar Series champion who will again lead the attack of Chip Ganassi Racing. "The finish to last year's championship and how it played out, the odds were stacked against this team but it showed what we could do as a group," he says. "To come down to the last lap of this championship was exciting for us and to me it was the most special championship because it was completely unexpected."

These are all reasons why Montoya has his work cut out to replicate the title push of 2015. The opposition is very strong and he will have to kick on if he's to grab another single-seater crown. The good thing is he's obviously classy enough to make another step. Just ask rival team owner and threetime series champion Bobby Rahal.

"Juan is pretty good and he's with a damn good team," he says. "No, I don't think it's his last chance. He's a hell of a good driver. If he hears something like that he is the type of guy that will say, 'I'll show you.' I don't believe that was his last, best chance."







AJ FOYT RACING

JACK

AGF

STARTS

DEBUT

HAWKSWORTH

BEST FINISH

BEST 17TH ('14, '15)

(GB)

33

3RD

2014



TAKUMA
SATO (J)
AGE 39
STARTS 103
WINS 1
DEBUT 2010
BEST 13TH (*11)

DREYER & REINBOLD



SAGE	
KARAM	(USA)
AGE	20
STARTS	13
BEST FINISH	3RD
DEBUT	2014
BEST 20TI	H ('15)

RAHAL LETTERMAN LANIGAN RACING



GRAHAM	
RAHAL	(USA
AGE	27
STARTS	145
WINS	3
DEBUT	2007

BEST

4TH ('15)



(USA)
22
0

THE CALENDAR

Street circuits, permanent road courses, short ovals and superspeedways are all thrown into the IndyCar Series schedule. Here are the races that will be fought out in 2016

ST PETERSBURG MARCH 13

A bumpy street circuit with surface changes, thanks to its mix of public roads and a runway of the Albert Whitted Airport. At 1.8 miles and 14 turns, it's an unorthodox and challenging track that creates plenty of action.

PHOENIX APRIL 2

A classic short oval that measures 1.022 miles and was built for Indycars in 1964, but has not held an IndyCar contest since March 19 2005. Since that time, it has been repaved and slightly banked to accommodate its two NASCAR dates and could be a one-groove track for IndyCar.

LONG BEACH APRIL 17

North America's greatest street-course race was for a while looked upon as the US's answer to the Monaco Grand Prix when it was run for F1 in 1976-83. The 1.968-mile, 12-turn track is picturesque, with the famed Queen Mary in the background. It's also bumpy, narrow and very tight, making it an extreme challenge.

BARBER MOTORSPORTS PARK APRIL 24

A beautiful, permanent road course outside of Birmingham, Alabama. Originally built for motorcycle racing, the 2.38-mile, 17-turn road course has become a favourite for drivers and spectators alike. It's fast, tight and challenging.

GRAND PRIX OF INDIANAPOLIS MAY 14

Considered the 'grand jewel' of road courses because it is smooth, very wide and inside the Indianapolis Motor Speedway, this is the old Formula 1 road course made better to increase passing zones and degree of difficulty. It's 2.439 miles and 14 turns of great spectator viewing.

INDIANAPOLIS 500 MAY 29

It's the most historic racing facility on the planet and the site of the 100th Indianapolis 500. Built in 1909, the unique, flat, four-cornered, 2.5-mile oval has two long straights and two short straights between the turns. It's historic and spectacular with high speeds and crowds of 300,000 spectators on race day.

BELLE ISLE JUNE 4 & 5

This is the only venue that hosts a double-header on the series schedule. It's held on Belle Isle, a public park in Detroit, and draws more corporate support than individual spectators.

Since Roger Penske took over the promotion of the race, dramatic improvements have been made to the paddock and the 2.34-mile, 13-turn racing surface.

TEXAS MOTOR SPEEDWAY JUNE 11

The only track on the current IndyCar Series schedule since 1997 other than the Indianapolis Motor Speedway. The high-banked superspeedway created 'pack racing' back in 1997, but in recent years the aerodynamic package has allowed the field to spread out around the 1.5-mile, 24-degree banked oval.

ROAD AMERICA JUNE 26

A favourite among drivers, teams and spectators, this 4.408-mile, 14-turn track returns to the Indycar schedule for the first time since the 2007 Champ Car Series race. It is the closest thing to a European-style road course in North America.

IOWA SPEEDWAY JULY 10

Very popular venue among grassroots race fans. It's a short track in the heartland of America that acts like a superspeedway. It's just 0.875 of a mile in length, but, at 12-14 degrees of banking in the turns and 10 degrees on the front straight, the speeds are very fast and the racing is very good.

TORONTO JULY 17

After a one-year move to June because of last year's Pan American Games, this popular street race in Toronto is back on its traditional date. The 11-turn, 1.75-mile circuit is quite slippery and the walls are very narrow, so it often resembles IndyCar's version of a hockey game.

MID-OHIO JULY 31

Another popular venue, especially for Honda because it has a production facility in nearby Marysville, Ohio. This is another old-school road course and its most famous turns are 'The Keyhole' and 'The Carousel'. The 2.258-mile, 13-turn track is challenging to pass on, and the race is often decided through pit strategy.

POCONO RACEWAY AUGUST 21

This oval is actually unique in racing, being a 2.5-mile triangle with just three turns. This is a track built especially for Indy cars in the late 1960s. All three turns are different and including the bumpy 'Tunnel Turn' - the second corner. It's a thrilling place to watch an IndyCar race.

BOSTON SEPTEMBER 4

A new event on the schedule, this is a 2.25-mile, 11-turn street course that winds through the Seaport District of one of America's most historic cities.

SONOMA SEPTEMBER 18

Another beautiful permanent road course, Sonoma has plenty of twists, turns and elevation changes around its 2.385 miles and 12 turns, making it a high-speed rollercoaster road for IndyCar. Located in California's Wine Country, it's a fitting place to celebrate the series championship.

STOCK



Percat gets his tail up for surprise success

V8 SUPERCARS ADELAIDE (AUS) MARCH 5-6 ROUND 1/15

THREE DIFFERENT HOLDEN DRIVERS shared the race wins in Adelaide but none of them — or any other Holden or Ford driver, for that matter — leads the 2016 championship.

Jamie Whincup and James Courtney shared the two Saturday wins but it will be Sunday's race that will be talked about long into the future. In torrential rain that led to the first race starting behind a safety car, then stopped, then cut short, Nick Percat broke through for his maiden solo win, and the first for team owner Lucas Dumbrell.

Percat looked set for a high-ish finish, but in the closing laps a number of teams realised that they still needed to complete the minimum refuelling 'drop' of 140 litres, despite the race being shortened from 78 to 48 laps because of the rain. So one by one the drivers ahead of him pitted, leaving a delighted Percat to take the flag.

Nissan Altima driver Michael Caruso took second place and with it a somewhat unforeseen early points lead, ahead of the Holden Racing Team's Garth Tander.

Six-time champion Whincup returned to his end-of-2015 dominant form to win the opening race with his Triple Eight-run Red Bull Holden before HRT man Courtney fought him off brilliantly to win the second, both

races conducted in stifling heat. Shane van Gisbergen finished on the podium in his first race as a Red Bull driver.

Reigning champion Mark Winterbottom had a tough weekend, suffering small set-up problems in his Ford, and not aiding his own cause much when he started the final, wet race on slicks. He finished the weekend in 12th place in the points.

The other Ford drivers also impressed, with Scott Pye and Fabian Coulthard both taking poles for DJR Team Penske and running strongly on Sunday, until each was penalised post-race for not meeting the minimum fuel requirements.

Winterbottom's team-mate Chaz Mostert, returning to racing after a five-month recovery from a broken leg, took the other pole and led race two early before finishing on the podium. But his Sunday turned bad when he hit the notorious Turn 8 concrete wall, damaging his Ford too badly to continue.

PHIL BRANAGAN

RESULTS

Race 1 Jamie Whincup (Holden Commodore), 39 laps in 56m43.1447s; 2 James Courtney (Holden), +3.9266s; 3 Shane van Gisbergen (Holden); 4 Scott McLaughlin (Volvo S60); 5 Garth Tander (Holden); 6 Todd Kelly (Nissan Altima). Race 2 1 Courtney, 39 laps in 59m37.1268s; 2 Whincup, +0.6310s; 3 Chaz Mostert (Ford Falcon); 4 McLaughlin; 5 van Gisbergen; 6 Michael Caruso (Nissan). Race 3 1 Nick Percat (Holden), 48 laps in 1h49m03.6598s; 2 Caruso, +7.1095s; 3 Tander; 4 Cameron Waters (Ford); 5 David Reynolds (Holden); 6 T Kelly. Points 1 Caruso, 222; 2 Whincup, 207; 3 Tander, 202; 4 van Gisbergen, 197; 5 McLaughlin, 189; 6 Courtney, 186.



Pizzonia stars for flu-hit Gomes

V8 STOCK CARS CURITIBA (BR) MARCH 6 ROUND 1/12

REIGNING CHAMPION MARCOS Gomes started his season in style thanks to a great performance from co-driver Antonio Pizzonia in the series' annual two-driver race.

A flu-ridden Gomes struggled in qualifying but Pizzonia hauled the Voxx Racing Peugeot up the grid (decided on an average of the times of each car's two drivers) to fifth. Poleman Ricardo Mauricio led the race up to the pitstops and driver changes, with Gomes — charging along as others saved their tyres — passing Thiago Camilo for second one lap before pitting.

Pizzonia rejoined in front, with Guilherme Salas (in for Mauricio) battling for second with Antonio Felix da Costa (who replaced Allam Khodair), and Augusto Farfus (co-driving with Rubens Barrichello) catching them up. That was until Farfus's brilliant effort ended when he got pulled in for a drive-through penalty after rough tactics in his battle with Lucas di Grassi.

With only four of his 18 'speed boosts' available, Pizzonia had to do his very best to stay in front, but was able to pull away due to the fight behind. Eventually, da Costa found his way past the promising young Salas with a spectacular jink at the end of the main straight, but it was too late to attack for the lead.

Di Grassi, in the Camilo car, was

fourth on the last lap when a right-front tyre blowout dropped him to 14th. Rodrigo Sperafico, who took over from Felipe Fraga, came home fourth, but a 20-second penalty for Fraga squeezing out Daniel Serra pushed the duo down to 16th. Atila Abreu and Nelson Piquet Jr clawed from the back of the grid to sixth.

RESULTS

1 Marcos Gomes/Antonio Pizzonia (Peugeot 407), 46 laps in 1h06m42.638s; 2 Allam Khodair/ Antonio Felix da Costa (Chevrolet Cobalt), +1.398s; 3 Ricardo Mauricio/Guilherme Salas (Chevy); 4 Daniel Serra/Danilo Dirani (Chevy); 5 Ricardo Zonta/Laurens Vanthoor (Chevy); 6 Atila Abreu/Nelson Piquet Jr (Chevy).

Points 1 Gomes, 6; 2 Khodair, 5; 3 Mauricio, 4; 4 Serra. 3: 5 Zonta. 2: 6 Abreu. 1.

Evans and BRC both back on track

BRITISH RALLY CHAMPIONSHIP MID WALES STAGES (GB) MARCH 5-6 ROUND 1/7

ELFYN EVANS WAS THE WINNER on the BRC's return after a year's hiatus, but he was pushed all the way by fellow Ford Fiesta R5 driver Fredrik Ahlin.

