

Getting to know the Circuit de Catalunya

Given that the teams seem to spend the bulk of winter testing gathering yet more data on the Circuit de Catalunya, you might think that defining a car's set-up in Barcelona is the easiest task of the season.

But in Formula 1, nothing is ever easy.

Barcelona is such a popular test site because its sixteen corners give a little something to everyone. The combination of speeds and corners on offer mean that the Circuit de Catalunya enables teams to test their cars in a range of scenarios without packing up shop and moving tracks.

Concerned about stability and aerodynamic performance? Analyse your performance through Barcelona's long, slow bends. Traction more of an issue? Take a look at the final sector telemetry. A car that handles well around the Montmelo circuit is a car that should prove to be consistent throughout the season.

While it's easy to understand why the teams love to test at Barcelona, historically the stacks of archived data they have at their disposal means that races there can border on the predictable. Set-up is a given, race pace is a known quantity, etc.

But that's the doom and gloom perspective. The overtaking extravaganza the 2011 F1 season has been thus far should mean that the Spanish Grand Prix will not be its traditional siesta. Hang the data, because the combination of Pirellis and DRS are very likely to shake up the status quo.

In the run-up to the race, Mercedes GP produced an analysis of overtaking in the 2011 season. While we have had an impressive number of overtakes (DRS-assisted and otherwise) so far this year, the received wisdom is that the Spanish Grand Prix will prove to be the real test of the effect of the 2011 rule changes on the racing.

Barcelona has never been a festival of overtaking – 80 percent of F1 grands prix held at the Circuit de Catalunya have been won from pole, while in the past three years we have seen an average of 2.3 passes per Spanish Grand Prix.

According to Mercedes, the circuit configuration in Barcelona has a bigger impact on the ease of overtaking than is typical at current tracks. "The fundamental impediment to overtaking at the Circuit de Catalunya is that the 880m main straight is preceded by the fast Turn 16," the team said in their analysis.

"It is a corner through which it is hard to follow another car closely and, when performance differentials between them are small, this makes overtaking extremely difficult. Furthermore, teams have normally been testing at Barcelona and have optimised the car and tyre usage, which usually gives less variation in performance and strategy than normal."

A key point of interest in Barcelona that could lead to changes in strategy will be the switch to a new hard tyre compound. Pirelli have brought along a hard tyre with improved wear over the primes we have seen so far this season, and the increased durability should lead to further changes in pit stop strategy. While the new tyre is more durable than the rubber we saw in Turkey, we are unlikely to see a return to one-stop strategies.

Pirelli motorsport director Paul Hembery explains the switch to a new hard compound. "We said from the start of the year that we would introduce evolutions of the tyres if we believed that they would benefit the sport and Barcelona marks the first occasion that we have done this," he said.

"The new tyre – which we have tested extensively – reduces degradation and improves tyre wear. It's not a huge step over the original hard tyre but it does mean that there is a bigger gap between the soft and the hard tyre, which will definitely make things even more interesting on race day and give teams the opportunity to use more creative strategies. In Barcelona, based on the data we have seen in testing, we're probably expecting around three pit stops per car. It takes a lot longer to enter and leave the pits in Barcelona than it did in Turkey, and this is another factor that will have a definite influence on strategy."

In terms of overall stress, the front-left will be the tyre greatest affected by the Circuit de Catalunya's numerous right-handers.

According to Jaime Alguersuari, the final sector will be the real test of Pirelli rubber in Spain. "Sector three of the track will be the key to the lap time and the part of the circuit where tyre behaviour will play a vital role," the Spanish driver said. "This part of the track is tough on the tyres and then there is Turn 12, which will be quite tricky as it is very demanding and you can really feel the tyres working here. Also, the exit to the final corner is going to be interesting in terms of the tyres because of the loads they are subjected to here."

But when it comes to challenging corners, the jury is out. While Alguersuari cites the technical Turn 12, others point to the uphill, flat-out Turn 3 as the beast of the track. Balancing speed with the battle against oversteer on the long right-hander is a real test of a driver's skill.