Evans opened the rally with a win on the first night stage, run in snowy conditions on roads used on Rally GB. But Swede Ahlin fought back in the second dark test to go quickest overall to trail Evans by 17.2s overnight.

Evans clearly had an advantage on his home stages in the dark, but the Pirelli tyres used by Ahlin performed better in Sunday's morning stages than Evans's



DMACKs, and with two stage wins Ahlin had the lead by just over three seconds at service.

Evans was unfazed, and with a tyre-compound change the Welshman backed up his strong words at the previous halt and gapped Ahlin on stage five to retake the lead. He also headed the final stage to win by just over 17 seconds.

RESULTS

1 Elfyn Evans/Craig Parry (Ford Fiesta R5), 1h08m14.3s; 2 Fredrik Ahlin/Morton Erik

Abrahamsen (Ford), +17.1s; 3 Tom Cave/ James Morgan (Ford); 4 David Bogie/Kevin Rae (Skoda Fabia R5); 5 Euan Thorburn/ Paul Beaton (Peugeot 208 R5); 6 Josh Moffett/John Rowan (Ford).

Points 1 Evans, 50; 2 Ahlin, 15; 3 Cave, 10; 4 Bogie, 8; 5 Thorburn, 6; 6 Moffett, 5. NB Evans used double-points joker.

IN BRIEF

ADELAIDE SUPPORTS

Paul Dumbrell and Garry Jacobson shared the Dunlop V8 Supercar wins in Adelaide, Dumbrell's race-two DNF giving Jacobson a handy points lead. Nick McBride took round honours in the Carrera Cup Australia, despite a five-second penalty for a jumped start costing him the final race to Michael Almond. Matt Campbell and Ash Walsh won the other races. Roger Lago (Lamborghini), James Koundouris (Audi) and Tony Walls (McLaren) shared the wins in Australian GT, though consistency has handed Glen Wood/Justin McMillan (Lamborghini) the series lead.

NASCAR SPRINT CUP

Brad Keselowski recovered from a mid-race penalty to power past Kyle Busch and Joey Logano on his way to victory at Las Vegas. The Team Penske star was caught speeding in the pitlane, but a number of late cautions brought his Ford back into play, and a late charge saw him dart from third to first past Logano and leader Busch, who suffered tyre vibrations. Logano came second, while Jimmie Johnson took third.

PIRELLI WORLD CHALLENGE

Patrick Long and reigning champion Johnny O'Connell took honours for Porsche and Cadillac respectively in the opening round at Austin. Long patiently wore down Bryan Heitkotter, passing the Nissan with 10 minutes remaining, with Michael Cooper's Cadillac third. Heitkotter also led race two before O'Connell pounced. The ensuing scrap for second ended with a flat tyre for Heitkotter and track-limits penalties for McLaren's Alvaro Parente and Bentley boy Andrew Palmer. That gave Cooper second from the McLaren of Jon Fogarty.

EUROFORMULA OPEN

Leonardo Pulcini and Diego Menchaca won the Winter Series races at Paul Ricard. Pulcini claimed the lead of the opener from poleman Ferdinand Habsburg on the first lap. Tatiana Calderon also passed Habsburg, but could not catch Italian Pulcini's Campos Racing car. Menchaca took the lead of the reversed-grid race at the start and won from Habsburg and Pulcini. A surprise F3 debut gave Jack Aitken two seventh places.

CONTROVERSY



FORMULA 1

Halo test brings driver

FERRARI'S BRIEF TRIAL OF THE SO-CALLED halo safety device during last week's Barcelona test certainly captured the headlines. The halo, which fits over the open cockpit and is designed to deflect flying debris and tyres, is just one step in ongoing work on the possibility of improving head protection, potentially for introduction as early as 2017.

Amid all the hand-wringing over whether this aesthetically displeasing device or another one like it is right for Formula 1 (and there are several such concepts being investigated by the FIA Institute), what will drive the decision to adopt such technology will be whether it works.

An article in the latest issue of the FIA's *Auto* magazine (available online) reveals more about the research process. It details tests of three concepts — the halo, the centre-line rollhoop (three curved bars braced from the front of the cockpit to the rollhoop) and the additional front protection (AFP, which is designed to deflect a flying tyre over a driver's head). In the case of the halo, tests suggest it can stand up to the impact of an F1 wheel assembly fired at 140mph from 20 metres. But research is ongoing to ensure that it's a net safety benefit.

"The good news is that the three structures we tested performed as expected or even better than expected," FIA safety director Laurent Mekies is quotes as saying in *Auto*. "We are pushing very hard to integrate it as early as possible. I'm sure it will trigger a few connected research topics to assess visibility, extrication and some of the other aspects, so I'm expecting some validation testing to be done in the course of the next six months. But we're all trying to make that cut [for 2017]."

Despite the fact that the tyre deflects on impact, the crash tests showed good results in terms of ensuring that it did not impact the driver's helmet. The test of the halo, which was designed by Mercedes in conjuction with the FIA, suggests visibility is not a major obstacle.

"It's a slightly different view," said Raikkonen.
"We're a bit limited in the front but I don't
think it's the final version. There was
surprisingly little difference."

The carbonfibre halo was built by Ferrari for the test. While the intention for a final design would be for it to be hinged to open from the front to allow the driver to get in and out, the test version was fixed and Raikkonen got into



head protection closer

"Sebastian

Vettel accepted

was unsightly"

the cockpit through the top of it. The Finn only completed a single lap with the halo in order to assess its effect on visibility.

Inevitably, the reaction was mixed. There was plenty of criticism from among the fanbase on social media. Nico Hulkenberg agreed with that reaction and criticised the halo when asked.

"It sends the wrong message," he said.

"Formula 1 is very safe at the moment. It looks horrible, I don't like it and it's just one of these little personal things that I wouldn't like to see.

You can't sterilise the sport. that the halo There needs to be an element of danger – I think in a way that's sexy and attractive and it's also what Formula 1 needs."

Other drivers were in favour; Daniel Ricciardo openly took issue with the Force India driver.

"I heard Hulkenberg say some things," said Ricciardo. "I don't agree with that because there's no need to be a hero about the situation. It doesn't change the sport or the speed of the car. It's just if there are any flying objects, it's extra protection."

Sebastian Vettel accepted the halo was unsightly, but backed the research because of the potential safety benefits.

"If it helps increase the safety and helps save lives, there would be at least two drivers who would still be around – Henry Surtees and Justin Wilson - if we had this type of system. It's ugly, but nothing justifies not having these two guys

around any more."

Vettel has a point. While this kind of protection is very unlikely to have made any difference in the case of the accident that cost Jules Bianchi his life, it does tackle the main area where drivers are exposed. That makes it a valid route for investigation.

But any such changes will not be rushed through, despite the widespread desire to adopt head protection for 2017. Since the death of Ayrton Senna in 1994, the FIA's approach to safety technology has been heavily data-driven, and work is still to be done to prove scientifically that there is a net safety gain.

EDD STRAW



IS THE NEW HALO

The consensus of those who watched Ferrari's test of the new halo headprotection concept at the track in Spain, including the drivers, is that it looks a bit stupid. Having also been there I share that viewpoint, but for different reasons not related to how good or bad it looks. It's a question of safety.

There are two ways for a structure of this type to achieve its goal. The first way is that the structure must be strong enough and stiff enough to withstand the loads imposed on it in the tests. This load would be what a wheel and upright assembly weighing roughly 20kg would be if it were travelling at something like 50 metres per second. This is about half the car speed achieved at somewhere like Monaco.

The second is that it needs to act as an absorbing structure to take some of the energy out of what has hit it. From what I have seen. it doesn't look like the central front support will achieve either of these.

But my biggest worry is if something smaller gets thrown up. The opening between the cockpit rim and the halo is inviting that kind of component to come in. At that point. it can't be deflected away from the head and it will be contained in this area and hit the helmet.

So a large deflector screen is required. This can be designed to deflect and absorb any component thrown at it.

GARY ANDERSON

OBITUARY

Alan Henry 1947-2016

ALAN HENRY'S FIRST BREAK IN motorsport journalism came after writing a letter to *Autosport* in 1968 complaining about the quality of a race report.

"One day I was moved to write to Simon Taylor, then club editor of *Autosport*, advising that I had been to Brands Hatch the previous weekend and that their magazine's report was rubbish," wrote Henry in his autobiography *Last Train From Yokkaichi*. "Simon wrote back briskly and said, 'If you think you can do better, write a dummy report.' I did, and the next thing I knew was that my mother's eight-year-old Morris Minor Convertible was heading for Snetterton."

That opportunity laid the foundations for an illustrious career. At the time of that first chance, he was still working for Barclays International, but it was when he was offered the job as reporter for Motoring News in June 1970 that his career really gained momentum. It also pitched him in direct opposition to Autosport, at one stage engaging in an escalating war with Ian Phillips to include the most arcane information in their respective titles' Formula 2 coverage. In a brutal denouement, Henry won thanks to "printing a carefully prepared list of the top gears being used by the fastest cars and supplementing these with engine rev limits in third, fourth and fifth at the end of practice".

After covering his first grand prix — at Silverstone — in 1973 Henry was soon covering Formula 1 full-time, and he continued to do so until the 2009 Japanese GP. By his own count, he covered close to 650 grands prix. Henry was famed for his ability to see the big picture in grand prix racing, weaving together the narrative threads and avoiding getting too bogged down in irrelevant detail — although he knew the detail very well. Those skills made his coverage in



Motoring News a must-read, and entertained and informed readers through a plethora of motorsport books. He cited Brabham: The Grand Prix Cars, published in 1985, as his finest but he also wrote on Ferrari, Niki Lauda, Damon Hill, Jenson Button, Ronnie Peterson and Ayrton Senna among his 50-plus books.

He was also known for his close relationship with some big names of the 1970s, including Tom Pryce and Ronnie Peterson, whose deaths hit him hard, but did not discourage him from following the sport. Henry was editor of *Motoring News* from 1976 to '79 and remained there until he went freelance in '88. He was subsequently F1 correspondent for *The Guardian*, grand prix editor for *Autocar* from 1994–2012, editor of *Autocourse* and editor-at-large of *F1 Racing*.

He was also very well-liked by his peers and retained a sharp sense of humour throughout his career. The stories of his antics are always brilliantly recounted by friends and colleagues such as Maurice Hamilton and Nigel Roebuck.

What stood out about Henry to a younger F1 correspondent was that his enthusiasm for the sport seemed to remain undimmed even after over three decades following the circus, even if some of the more recent changes to grand prix racing did not meet his approval. That was a characteristic of his career, during which he was never afraid to criticise when he felt that was justified.

Tributes have flowed for Henry, with four-times world champion Alain Prost describing him as "one of the best F1 journalists". Ron Dennis said: "As a journalist he was knowledgeable, accurate, intrepid yet fair-minded, and as a man he was warm, kind loyal and always funny."

Autosport sends its deepest condolences to Henry's many friends and colleagues in motorsport, and to his family.



EDD STRAW



FORMULA 1

Qualifying green light

AFTER DAYS OF UNCERTAINTY, Formula 1 has agreed on a new qualifying format to be introduced in time for the season-opening Australian Grand Prix.

An elimination system, in which drivers were knocked out at intervals, was proposed as a means of adding drama to qualifying and was agreed by the Strategy Group and F1 Commission. In theory all that remained was



for it to be ratified by the FIA World Motor Sport Council, but soon cracks began to appear in the facade of unanimity. Bernie Ecclestone told the media that the timing software could not be rewritten before Melbourne, and that the new system may not be implemented until the Spanish GP.

FIA race director Charlie Whiting met with the drivers and sporting directors during the second pre-season test to discuss the system in more depth, leading to talk of the proposal being tweaked, with the knockout format only being applied to Q1 and Q2, and Q3 unchanged.

But last Friday, the World Motor Sport Council voted through the original proposal. Whether it can be realised in time — both in code and in the sporting regulations is yet to be seen.

LAWRENCE BARRETTO

IN THE HEADLINES



OCON TO GET FRIDAY OUTINGS

Esteban Ocon (above) will drive in some Formula 1 grand prix practice sessions for Renault this season as part of his role as reserve driver. The sessions have yet to be decided, but he is also expected to run in the two in-season tests.

WMSC APPROVES NEW RULES DEADLINE

The World Motor Sport Council has approved the extension of the deadline for finalising Formula 1's regulations for 2017. The cut-off is now April 30.

SAUBER LATE WITH STAFF PAYMENTS

Sauber has not paid the February salaries of its F1 staff in full because of cashflow problems. The Swiss team is said to be in the advanced stages of securing a title sponsor, but an agreement has yet to be signed. All staff have been treated equally and received an equal portion of their salary for the last month.

GP2 TO RACE IN AZERBAIJAN

The 2016 GP2 calendar includes a race on the streets of Baku in Azerbaijan in support of the European Grand Prix. Bahrain, which staged two rounds last year, drops off the calendar. Sepang in Malaysia will also host a race.

BENNANI TOPS WTCC TEST

Sebastien Loeb Racing's Mehdi Bennani topped last week's World Touring Car Championship test at Vallelunga. The Citroen C-Elysee driver set a best time of 1m37.000s on the afternoon of the first day. Works Citroen driver Jose Maria Lopez was second fastest overall and quickest on day two.

BOYD RETURNS IN ELMS LIGIER

British Formula 3 race winner Wayne Boyd will contest his first full season in five years in the European Le Mans Series this year. He will share a United Autosports LIgier-Nissan JSP3 with Mark Patterson and Matt Bell.

FIRST RAHAL TEST RUN FOR PIGOT

Indy Lights champion Spencer Pigot had his first test in the Rahal Letterman Lanigan Racing Dallara-Honda IndyCar he will race this season at Sebring last week. The 22-year-old will contest three races, including the Indianapolis 500.

ROSSI MAKES ANDRETTI DEBUT

Ex-Formula 1 driver Alexander Rossi made his test debut with the Andretti Autosport IndyCar team at Sebring last week (below). "The car is pretty similar to other things I've driven," he said. "There's quite a bit of downforce."





WILL STEVENS MANOR MOTORSPORT WEC LMP2 DRIVER



The ex-Formula 1 driver will race in the World Endurance Championship this year, and could also add a Blancpain GT programme

Are you closing the door on single-seaters with this move into sportscars?

I'm not closing the door on single-seaters at all. It wasn't necessary for me to go and do a year in GP2 to prove myself, but I'm not ruling anything out. I need to decide what is best for my future, whether it is single-seaters, LMP or GTs. I have to be open-minded and explore different avenues.

Could your tests in an Audi R8 LMS GT3 car for the WRT team at Misano and Monza last week lead to anything in 2016?

I want to do a lot of racing this year and stay busy, so if a second programme is available it would be something that I would look at. My goal is to make a long and successful career, and the best way of doing that is to work with a manufacturer, so it will help if I can jump between different types of car and be competitive. The Audi test with WRT was a good experience for me in that respect.

Was LMP2 your preference over GT?

The WEC deal will be good for me because an LMP2 car is closer in terms of downforce to what I'm used to. But I enjoyed driving the Audi R8. I felt comfortable. If I do end up doing some GT racing, I know I'll be able to hit the ground running.





THE WRC'S LONGEST STAGE IN three decades divided opinion in Leon last week. But one thing looks certain: it's not an exercise about to be repeated.

The organisers worked through the night on Saturday to make sure everything was in place — not least the legion of safety cars. The 50-mile test itself was broken down into a beginning, middle and end, with each of those three sections treated as an individual stage.

"We had more safety cars in that stage than we had rally cars," admitted an understandably jaded-looking rally director Patrick Suberville.

Asked if he would be doing it again during next year's rally, Suberville couldn't have been clearer.

"Definitely not!" he confirmed. "I'm really happy we tried it and I had full confidence in the team that they would be able to do it, but not again. The important thing for us was that it appeared seamless to people on the outside — we achieved that."

That's not to say that Rally Mexico will not maintain its tradition for experimenting with the WRC's conventional format.

"Rally Mexico has got to this point by being daring and different and that will continue," said Suberville.

WRC promoter Oliver Ciesla was happier than most at news of the long stage's departure: "From the promoter's point of view, an 80km stage is too long and doesn't add sporting or commercial value, and nor does it make the competition more interesting.

"In fact, the opposite seems the case. It's even questionable whether this long stage motivates the drivers to go flat-out or look to bring the car to the finish."

On the future of long stages in the WRC, Ciesla added: "We do not encourage rallies at all to run stages longer than 50 or 60km — we do not see the added value; endurance is sufficiently covered in the WRC as it is."

DAVID EVANS



THIRD-GENERATION DEBUT GP3 teams shook down the series' new GP3/16 car last week during a two-day test at Magny-Cours that was plagued by rain. The seven teams present completed a combined total of 825 laps, and Trident driver Antonio Fuoco set the fastest time. "This shakedown felt really good," said Fuoco. "The engine is more powerful than last year. I think we have to wait until Estoril [the first full pre-season test] to see how the car behaves in dry conditions, but at the moment it looks really good. It's hard to compare this year's car to last season's because we never got to drive in wet conditions in 2015, but in general you can feel a bit more downforce and a bit more grip." Pictured is McLaren protege Nyck de Vries. **Photograph by Malcolm Griffiths/GP3**

IN THE HEADLINES



ILOTT SETS THE F3 PACE

Britain's Callum llott set the fastest time of the two-day official Formula 3 European Championship test at Vallelunga last week. The Van Amersfoort Racing driver's best time was 0.037s faster than Sergio Sette Camara.

WEBB GETS LMP1 PRIVATEER DEAL

Former European Le Mans Series champion Oliver Webb will step up to LMP1 with the ByKolles privateer squad in this year's World Endurance Championship. He will share the CLM-AER with Simon Trummer and Pierre Kaffer.

JAKES JOINS MANOR FOR WEC

IndyCar refugee James Jakes will race for Manor Motorsport in the WEC. Jakes, who drove for Manor in F3 and GP3, will share the team's lead LMP2 ORECA-Nissan 05 with Will Stevens and Tor Graves. Ex-British F3 racer Matt Rao has been confirmed as one of the drivers in the team's second car along with former KCMG ace Richard Bradley.

TOYOTA PLACES HIRAKAWA WITH TDS

Toyota young driver Ryo Hirakawa will join TDS Racing's LMP2 team for the ELMS and Le Mans 24 Hours. He will share with Pierre Thiriet and Mathias Beche.

SIMS LANDS BLANCPAIN GT SERIES SEAT

Factory BMW driver Alexander Sims will contest the full Blancpain GT Series in 2016 with the German Rowe Racing squad. The Briton has been placed alongside Porsche Supercup king Philipp Eng in a new M6 GT3.

POMMER SWITCHES FROM F3 TO GT

European F3 race winner Markus Pommer will make the switch to sportscars in 2016 with the Phoenix Audi squad. He will share with Nicolaj Moller Madsen in the Blancpain Sprint Cup and Markus Winkelhock in German GT Masters.

CANAL SAILS TO GREAVES FOR ELMS

WEC LMP2 title winner Julien Canal will move to the ELMS this season with the 2015 title-winning Greaves Motorsport squad. Memo Rojas will share the LMP2 Ligier-Nissan, with a third driver to be decided.

RAST GAINS JOTA SPORT DRIVE

Audi factory driver Rene Rast will undertake his first full season in a prototype this year in the World Endurance Championship with G-Drive Racing in LMP2. He will share the Jota Sport-run ORECA coupe with reigning WEC LMP2 champion Roman Rusinov and Nathanael Berthon.

RICHELMI SWAPS GT FOR PROTOTYPES

Former GP2 driver Stephane Richelmi will move from GT3 to the prototype ranks in WEC with the Signatech Alpine ORECA-Nissan LMP2 squad.

HILL TO RACE HARD TOYOTA IN BTCC

Jake Hill will race a Team Hard Toyota Avensis in the BTCC this year. He will partner Chris Smiley at the squad.



With the Formula 1 season close to getting under way, there's no better time to plan a journey to a race. The winners of our competition will enjoy a trip for two with Grandstand Motor Sports to the 2016 Belgian Grand Prix at Spa-Francorchamps, one of the sport's most cherished venues and a

track on which the greatest drivers in the sport's history have demonstrated their excellence. The trip includes three nights' accommodation, two three-day admission tickets and return travel from London. Grandstand Motor Sports specialises in tailor-made motor racing holidays worldwide.

TO WIN ANSWER THIS QUESTION

WHO WILL WIN THE FIRST RACE OF THE 2016 FORMULA 1 SEASON?







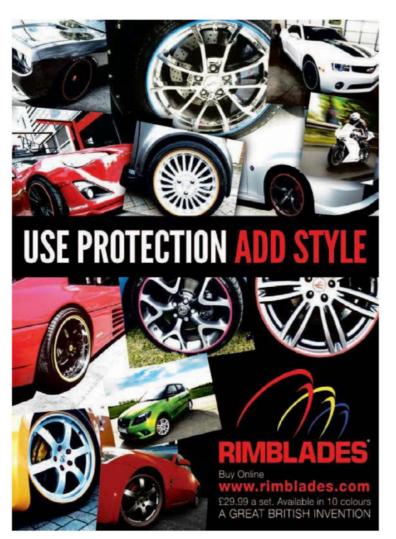
Enter your name and details and answer the question at:

www.autosport.com/competition

Entries close at 11.59pm March 18, 2016

TERMS AND CONDITIONS 1. To enter, visit autosport.com/competition. 2. Competition closes at 11.59pm on Friday March 18, 2016.
3. This competition is only open to UK residents aged 18 or over. 4. No cash alternative. 5. Prizes are non-transferable. 6. Only one entry per person 7. Winner will be selected at random, if none of the three selections wins, the best-placed driver will be selected as correct.

8. The prize is to win a three-night trip for two people to the 2016 Belgian Grand Prix (August 26-29, 2016) including return travel by Eurostar from London St Pancras to Brussels, 3 nights accommodation based on two people sharing a room on a bed and breakfast basis, circuit transfers by coach on Saturday & Sunday & three-day general admission race tickets for two people. 9. Winner and chosen companion must travel to and from London St Pancras at own expense 10. Winner and chosen companion must have a valid passport. 11. For full terms and conditions see autosport.com. The Promoter: Haymarket Media Group, Bridge House, 69 London Rd, Twickenham, TW1 3QR.