As far as engines go, the Circuit de Catalunya is not one of the most demanding on the calendar, although the main straight presents its own challenges. "As a general rule," Cosworth say, "the Catalan circuit is not too demanding on engines but units are still put through a decent workout over the course of the lap. Only around 60 percent of the lap is spent at full throttle, but the 1.047km main straight requires good peak power, while the circuit's unique flow of corners demands good driveability from the engine and a responsive gearbox."

The current configuration of the Circuit de Catalunya has been in use since 2007, when a chicane was added in the run-up to the final corner, and measures 4.655km. Presuming it runs for the full distance, the grand prix will last for 66 laps, bringing the total distance run to 307.104 kilometres.

The group of past Circuit de Catalunya winners currently racing in F1 is fairly small: Mark Webber (2010), Jenson Button (2009), Felipe Massa (2007), Fernando Alonso (2006), and Michael Schumacher (1995, 1996, 2001, 2002, 2003, 2004).

The group of previous pole sitters is fairly small, with the lion's share of poles claimed by a certain German legend: Mark Webber (2010), Jenson Button (2009), Felipe Massa (2007), Fernando Alonso (2006), and Michael Schumacher (1994, 1995, 2000, 2001, 2002, 2003, 2004).

Fastest laps at the Circuit de Catalunya have been claimed by Lewis Hamilton (2010), Rubens Barrichello (2009), Felipe Massa (2006, 2007) and Michael Schumacher (1993, 1994, 1996, 1999, 2001, 2002, 2004).

The current lap record at the Circuit de Catalunya is Kimi Raikkonen's 2008 time of 1:21.670s, set at an average speed of 205.192kph.

The sharp-eyed among you might have noticed that Cosworth and Mercedes have supplied two different measurements for Barcelona's main straight. Those measurements vary by a not insignificant 200 metres.

F1 Sofa Blog – Thursday press conference in Barcelona

While Jaime Alguersuari (Toro Rosso), Fernando Alonso (Ferrari), Pastor Maldonado (Williams), Sergio Perez (Sauber), and Mark Webber (Red Bull) were all present for the Thursday drivers' press conference, the media were interested in little more than Alonso.

Webber got some of the attention, but the hot topic of the day was Ferrari's announcement that Alonso would drive for the team until the end of the 2016 season – that's two Olympics away, fact fans.

Let us begin with the few comments made by Alguersuari, Maldonado, and Perez, each of whom had a brief turn at the microphone before the focus moved to the bigger guns.

It was hardly fair to ask rookie driver Maldonado about his season thus far. Williams have had their worst start to a season in the team's history, and even Juan Manuel Fangio would have found it hard to shine in the FW33.

"It was not so easy for us," Maldonado said, "especially at the beginning, the first two races, as we have some problems in both cars, so it was difficult to keep the car to the end of the races. I am improving every time, every race. The team is pushing and we are working so hard to be competitive and I am quite confident from now to be in the top ten. I think we can do that.

"The potential is so high in the team," the Williams driver continued. "We just need to put all the points together and to get the right things and finalise in top ten. The car is so quick, we just need to concentrate on some little things and we will see. Our potential is so high. I always said that. We need to be together in that moment. But it has been difficult for us but we can see that we can score some points."

Back in Grove, the Williams factory team have been working hard to develop the car, and Maldonado is confident that progress is being made race by race.

"The team did a very, very strong job – especially in the past two weeks – just to improve," he said. "We have a very good aero package here and hope that it will function. I don't know if you saw the last race: we were very close to going into Q3 so I hope to be there this race. We do our best and let's see."

Fellow rookie Perez has had a better debut, although the shine was taken off his impressive Melbourne performance when Sauber was disqualified post-race.

"So far I am very happy with my season," Perez said. "Even though I had a very good debut, finishing seventh, in the last races I had the pace to be on the points consistently. For one reason or another I could not manage in the end to get the points, but my adaptation to Formula 1 has gone very good so I am very motivated. The team has supported me a lot and I am very happy and looking forward for this weekend. I think now, after four races, I am quite ready to start to show the progress and ultimately to aim for the points."

Sauber have brought a package of updates to Spain, and Perez is feeling positive about his potential performance this weekend.

"I think we are quite optimistic," the Sauber driver said. "We hope everything goes according to our plan. Many teams are bringing updates so we have to keep pushing to keep improving. I think so far the car has been quick especially in the races. If you see the last race I had a problem with my front wing, I broke my front wing in the third corner, so I lost about 40 seconds but recovered from that to still finish 13th so the pace of the car is quite good. We have to keep improving and I am very optimistic we are going to do a good job this weekend."