Follow us on:

Available from all good book shops WWW.haynes.co.uk See Haynes See How WAITING TO BE DISCOVERED

FEBBACK

F1 needs heroes, not just drivers

Apparently we are not going to see schoolchildren tackling in rugby matches any more and next year F1 drivers will be further coddled by a non-religious and hideous halo impairing their vision.

Many of us watch F1 because of the gladiatorial challenge that it poses for those of us who would not dare to try it. Just like in the Roman arena, we want to see the action but would hate to be at the point of the sword.

If our modern drivers wish to be compared with the greats of the past who risked all for the glory of the win, then they have to accept the risk. Stick a load of carbonfibre scaffolding around me and I might give it a go myself.

The pictures of the Ferrari that I have seen testing the concept reminded me of the original split-screen Volkwagen Beetle.

There is a danger that drivers will become just drivers rather than heroes. I may need something more



exciting for my Sunday afternoons. Bowls, anyone?

Paul Caldwell By email

The ban on tackling in school rugby is so far just a suggestion, and the halo is only one of several options being evaluated by the FIA; we reckon you'd get much better odds on the latter coming to pass — ed

Formula 1 is too complacent

It was good to see a large spread on NASCAR two weeks on the trot. Anybody who watched the Daytona 500 would realise that F1 needs to take a long, hard look at itself.

F1 is clearly the pinnacle of technology and driver skill. There is no question, but whatever diehards and old-school dinosaurs say, F1 is pretty boring compared to other motorsport and that's before Formula E starts to make inroads into the fanbase.

We're off to Berlin and Battersea this year for Formula E. No more being

F1's new safety effort, with its ugly halo, has already lost its shine for reader Caldwell treated like a football fan of the '70s and '80s if you aren't a hospitality user.

This is from someone who went to his first grand prix in the '60s.

Neil Cameron By email

Listen to the drivers

Is F1 broken? Two of its greatest drivers have stated that it is, one a double world champion, the other our own triple world champion. Are we listening to them? It does not seem so.

Fans and TV viewers are walking away from the sport. Why? It seems the answer is we are not happy with the qualifying format, so two weeks before the first race let's throw it into total confusion — the only part of a grand prix weekend that actually works.

How about modifying the tracks to allow overtaking, imposing track limits on all tracks, give the cars the ability to follow closely, and last of all ask the men in the cars for their opinion on how to improve their sport.

Kevin Friday By email

CORRECTION

Apologies for the errant zeroes that made the front and rear tyres on our 2017 Formula 1 car graphic (Pit+Paddock, Feb 25) rather larger than intended. For the record, front tyres are changing from 245mm to 305mm and 325mm to 405mm at the rear.

HAVE YOUR SAY, GET IN TOUCH

Autosport editorial Bridge House 69 London Road Twickenham TW1 3SP









Good design sometimes needs a little help...

...that's why global race teams use Sandwell as a prime supplier of performance engineering solutions.

- · Controlled Shot Peening
- Superfinishing
- Low Friction Coatings
- Kephos Lightweight Coating
- Conductive Coatings
- Non Conductive Coatings

Sandwell works with design and development engineers throughout the world of manufacturing to improve component performance.

- Improve component fatigue life
- Increase component strength
- Improve reliability
- · Reduce component weight
- Reduce surface friction
- Apply corrosion resistant coatings





















Flying blind

New tyre choices and tighter controls on radio traffic this season should introduce a welcome element of unpredictability

By Ian Parkes, Chief F1 Correspondent

@ianparkesf1

THERE IS A GLIMMER OF HOPE THAT MAYBE, JUST

maybe, the Formula 1 season in the offing will offer more than a pair of silver cars leaving everything else in their wake. The two pre-season tests in Spain offered some valuable insights into the likely competitive order although, as ever with testing, those insights came freighted with caveats.

Pace is always difficult to assess because you can never be sure as to the fuel load on board any given car on a particular lap, or what engine mode it is running. But there is some suggestion that Ferrari has again made gains, as it did last winter, and that we are closing in on a convergence in performance between the Mercedes and Ferrari power units.

We can, of course, only hope this is the case.

On the other hand, the fact that Mercedes managed to complete the equivalent of 18.6 Spanish Grands Prix before the Wo7 Hybrid finally suffered its first major issue (a transmission failure early on the final afternoon) was an eye-opening feat of reliability. The overriding feeling is that at no stage did Mercedes ever show its hand, and only come the

weekend of the Australian Grand Prix — or even later in the season — will it whip out the aces it probably has stashed up its sleeve.

But there are two wild cards on F1's table this season and, while they may not trump Mercedes, they

will certainly give it pause for thought at times on whether it should stick or twist. The first is the new tyre regulations, and it is fair to say that Pirelli is enamoured by the potential scope for diversity and uncertainty in races, particularly over the first half of the season. The fact that there are now three compounds available per race, rather than the two of previous years — and all three could be chosen for a grand prix — will torment the team strategists with a plethora of what-ifs and really challenge them to find the optimal plan for their drivers.

There is even the possibility for the two drivers within each team to run differing strategies based on their choice of rubber, and how they feel their car is handling throughout the course of free practice in the build-up to qualifying.

But the greater scope for unpredictability comes in the fact that for the first eight races the teams and drivers have had to commit to a strategy far in advance — for some, they had to make the choices before the cars had run for the first time. For the forthcoming long hauls in Australia, Bahrain, China, Russia, Canada and Azerbaijan, they had to nominate their tyres up to 14 weeks in advance.

Pirelli recognises that most teams (with the notable exception of Sauber) have sufficient simulation capacity to explore many scenarios in advance. But it is positive that there will be more pitstops than has been the case over the past two seasons since the introduction of the current power units.

The return to running at least two-stop plans this season should be in evidence, particularly if a team or a driver opts to go aggressive. But as we head into the second half of the campaign, the teams will have gathered enough knowledge for the strategic choices to converge.

In terms of offering uncertainty all through the season, then, our second wild card comes in to play: the FIA's clampdown on radio traffic. Modern technology has added many layers of complexity to the process of operating an F1 car, with the result that drivers receive many instructions from the pitwall. No less an eminence than Mercedes motorsport boss Toto Wolff has acknowledged that to some extent drivers are becoming "remote controlled".

To police the stipulation in the rules that "the driver shall

drive the car alone and unaided" there is now a 32-point list of permitted radio transmissions. The onus will once again be on the driver, not just in terms of preparation ahead of a race, but more significantly through it, since he will

"Three compounds per race will torment the strategists with what-ifs"

have to think on his feet as that grand prix unfolds.

Think of the calls we've had from Lewis Hamilton and Nico Rosberg in the past, asking the team if they can be placed on a different strategy from their team-mate in an attempt to find a way past and win the race. Now that strategy, tyre choice, pitstops and engine-mode deployment is in their hands — it is they who will have to decide when to attack, when to defend, when more fuel is required, and when to fuel save.

As Wolff states, intelligence will be required from his drivers, both in terms of the pre-race planning and in knowing how to read a race, and potentially "it will give room for error".

Rosberg, for one, is relishing the opportunity of using his nous during a race. He said, "It's challenging, but I like it because it's more down to yourself out there. More and more and more you need to figure your own way out, but I think it's good. It's more pure, which is good for the racing."

We have yet to see how it unfolds, but this does offer the tantalising prospect of greater depth in grand prix racing, and for drivers to demonstrate new elements of their skillsets. It might even expose some hitherto-concealed weaknesses...



PRINT SUBSCRIPTION ACCESS + FREE GIFT



✓ SPREAD THE COST – PAY JUST £34.99 EVERY 13 ISSUES BY DIRECT DEBIT

✓ GREAT SAVING – 27%
ON THE COVER PRICE

FREE P&P - EVERY ISSUE DELIVERY TO YOUR DOOR

UNLIMITED ACCESS FOR JUST AN EXTRA £5.50



✓ FULL ACCESS TO autosport.com

✓ AUTOSPORT INTERACTIVE iPAD EDITION SUBSCRIPTION

✓ AUTOSPORT DIGITAL PAGE-TURNER SUBSCRIPTION

TERMS AND CONDITIONS This offer is open to UK residents only. Calls cost 7 pence per minute plus your phone company's access charge. If you require any assistance following the purchase of your subscription, then you can speak to a member of our customer service team on 01795 592 974, calls are charged at local rate. Overseas rates are available on +44 (0) 1795 592 974. Please allow 35 days for delivery of your gift and first issue. The gift will be sent under separate cover from the magazine. Should we run out of gifts, you may be offered an alternative gift – there is no cash alternative. If your subscription includes access to autosport.com and the *Autosport* Digital Page Turner, then you can set-up your *Autosport* online account by visiting https://secure.autosport.com/subs/activate.php. You'll need to enter your activation code (your personal magazine subscriber number which will be included in your confirmation email) along with your email address to access your content. You will be emailed instructions on how to access your included edition. Direct Debit rates are valid for one year after which they are subject to change – should prices change we will inform you winting. We ask that you enter into a Direct Debit agreement with the intention that your subscription will continue for a minimum period of 12 months, even if the frequency of payment is for a shorter period, however, you will still have the right to cancel your Direct Debit in accordance with Direct Debit Guarantee. Should you wish to cancel your subscription it will be cancelled on expiry of the current term which will not be refundable, other than in exceptional circumstances. If a gift is included as part of the subscription offer we reserve the right to request the return of the gift. Details of the Direct Debit Guarantee are available on request. Savings are based on the standard UK cover price of £3.70 and £2.99 for the digital price. Offer ends April 8 2016.

TICKETS & HOSPITALITY FEATURE



- Campsite open for British Grand Prix, Moto GP and Renault World Series events
- Attractions within campsite include bar, catering and live entertainment
- Glamping, pre-erected tents and electrical hook ups available. Contact us for details



www.hamiltonfields.co.uk

Email bookings@hamiltonfields.co.uk





Future Events

Forthcoming events at Silverstone

British Grand Prix 8th - 10th July 2016

Silverstone Classic

29th - 31st July 2016

Renault World Series 23rd- 24th July 2016

Moto GP 2nd - 4th September 2016



silverstone-camping.co.uk





AN OFFICIAL DISTRIBUTOR

T: +44 (0)1442 891500

E: sales@bamf1.com

W: www.bammotorsportsgroup.com



www.smokingdog.co.uk

SMOKING DOG HAVE BEEN CATERING FOR MOTORSPORTS TEAMS FOR MANY YEARS, GAINING EXTENSIVE EXPERIENCE IN LOOKING AFTER THE WHOLE TEAM. FROM OFFERING MEALS FOR THE MECHANICS IN THE PITS TO THE VIP TREATMENT OF TEAM SPONSORS.

WE HAVE DIFFERENT SIZED UNITS THAT CAN SEAT 40 TO 220. COMPLETE WITH LOUNGE AND ROUND DINING TABLES, YOUR GUESTS WILL BE GREETED IN A RECEPTION AREA AND IF SUNNY THEY CAN ENJOY THE PADDOCK ATMOSPHERE OUTSIDE IN THE GARDEN AREA.

WE ARE HAPPY TO PROVIDE OUR SERVICE AT YOUR OWN FACILITY. IF NEEDED WE HAVE EQUIPMENT AVAILABLE FOR HIRE. WITH SMOKING DOG, OPTIONS ARE ENDLESS AND WE LOOK FORWARD TO DISCUSSING ANY REQUIREMENTS YOU HAVE.



THE SMOKING DOG TEAM OF TALENTED CHEFS USE ONLY QUALITY FRESH PRODUCE IN PREPARING YOUR MENU. OUR DELICIOUS FOOD IS COMPLEMENTED BY OUR EXPERIENCED AND PROFESSIONAL WAITING STAFF, TOGETHER CREATING THE SMOKING DOG EXPERIENCE.

info@smokingdog.co.uk +44 1428 288O23

WEB DIRECTORY

AWNINGS



No1 for Inflatable Structures.
With you from the Paddock to the Podium.
www.aireshelta.com

EQUIPMENT



.

Precision machining and engineering
Leading brand replacement & performance engine parts
WWW.gosnays.co.uk

Tel: 01708 748320



GEARBOXES

demontw



EQUIPMENT

MOTORSPORT

www.demon-tweeks.co.uk

Telephone: 01582 840008 Fax: 01582 840007



EXHAUSTS

HELMET GRAPHICS

RACING

TRAILERS & TRANSPORTERS

Mike Fairholme Designs

Sole approved painter of Arai helmets.

Silver Birches, Corby Birkholme, Nr Grantham, Lincs NG33 4LE
Tel: 01476 550630. Fax: 01476 550029.
email: fairholmedesigns@btconnect.com

www.fairholmedesigns.co.uk

Visit: www.liquidcolourdesign.com Studio: +44 028 93378525 Mob: +44 0770 9442894

MOTORHOMES

Rentamericanmotorhomes.com

Jordan RV

0870 3008008

MOTOR RACING LEGAL ADVICE

MOTORSPORT LAWYER
JAMIE CHAMPKIN LL.B
National and International

CALL +44(0)1386 871287 ANYTIME

PASSIONATE ABOUT MOTORSPORT www.jjcraceandrally.com



RACE PARTS

ARMSTRONG RACE ENGINEERING INC.

RACING

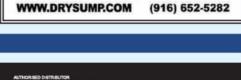


www.finallap.net **WE BUY AND SELL** +44 (0) 1245 287588 / 07771 920345

PORSCHESHOP

10% off with website voucher code AUTOTEN

Or Call: 0121 585 6088



WWW.YBRACING.COM

YB<mark>RACING</mark>

TRAILERS & TRANSPORTERS

MARDI GRAS MOTORSPORT www.mardigras.co.uk



BRIAN JAMES TRAILERS

>>> Connected to you

www.brianjames.co.uk

WHEELS & TYRES



Image[®]

Manufacturers of bespoke split rim alloy wheels

www.imagewheels.co.uk



TO ADVERTISE IN THE WEB DIRECTORY PLEASE CALL **020 8267 5271**OR EMAIL **autosport.ads@haymarket.com**



>> Connected to you



www.brianjames.co.uk

Low cost covered.

Protecting, while transporting your race or rally car is what we do and with an enclosed Brian James Trailer you have the ultimate.

A track record of providing value for money and original thinking signifies that Brian James Trailers are no strangers to combining total quality and winning price.

The brand new Race Sport, with a full complement of standard class leading features perfectly represents this philosophy and they're available today.

Go ahead, make one of the best investment in your motorsport equipment imaginable.

Race Sport 4.5m bed length \pm 6,749.00 + vat Race Sport 5.0m bed length \pm 6,999.00 + vat

To find your nearest dealer visit: 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.



www.WOODFORDTRAILERS.com

HIGH QUALITY TRAILERS FOR CLUB. PRIVATE AND PRO MOTORSPORTS



Email: sales@woodfordtrailers.com

01327 263 384



RACING DRIVERS CLUB



2016 CALENDAR - KUMHO BMW CHAMPIONSHIP

SILVERSTONE DONINGTON (26/03 - 27/03/16) (16/07 - 17/07/16)

ROCKINGHAM BRANDS HATCH (13/08/16)

(09/04 - 10/04/16) SNETTERTON
CASTLE COMBE (02/05/16) (10/09 - 11/09/16)
THRUXTON SILVERSTONE
(11/06 - 12/06/16) (08/10 - 09/10/16)

For more info please visit www.barc.net/championships/bmw

The Kumho BMW Championship is for competitors participating in any series production based BMW. Series production is defined as those models produced in Europe (or in the USA for Z3's only) for sale in the European market to the general public as shown in sales brochures and obtained through the UK or European BMW dealer network. Left-hand drive versions of models may also be used. Vehicles falling outside of this definition will be prevented from participating in the championship.

For more information contact: Trevor Ford on 07710 493953 or trevor@bmwrdc.com www.bmwrdc.com











Telephone (44)1179 509 294









£122,500+vat

Ref 404 : Ex Marussia F1 Support Transporter; HMS

New build 2010 complete with 2 offices and workshop area.

Hydrovane compressor, Ian Webb 120kva generator, 2 x 8m masts and all ancillaries to suit.

Carrying capacity 1 formula Car.

As used in the British Super bike championship during 2015

WE CAN SELL AS IS OR ADAPT TO CARRY 3 FORMULA CARS IF REQUIRED.









£148,000+vat

Ref 426 : 2 car with Rigid with Living

Carrying capacity 2 GT cars or 1Touring car.

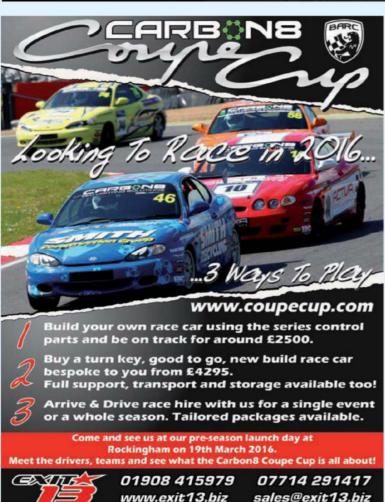
Luxury living to sleep up to seven people, bathroom, kitchen,

Generator, 5Kw Inverter, wind out 7m x 4m awning, satellite, everything!

WE HAVE 8 OTHER TRANSPORTERS IN STOCK AVAILABLE NOW FOR SALE OR RENTAL

DRIVES AVAILABLE





RENT HIRE LEASE





INGSport Racing still have some availability for the 2016 season for both their BMW Race cars for suitably funded Drivers and or Teams.

For more information and to discuss your requirements please contact Ian Lawson on 07850 944465 or email ian.ram@virgin.net or ingsport.co.uk

MAUTOSPORT

If you wish to advertise your products and services with Autosport in print and online please contact

Jonathan.King@haymarket.com or call

020 8267 5992

Race proven



20% discount on before Ist April 201



Ferrari 458 Challenge GTR All-Carbon Upgrade AeroKit & Power Performance

Quality, precision and fastidious attention to detail



Aero Front Bumper / Apron
Fully Adjustable Front Splitter & Floor



Carbon Aero Vented Louvered Bonnet



Anhedral Rear Wing



Anhedral Rear Wing





Carbon Aero Rear Bumper / Apron & Carbon Rear Double Diffusor

Power upgrade to 620 bhp and 4-way adjustable suspension also available

www.evo2group.com Email: info@evo2.biz

Tel: +44 (0) 1608 730280 / Tel: +44 (0) 7785 330690













Who should do this course?

Do you...

- Want to improve your career prospects by becoming a highly qualified Motorsport Engineer?
- Work or volunteer in motorsport without a degree?
- Work in the automotive sector and would like a career change into motorsport?
- Want a motorsport degree but can't justify the time/ travel & accommodation costs at university?
- Have work or family commitments & need to earn while you learn while studying for your motorsport qualification?

If you answered YES to any of the above, then the NMA Online BSc (Hons) Motorsport Engineering Degree is the course for you!

*All degrees are awarded by our partner Staffordshire University.



Why Study with NMA?

- 40% lower fees than other universities & access to student loans
- No term times or semesters, choose your own start date, work at your own pace & study from anywhere in the world
- Mature students welcome No upper age limit
- Earn while you learn
- No travel or accommodation costs
- Study Online & On-track
- Free industry standard CAD software



motorsport.nda.ac.uk

+44 (0)1159 123456

MARKETPLACE

AWNINGS

HAMILTON Passic LTD

Specialists in Bespoke Products for Classic & Sports Cars





Race & Rally Marquees to Suit all Budgets 3x3m to 6m Hexagon
Steel and Alloy Frame, Clubman to Professional, Printing Available Multi-Layer Indoor
& Outdoor Breathable Car Covers for Classic & Moderns









Luxury Car Covers, Indoor & Outdoor Breathable Materials Printed Barriers & Flags, Entrance Mats, Minilite Wheels Many More useful products for Modern, Classic & Race Cars

www.hamilton-motorsport.com
Email: office@hamiltonclassic.co.uk | Tel: +44(0)118 973 7300

EVENTS

Floral Events 2

Bespoke Florist with both
Motorsport Hospitality
and Product Launch Experience.
Prepared to travel throughout UK
and Europe, leaving your team to do
what they do best.

www.floralevents.co.uk

Contact Julie on

Mobile 07957831398 • Office 01538 308259 or
email Julie@floralevents.co.uk







0844 375 2196 www.demon-tweeks.co.uk

MEDIA CODE:

LZ252A

LOW CALL RATE CALLS
MAY BE RECORDED FOR
TRAINING PURPOSES

RACEWEAR



MARKETPLACE





RACE PRODUCTS



POWER CONTROL PANELS

- Made to Customer Requirements for a Plug-n-Play power control solution
- Power Distribuition Module and switches incorporated into one unit.
- Reduces your wiring harness and easy to install
- Choice of Current Settings, Functions and Graphics
- Status LED for each channel

www.cartekmotorsport.com

RACE PRODUCTS







MEMORABILIA



email:- sales@f1collectors.com

TYRES



BMTR LTD

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

MARKETPLACE



STORAGE

01559 372356



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













Working with teams and companies in classic/historic racing right through to Formula

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

MAUTOSPORT

Want to advertise a motorsport job?

If you are recruiting in motorsport and wish to advertise with

Autosport in print and online please contact

Jamie.Brooker@haymarket.com

by email

or call 020 8267 5271.

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



HR030316 - ELECTRICAL SYSTEMS ENGINEER

Working with our Mechanical and Electronic Engineers you will be responsible for the design, installation and specification of our on and off-car Electrical Installations, you will also be involved in our future development projects working within multidisciplined groups. You will have a good understanding of the wiring, connectors and heatshrink systems used within a Formula 1 environment and ideally have a high level of experience in the use of Computer Aided Design Harness packages, ideally Unigraphics NX8.5. You will also be required to carry out peer reviews, mentoring and coaching of our developing Systems Engineers

Applicants for this role should ideally have a recognised qualification in an electronics discipline, combined with relevant experience of Motorsport Electrical and Electronic Systems. You should additionally be able to demonstrate a high level of self-motivation and be able to work within a high-pressure environment. Good communication skills and the ability to work within tight timescales are a prerequisite for this role.

As well as being part of our multi championship winning team, we reward our employees with a significant benefits package including championship bonus, life insurance, private medical cover and a pension scheme.

To apply for this role please send your CV with your notice period and salary expectations to recruitment@redbullracing.com

CLOSING DATE: FRIDAY 25TH MARCH 2016

RIGHT TEAM. RIGHT TIME.

Mercedes-Benz has been setting the standard in racing for over 100 years, and the MERCEDES AMG PETRONAS Formula One™ Team continues the proud history of the legendary Silver Arrows. We have some exciting opportunities at our Championship winning team within our Design Office.

PREFIT MECHANIC

REF: CH1219

The successful candidate will report to the Build Operations Team Leader and will be responsible for ensuring that every new component sent to a race or test event has been fully prefitted and to ensure the overall quality components is to the highest standard. We are looking for someone with previous mechanical and composite experience working in an F1 or similar environment.

TEST AND DEVELOPMENT DESIGN ENGINEER

REF: SW1280

We have two new vacancies within our Test and Development (T&D) Design team. The successful candidates will take full ownership and responsibility for a variety of design and development activities, including T&D projects, T&D rig and fixture design as well as car projects. Previous F1 experience is preferable. Candidates with a broad level of experience in other high tech engineering industries will also be considered.

AERODYNAMICS TEST TECHINICAN

REF: SW1305

We have a great opportunity in our Wind Tunnel team reporting into the Wind Tunnel Operations Manager. The successful candidate will be responsible for supporting the running and maintenance of the Wind Tunnels for customer programmes. This is a fixed-term position for 12 months working on a night shift. We are looking for someone that has a minimum of a HND in Engineering, and ideally some practical Wind Tunnel experience.

We are looking for team players that can think of an idea today and see it race tomorrow. You will be highly motivated and resilient and know how to work in a planful and organised way. You will be decisive yet adaptable to ensure that we achieve the highest levels of quality, reliability and performance. You will be able to communicate effectively at all levels and meet strict deadlines with minimal supervision.



PETRONAS FORMULA ONE TEAM

In return for your hard work and commitment, we will offer a competitive package.

To find out more and join our Team: www.careers.mercedesamgf1.com
Closing Date: 24 March 2016





RACING DRIVERS CLUB



2016 CALENDAR - KUMHO BMW CHAMPIONSHIP

SILVERSTONE DONINGTON (26/03 - 27/03/16) (16/07 - 17/07/16)

ROCKINGHAM BRANDS HATCH (13/08/16)

(09/04 - 10/04/16) SNETTERTON
CASTLE COMBE (02/05/16) (10/09 - 11/09/16)
THRUXTON SILVERSTONE
(11/06 - 12/06/16) (08/10 - 09/10/16)

For more info please visit www.barc.net/championships/bmw

The Kumho BMW Championship is for competitors participating in any series production based BMW. Series production is defined as those models produced in Europe (or in the USA for Z3's only) for sale in the European market to the general public as shown in sales brochures and obtained through the UK or European BMW dealer network. Left-hand drive versions of models may also be used. Vehicles falling outside of this definition will be prevented from participating in the championship.

For more information contact: Trevor Ford on 07710 493953 or trevor@bmwrdc.com www.bmwrdc.com









CLUB AUTOSPORT

NATIONAL RACING • HISTORICS • HILLCLIMB • TRACK TESTS • FEATURES



BRDC F4 could get Formula 3 status

BRITISH FORMULA 3 COULD MAKE A shock return this season — in the form of the BRDC Formula 4 Championship.

According to *Autosport's* sources, the idea was discussed at the FIA World Motor Sport Council in Geneva last Friday and it could be pushed through during the coming week — just in time for the opening round at Snetterton on March 27-28.

The new Cosworth-powered Tatuus BRDC F4 chassis is significantly faster than its predecessor, with testing indicating it is not far off the pace of an F3 car. If BRDC F4 was to be upgraded to the status of F3, it could also persuade series boss Jonathan Palmer to relinquish ownership of the F4 trademark in the UK to MSA Formula, which runs to FIA F4 regulations.

While Palmer said he was unable to comment on the story, team bosses have responded enthusiastically to the plan, which would mean F3 returning to the UK as a single-seater 'ladder' class after an absence of one year.

Fortec Motorsport, Double R Racing and Carlin, which all supported British F₃ up to its demise at the end of 2014,

have all lodged entries in BRDC F4 for the first time in 2016.

Fortec boss Richard Dutton told *Autosport*: "The new BRDC F4 car is everything we ever wanted for British F3. It's a great car and it's inexpensive."

Dutton said he played a part in getting the FIA and Palmer to discuss the possible move to F3 status.

"It made perfect sense to me," he said. "I spoke to the FIA about it at the Macau Grand Prix, and then I was chatting to them at the *Autosport* Awards when Palmer walked past. So I grabbed him and said, 'Why don't you have a serious conversation?'. I think they did that a couple of weeks later. If I've done something good at long last, so be it!"

Double R chief Anthony Hieatt added: "It would be very good for British racing and for the MSA to get a bit of clarity between the two [BRDC F4 and MSA Formula], because they're aimed at very different levels of competition.

"Having two 'F4' series in the same country doesn't help anybody, but there is room for both — and for the Palmer car, having the title of F3 wouldn't embarrass it. It's a seriously quick car, so



The British F3 Championship bowed out at Donington Park at the end of 2014 it's not fair to tar it with the F4 brush. Palmer had a great vision with the car, and I think it's ended up being even better than he anticipated.

"We need to keep European F3 as the pinnacle, while this is a good middle ground from F4. It seems funny that the FIA desperately tried to kill off regional F3, and now in quite a short time frame they're trying to get it going again!"

It is understood that budgets for the new BRDC F4 are similar to MSA Formula, and roughly one third those of European F3.

Comprehensive motorsport insurance products to keep you on track;

- Accident damage On Track
- **S** Liability
- **6** Rally damage On Event
- Personal Accident
- **Storage and Transit**
- Track day

Log on to **www.ryanmi.com** to obtain your online quote Email – info@ryanmi.com Tel – +44 (0) 1799 524202

Ryan Motorsport Insurance Limited is an appointed representative (557405) of Independent Broking Solutions Limited who are authorised and regulated by the Financial Conduct Authority, Its Financial Services Register number is 3120





BRITISH G1

McLarens for Ecurie Ecosse

ECURIE ECOSSE IS SWITCHING FROM BMW TO McLaren machinery for its attempt to regain the British GT Championship title in 2016, and will have factory driver Rob Bell as part of its two-car line-up.

Ecurie Ecosse, which claimed the British GT title in 2014 with a Barwell-run BMW Z4 GT3 and Marco Attard, is joining forces with Garage 59, a new organisation set up by McLaren to run cars for its customers. It will field a 650S GT3 for Bell and Ecurie Ecosse regular Alasdair McCaig, who is returning to British GTs after campaigns with the team in the European Le Mans Series and the Blancpain Endurance Series in 2013-15.

Bell, who will be contesting his first full championship in Britain since his 2002 Formula Renault UK campaign, commented: "It is great to have the chance to race back on home soil. Since joining McLaren GT as a factory driver in 2011 I have had the opportunity to race at some of the world's most iconic circuits, but it's always special to race back on my old stomping grounds with the support of the British fans."

McLaren GT boss Andrew Kirkaldy welcomed the team to the fold of the British manufacturer and said: "It will be great to see a McLaren wearing the famous Ecurie Ecosse colours for the first time. The team has an unrivalled heritage in sportscar racing."

Garage 59 was described as a "separate entity" to McLaren GT by Kirkaldy, and "a continuation with what we were doing last year with VonRyan Racing", which was McLaren's representative in the BES.

Details of the second car are expected to be announced next week. Garage 59 will also field a pair of 650S GT3s in the rebranded Blancpain GT Series Endurance and Sprint Cups for a line-up that will include factory drivers and members of its academy scheme.

B-TEC DEVELOPMENT SERIES

B-TEC Development Series plans put on hold

THE DEBUT OF THE BRITISH Touring Car Championship spin-off category, the B-TEC Development Series, has been postponed.

The category, which was designed to give aspiring teams and drivers an introduction to tin-top

racing, was revealed in January. It was due to run at six club meetings and encompass 12 rounds, and would have run former BTCC cars fitted with olderspecification GPRM-built standardised parts.

Over the course of 2016,

series bosses intend to allow potential entrants to sample the series and they will outline plans to reignite the category in 2017.

B-TEC Development Series director Ian Harrison said: "Naturally we are disappointed to have to postpone like this, but that is all it is, a postponement.

"We want to ensure we have the strongest possible grid when we start, and at the moment there are a lot of carrots being dangled in front of potential entrants from other categories."

FORMULA4

FIA SEEKS FORMULA 4 WORLD CUP ORGANISER

PLANS TO INTRODUCE a world final for FIA Formula 4 cars – including Britain's MSA Formula – have taken a step forward after the governing body said it was exploring ways to bring its regional championships together.

Autosport revealed last year (April 30) that the FIA was working towards a World Cup event for the concept.

Recognising the 'considerable interest' in the idea, the FIA announced after last Friday's World Motor Sport Council meeting that it will launch a call for expressions of interest from parties that were keen to promote or organise such an event.

The FIA statement declared: "Following the global success of the introduction of FIA Formula 4, the World Motor Sport Council recognised the considerable interest in staging a World Final for National-level Formula 4 Championships... where successful drivers from the 12 National F4 championships around the world would meet."

The F4 concept has proved to be a hit since its launch with the

It is understood that the organisers of the V8 Supercar December season finale at Sydney's Homebush street track have offered to host such an event.





GOODWOOD MEMBERS' MEETING

TVR to make Goodwood return

A FAMOUS EX-WORKS TVR GRIFFITH will return to racing at next week's Goodwood Members' Meeting.

Chassis 1, registered 'BFR 400B', was the prototype for the Griffith and only raced during the 1965 season, contesting the Whitsun Trophy with Tommy Entwistle and last raced in October of that year by development driver Chris Lawrence.

Now marque enthusiast Mike Whitaker has had the car, which he bought in 2011, restored to 1965 factory specification by Nigel Reuben.

"Nigel has spent a lot of time on the chassis; he even worked on it on Christmas Day," said Whitaker. "The pressure was on to get it ready for Goodwood, and it will race in the Graham Hill Trophy. We're keeping it as original as possible."

BRDC FORMULA4

Sowery in for F4 opener with Lanan

McLAREN AUTOSPORT BRDC Award finalist Toby Sowery will contest the opening round of the BRDC Formula 4 Championship with Lanan Racing.

The 19-year old is still working on a deal to race in GP3 this year but is open to contesting the full F4 campaign if that plan does not work out.

Sowery contested a partial season in MSA Formula last year, having won the MRF Challenge the previous winter. He also won the F3 Cup in 2014 with Lanan.

"It's just the first round at the moment," said Sowery. "I am working to try and do GP3, which is my Plan A, but I'm doing this to stay sharp. I'll see how it goes and may do more rounds if I can't get a GP3 deal."

Lanan team principal Graham Johnson added: "It's great to have Toby back and to give him this chance. He is a proven frontrunner."

The BRDC F4 opener is at Snetterton on March 27-28.



SILVERSTONE 24 HOURS

Ex-servicemen enter 24 Hours

TWO INJURED EX-SERVICEMEN WILL contest the 24 Hours of Silverstone.

Berkshire-based Team Brit has entered a petrol Volkswagen Golf GTi for the April 1-3 event, where it will be raced by Martyn Compton and Mark Allen together with former Ginetta GT4 Supercup driver David Pittard and Julian Thomas.

Team founder Dave Player said: "We want to one day race at Le Mans, so this is the first step towards that. We're working on joining the European Le Mans Series in the future."

IN BRIEF



JORDAN'S DONINGTON GROUP C OUTING

Andrew Jordan tried a Group C car for the first time at Donington Park last week when he drove Mark Sumpter's Porsche 962-011 for some filming work. "That was a real experience, awesome, probably the best car I have ever driven," said the BTCC star.

HANCOCK JOINS CENTURY IN BRITCAR

Century Motorsport will field 2008 Formula Renault BARC champion and historic ace Ollie Hancock and Russian driver Ruben Anakhasyan in this year's Britcar Endurance Championship. The team, which also competes in the British GT Championship and Ginetta GT4 Supercup, will field a Ginetta G55 GT4 for the duo.

CICELEY SNAPS UP COATES FOR CLIOS

Max Coates, who contested a one-off round of the British Touring Car Championship last season, will compete in the Renault UK Clio Cup in 2016 with Ciceley Racing. The 22-year-old has previously raced in the Ginetta GT4 Supercup and Ginetta Juniors. He follows the lead of Mike Bushell, the 2014 Clio champion who has switched back from the BTCC to the support series.

NO ERS AFTER LOW ENTRY NUMBERS

The Endurance Racing Series will not run this year. The ERS was founded for the 2015 season and held four three-hour races around the UK. For 2016 the series had planned to extend its races to six-hour events, and had a deal in place for UK drivers to run on the Nurburgring Nordschleife during a three-hour German club event, but series organiser David Hornsey said it had been cancelled owing to a lack of entries.

NEW KREMER PAYS HOMAGE TO 935 K3

Porsche tuning giant Kremer Racing will field its new 997 K3 machine in this year's German VLN championship. The K3 has been designed to pay homage to the Kremer Porsche 935 K3, which was successful in sportscar racing during the late 1970s and early '80s. Based on the chassis of a 997 GT3 Cup car, the car features a reworked body and aero kit from Kremer and Holger Zimmermann.



TURN ONE

ACCESS TO PASSION



ORDER NOW
THE NEW JET-RS HELMETS
FIA 8859-2015 APPROVED

- Fiberglass and Kevlar® shell
- Available with or without intercom system
- Colours: White or matte black
- Designed and made in EU
- HANS® compatible



PELTOR COMPATIBLE INTERCOM









AUTHORISED UK DEALERS

NICKY GRIST MOTORSPORTS

Phone: 0198 124 1040 Email: info@nickygrist.com

SCA MOTORSPORT

Phone: 0845 643 1343 Email: scamotorsport@hotmail.co.uk





Special saloons recall Thruxton of my youth

By Marcus Pye, the voice of club racing



THAT SPECIAL SALOONS ARE RETURNING TO

Thruxton on August 13/14 will be music to the ears of enthusiasts who enjoyed the class there in its 1970s and '80s heyday — not least me and my namesake (Deputy Editor) Simmons, already regular racegoers at the British Automobile Racing Club's home circuit. Hats off to Hugo Holder, David Smitheram and their Classic Sports Car Club cohorts for seizing the rare opportunity.

Special Saloons became popular in the late '60s — who could resist a good inter-marque tin-top dust-up in a haze of Castrol R? — but the class evolved rapidly when the advent of increasingly wild V8-engined 'Super Saloons' garnered international appeal (with events in Sweden and Ireland) and earned a slot on Silverstone's '75 British Grand Prix bill.

Forty—odd years ago, my favourite races at Thruxton were the Formula 5000 and F2 Internationals and, unquestionably, Special Saloons on the club front. Formula Ford guaranteed great slipstreaming, the Castrol/Motoring News Special GT series occasionally attracted a European championship contender such as the late Martin Raymond in a contemporary Group 6 prototype among a mixed bag of what we now know as Historics, but 'hot' saloons were king.

It was then that I became immersed in the sport I'd loved from childhood, thanks to the BARC encouraging junior members to become race assistants before they were old enough to marshal at trackside. I fondly recall helping staffers Wendy Dodimead and the late Del Ali with the then laborious task of preparing results sheets after each track session. Having carried the data from Mike Eyre's timekeeping team, the girls typed them onto a template before printing them on a hand-turned Roneo machine.

The machines on track and in the assembly area overlooked by the race office were my principal focus. The Wendy Wools Special Saloon championship was a hotbed of innovation, with intriguing spaceframe hybrid silhouettes increasingly outperforming hordes of steel-shelled Minis, Imps, Vauxhall Vivas and Firenzas, Ford Anglia 105Es and Escorts, plus charismatic relics from the Jaguar Mk1 epoch.

Oddities always caught my eye: Tony Hazlewood's fabulous DAF-Oldsmobile V8 (which I've driven a couple of times), John Peachey-Austing's Imp-engined 'Mimpi', a brace of Fiat 850, Ginger Marshall's wonderful Mini Countryman and Reliant Kitten with bespoke powerplant, Jonathan Buncombe's wacky 'Chimp,' Lola and Chevron sportscar-derived Skoda coupes on a similar theme and John Turner's F5000 Ledabased monster, the ultimate Czechmate. I could go on.

Today's CSCC popular series for Special Saloons and Modified Sports cars caters for period survivors and ingenious modern takes on the genre. Rapidly gaining competitor support, this slightly more liberal class features scintillating tubeframe turbocars alongside Donington/Castle Combe Special GT machinery and thuggish 'old school' stock. No wonder it boasts a growing spectator following and paddock interest runs high. Thruxton must already be a candidate for event of the season?

Last week's Humble Pye, on the subject of bracketed Formule Libre racing for novices, touched a chord with the CSCC. While not as wide-based as 'The Redfern Formula,' or time-targeted as such, its new for 2016 Open series has only three basic rules: no single-seaters, no sports racers and no slicks. Like the rest of the successful 15-year-old club's sets, it should work rather well **



SPECIAL SALOONS GET TV SLOT WITH THRUXTON DEAL

Special Saloons and Modsports return to Thruxton for the first time in more than 30 years as a triple-header jewel in the crown of the Classic Sports Car Club's maiden visit to the Hampshire track on August 13/14.

Three one-hour, recorded highlight programmes on Motors TV, produced by Barry Welch of Digitex, mark another first for CSCC competitors across a 10-class portfolio. "We were in the right place at the right time and jumped at the opportunity," said CSCC's Hugo Holder.



KING STEPS UP TO JUNIORS AFTER WINTER SUCCESS

Ginetta Junior Winter Series Rookie Cup champion Harry King, 15, has rejoined Edward Ives' Elite Motorsport equipe in a bid to add the 2016 Simpson Race Products championship title on the BTCC bill.

The Holyport hotshot, who graduated to cars having finished second in last year's Whilton Mill kart championship and third in Ginetta's Junior Scholarship, arrives with confidence buoyed by three class wins at Snetterton and Brands Hatch last November.

WHAT'S ON



"LUCKY" PROBABLY ISN'T WHAT you'd expect a double-amputee to call himself, yet that's exactly the word Alex Zanardi chooses to use. The Italian lost both legs in an Indycar accident in Germany in 2001 but asserts that he wouldn't go back to his old life because he's "so comfortable" with this one.

A tale and a personality such as Zanardi's are ideal material for the bigscreen treatment. But with the release of *No Limits: Impossible Is Just A Word* — a documentary on the two-time Indycar champion's experience in last year's Spa 24 Hours, which had its UK premiere at the Manchester International Film Festival last weekend — expectations are almost impossibly high.

How do you do justice to a man with Zanardi's story? To someone whose heart stopped seven times after his crash, but who was back in the driving seat just 15 months later and who went on not just to race and win again, and to become a hero in an entirely different sport too? To a

man whose demeanour is one of unfailing gratitude, optimism and determination? The short answer is that you can't. Not in 60 minutes.

At first glance, it's no surprise that Stereoscreen, the company behind 24 Hours — One Team, One Target (2011) and Adrenaline: The BMW Touring Car Story (2014), opted to use Blancpain GT's 24-hour endurance race as the lens through which to study Zanardi. It's a big challenge, particularly for the (then) 48-year-old driver. In the context of his life, however, Spa could

Zanardi, champion driver and Paralympian, is an obvious choice for bigscreen treatment



be considered one of his less memorable achievements. Even before his accident, Zanardi entertained thousands with his cocky driving style as he took the CART scene by storm, typified by that move on Bryan Herta at the Laguna Seca Corkscrew on the final lap of the 1996 season. Post-amputation his feats have become ever more remarkable, including returning to the scene of his Lausitzring crash 20 months later to 'complete' the last 13 laps of the race, winning in the World Touring Car Championship and the Paralympics.

In an effort to contextualise his life, *No Limits* uses Spa as a framework, but hampers itself by relaying obvious facts: the drivers must be extremely fit; the car is altered to fit Zanardi's disability; his team-mates Timo Glock and Bruno Spengler don't see him as a handicapped driver. These broad-brush strokes are only surface elements, and the fascination is in the deeper details. How is the seat made to house both a legless Zanardi and his fully limbed

GET AUTOSPORT ON THE MOVE

DOWNLOAD IT NOW FROM AUTOSPORT.COM





team-mates? Why does his body take twice the load of his co-drivers and why does he liken himself to an engine with a compromised cooling system? In this regard, *No Limits* feels rather limited.

This isn't to say that it's not worth a look. Cinematographer Julius Jacoby shoots the BMW Z4 and their drivers beautifully, while a fitting soundtrack ties things together nicely. Zanardi's endless charm is invaluable and you feel honoured to get up close and personal with him for an hour.

Intimate moments such as seeing him play with his dog or tip sweat out of his prosthetics really hit home and epitomise what the documentary should have prioritised. Instead, it reveals the tip of an iceberg that's likely to leave newcomers to his story Googling for more and diehard fans disappointed at the lack of new material. Zanardi puts his success down to being a "curious guy", and he deserves a documentary that is itself more curious.

ALLY WYBREW



HOT ON THE WEB THIS WEEK

YOU TIME RALLYING'S A HIGH-STEAKS GAME

Search for: 2016 Rally Mexico - Ogier's epic save

The hazards confronting a rally driver are many (just ask Kris Meeke about hidden rocks), and on Rally Mexico Sebastien Ogier had to employ his considerable skills to avoid a potentially messy encounter with some cattle. Listen carefully at the start of the clip – it neatly sums it up.



INTERNATIONAL MOTORSPORT

INDYCAR SERIES

Rd 1/15 St Petersburg, USA March 13

The IndyCar off-season is long, but that has only served to fuel anticipation ahead of this weekend's opening round. Honda and Chevrolet have altered their aero kits, Max Chilton prepares to make his debut, plus Juan Pablo Montoya returns to avenge his 2015 defeat. As ever, the season kicks off on the streets of St Pete.

WATCH ON TV

Live: ESPN, Sunday 1630

INDY LIGHTS

Rd 1/12 St Petersburg, USA March 12-13

Before the big boys get going, the supporting Indy Lights gets its run in the Florida sun. There's British interest after Dean Stoneman completed a switch to America with Andretti Autosport, while it will be intriguing to see how Formula 3 ace Felix Rosenqvist gets on as he starts his first non-F3 season since 2009.

WATCH ONLINE

www.indylights.com

FORMULA E

Rd 5/10 Mexico City, Mexico March 12

Four months after the Autodromo Hermanos Rodriguez hosted its first grand prix since 1992, Mexico becomes a Formula E venue using a shortened 1.34-mile version of that circuit, with Sebastien Buemi bidding for a hat trick of wins. BT Sport has picked up the rights to the race on a one-off basis.

WATCH ON TV

Live: BT Sport Europe, Saturday 2145

NASCAR Sprint cup

Rd 4/36, Phoenix, USA March 13

America's premier open-wheel series might only just be starting its season, but the NASCAR campaign is already in full swing and the race to the chase is well under way as the series heads to Phoenix. Brad Keselowski made it three different winners from the opening three events with victory last time out at Las Vegas.

WATCH ON TV

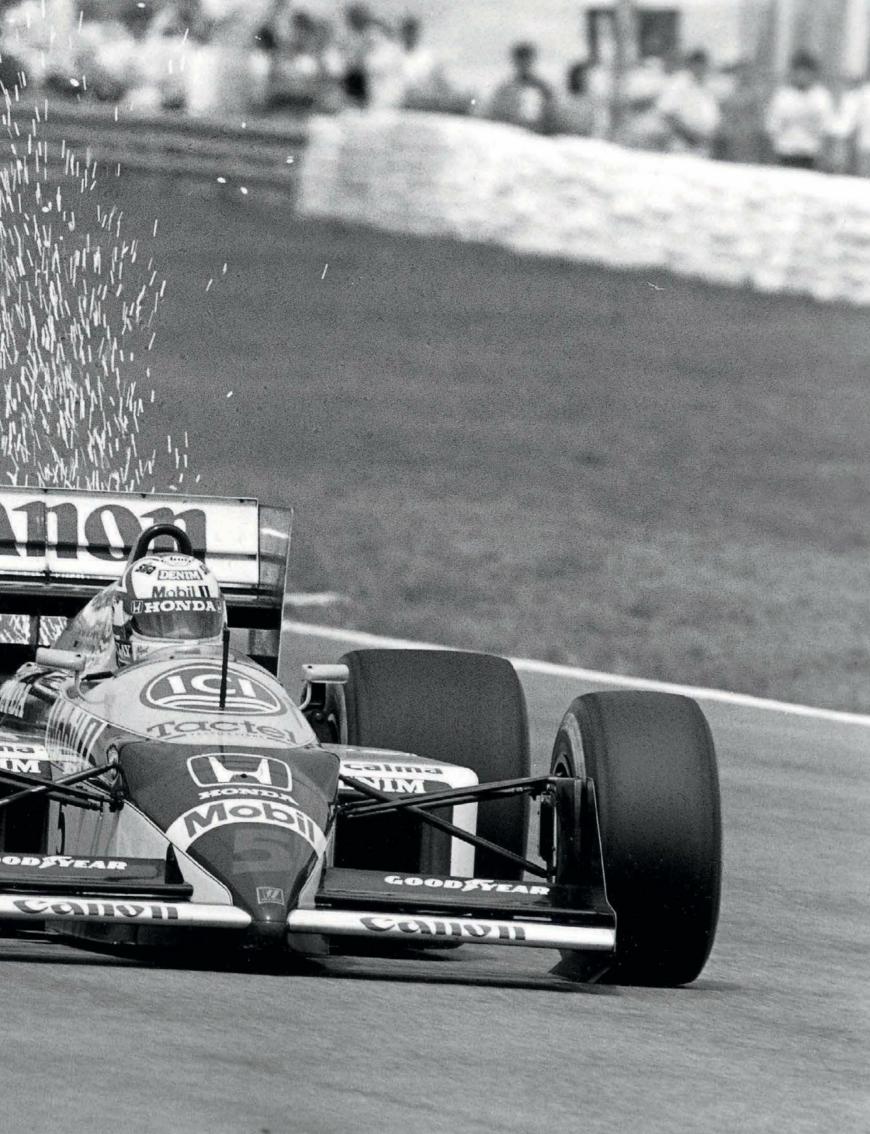
Live: Premier Sports, Sunday 1900



THE ARCHIVE

Sparks fly even in black and white. This is Nigel Mansell on his way to victory in the 1987 Spanish Grand Prix at Jerez in the Williams-Honda FW11B

LAT Photographic





ou could drive within a stone's throw of the Autodromo Nationale Monza without knowing it's there. Nestled within the walls of Monza's Royal Park is the legendary temple of speed, an ultra-fast track with a history stretching back to 1922. And it's a temple in the literal sense, at least for the loyal tifosi who head there to worship.

A pilgrimage to Monza is a must for any racing fan. The parkland setting can make even finding the track once you're inside the walls something of a challenge. On some days mist shrouds the circuit and the narrow approach roads, to the

point where you can struggle to get your bearings. But it only adds to the atmosphere. And when you do finally catch a glimpse of the hallowed asphalt for the first time, you appreciate just how spectacular this track really is. Narrow and ready to catch out the unwary, even in these days of surfaced run-off, it's a circuit unlike any other.

This track has had its share of triumph and tragedy. As well as the great victories, the legendary overtaking moves and the famous laps it was at Monza that Juan Pablo Montoya averaged a record 162.95mph in pre-qualifying for the 2004 Italian Grand Prix, the fastest lap in F1 history – there have also been the deaths of Jochen Rindt, Alberto Ascari and Wolfgang von Trips.

But Monza becomes truly special when cars are on the track. Stand near the braking zone for the first chicane and you will never again argue that contemporary grand prix machinery is boring. Watch as drivers fling the cars left, right and left in the blink of an eye at the sweeping Ascari chicane (a fast left-hander when the Italian met his end at this part of the track) and your breath will be taken away.

This is a circuit unlike any other.

Monza is a special place thanks to its blend of passionate fans (above), unique layout and incredible history (below)

AT A GLANCE

Where Autodromo Nationale Monza, 10 miles north of Milan When The 2016 Italian Grand Prix, September 2-4 Cost From £75 - the cost

of general admission for raceday - up to £535 for the priciest ticket listed on the official F1 website. That's for three-day admission and a seat in the

main-straight grandstand Key tip You must visit 'Monzanapolis', the historic banking that nestles, largely intact, in the middle of the circuit





Haymarket Consumer Media, Bridge House, 69 London Road, Twickenham TW1 3SP Tel +44 (0) 20 8267 5998 E-mail autosport@haymarket.com Website www.autosport.com Individual e-mail firstname.surname@haymarket.com

Editorial

Editor Edd Straw

Deputy Editor **Marcus Simmons** Chief F1 Correspondent **Ian Parkes** Grand Prix Editor Ben Anderson F1 Reporter Lawrence Barretto Features Editor Scott Mitchell Managing Editor Peter Hodges Executive Editor Stuart Codling roup National Editor **Rob Ladbrook** Rallies Editor David Evans Art Editor **Lynsey Elliott** Senior Designer **Michael Cavalli** Group Picture Editor **Peter Mills** Office Manager Joanne Grove

Autosport.com

Editor **Glenn Freeman** Deputy Editor **Matt Beer** International Editor Mitchell Adam Technical Team Leader Geoff Creighton Senior Digital Designer Amar Vijay Senior Developer Stephen Palme

Special Contributors

Gary Anderson, Alan Eldridge, Mark Glendenning, Marcus Pye, Dieter Rencken, 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 Carpinte

Russia Gregory Golyshev Spain Raimon Duran Sweden Tege Tornvall USA Bruce Martin, Jeremy Shaw UK & Ireland Pete Allen, Jonathan Crawford, Jack Cozens, Kerry Dunlop, Tom Errington, Linda Keen, Alex Kalinauckas, Lewis Larkam, Mark Libbeter, Stephen Lickorish Marc Orme, Dan Paddock, Graham Read, Hal Ridge, Aaron Rook. Peter Scherer, Seb Scott, Ian Sowman, Oliver Timson, Ian Titchmarsh, Eddie Walder, Richard Young

Advertising

Tel +44 (0) 20 8267 5271

E-mail autosport.ads@haymarket.com

Sales Manager Jonathan Whitehead Display Advertising **Don Rupal, Karen Reilly**Classified Advertising **Jamie Brooker, Jonathan King, Joe Andrews** Autosport.com Sales Manager Fiona Bain Online Advertising Leah Mimms

Special Project Sales James Robinson Advertising Director Matthew Witham

Advertising Production

Tel +44 (0) 20 8267 5588 Fax +44 (0) 20 8267 5320 Production Controller **Abbey Gunner** abbey.gunner@haymarket.com

Subscriptions

UK 0844 8488817 Overseas +44 (0)1795 592 974 Email autosport@servicehelpline.co.uk Back issues 0844 8488817

Direct Marketing Executive Maria Fernandez +44 (0)20 8267 8254

Autosport. ISSN number 0269946X, is published weekly by Haymarket Media Group, Bridd, House, 69 London Road, Twickenham TWI 3SP, United Kingdom. Aifreight and mailing in its USB Aye agent named Air Business Ltd. of Worldnet Shipping, Inc. 156-15, 166th Avenue. 2- Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Jamaica NY 11431. Subscription records are maintained at Haymarket Media Group, Bridge House, 69 London Road, Iwicke WIL 3SP. Air Business Ltd is acting as our mailing agent.

Licensing and Syndication

International Director **Alastair Lewis** +44 (0)20 8267 8606 Syndication enquiries Isla Friend +44 (0)20 8267 5024

Management

Group Director **Tim Bulley** Group Publisher **Stuart Williams** Group Editor Anthony Rowlinson Group Publishing Manager Sunita Davies Special Events Manager Laura Coppin
Digital Special Project Manager Simon Strang Digital Product Manager Simon Grayson

© 2016, HAYMARKET MEDIA GROUP LTD printers cannot accept liability for errors and omissions. Advertisements are accepted for publication in *Autosport* only upon Haymarket Media Group Ltd's Standard Terms of Acceptance of Advertising, copies of which are available from the Advertising Sales

Frontline Ltd, Park House, 117 Park Road, Peterborough, Cambs, PE21 2TS. Tel: +44 (0) 1733 555161. Printed in England by Wyndeham Peterborough Ltd. ISSN 0269-946X. Autosport, incorporatir

CIRCULATION TRADE ENQUIRIES

Editorial Director **Mark Payton** Strategy and Planning Director **Bob McDowell** Managing Director David Prasher







Italian Grand Prix 2016



Tick it off your bucket list!

3 night packages staying on Lake Como from just £679 including: Flights • Accommodation on a B&B basis • Airport transfers • Circuit transfers

Flights available from UK regional airports, choice of race tickets and hospitality, the option to extend your stay in Como, Milan or further afield.

We can take care of these arrangements for you!

F1 • Monaco Historic GP & Le Mans Classic • Le Mans 24 Hours • MotoGP • NASCAR WSB • Indy 500 • British Superbikes







CONFERENCE CENTRE

RACE DAY HOSPITALITY & PUBLIC TOURS

The Williams Conference Centre is home to the largest private collection of Formula One cars in the world. Housing more than 40 of the team's seminal race cars, the collection charts the team's 30+ years of motor racing history.

INFORMATION AND ONLINE BOOKING: WILLIAMSF1.COM



CLAYHAH