Jaime Alguersuari is hoping that his home grand prix will be the circuit at which his season turns around.

"I really hope the season turns around a bit for me and from this weekend onwards we can have a much better season," the Toro Rosso driver said. "For one reason or another it was not really the best beginning for me and hopefully we can finish in the points. We will see if the strategy goes with us and it helps us to be more consistent in the race with tyre degradation and so on and we can score some points and hopefully, as I say, just turn around the season. Then we can score some points as well in Monaco and the next races.

"The target is to be in top ten and we have shown it, we have shown we have potential and that this year the car is more competitive, especially on the

Saturdays, than last year,” Alguersuari concluded. “We have showed it in qualifying. For me I am struggling a bit in the race. We did not have the chance to finish China or Malaysia in good conditions but in general we have good experiences from Sebastian, who seemed to have no problems in the race and we will see where we can finish here.”

And that was pretty much it from Alguersuari, Perez, and Maldonado, who had to twiddle their thumbs while Alonso and Webber were asked question after question.

For Fernando Alonso, the biggest story of the day was his new Ferrari contract. The Spanish driver was happy to talk about his passion for the Italian team.

“It is not a big change in my mind or in my head as it was already for me very clear that I would race here for many years,” the Asturian driver said. “Despite what the number of the contract said, which year it finished, the stability was already 100 per cent in my case and I felt the same with the team. This is just a public confirmation, nothing changed inside the team and stability is always good for a Formula 1 team. There are so many rule changes, so many things to look at, that for a driver point of view or a team point of view it is good to programme in the long-term to develop and to create a good partnership together and bring some success to Maranello.

“It was good news for me, for my career to extend the contract and to make an extension to 2016,” Alonso continued. “As I also said last year the intention is to finish my career at Ferrari. I don’t imagine any other better place to race for a racing driver. I have been lucky to arrive here last year. I felt at home from day one and now I have this possibility to be racing here. At the end of 2016 it will be seven years in Ferrari, so I feel very privileged, very happy to that, and in 2017 we will see maybe another contract, if I am not too old at that point and if Ferrari are still happy with me.”

With the contract extension out of the way, questions to Alonso concentrated on his ability to beat the Red Bulls to the championship.

“I think Mark, for sure, last year was taking some points from Sebastian,” the Ferrari driver said. “That hasn’t happened in these four races. In the numbers, when you see the championship now, you see that Vettel is quite far in front and then a group of six or eight cars, not too far behind one another. It’s only Sebastian who has got a bit too far ahead at the moment and this is also thanks to his fantastic driving in these first four races: no mistakes, very quick and he deserved all those points. So it’s up to us, now, to recover this gap, it’s up to us to have more competitive cars, better cars than Red Bull, so we are working on that and winning races.

“If we do that – the championship is long – to recover the gap and there are still plenty of races, but to do any reaction or any recovery in terms of points, you need to have the best car,” he continued. “It’s happened in many years, it happened in 2006 to me. I remember I had a gap of 32 points to Michael in Canada, which is more or less 75 or 80 points today, and Michael had the same gap to me with two races to go. So you can catch up any distance, but you need to have the best car in one part of the championship, so we are working on that. And as you said, if it happened like last year that the Red Bull was the quickest car but sometimes Mark was winning, sometimes Sebastian was winning, sometimes they didn’t finish races, sometimes they crashed together and if we can have something like that, it will be even better.”

And based on Alonso’s performance in Turkey, the championship is not entirely out of reach. The Spanish driver was asked to explain his podium at the last race.

“It came from race pace and from tyre management, I think, because in qualifying, I think in Malaysia it was 1s again,” Alonso said. “In China, it was 1.4s and Turkey was 1s behind pole position, so more or less the same distance. But the race pace depends on how is the tyre management you can have in the race, how easy your car is in that particular race, concerning the set-up or whatever you can find on Friday; it helps the Sunday performance, so in Turkey, it seems that we went in the right direction in terms of set-up of the car, in terms of tyres and we were a little bit more competitive than expected in the race.

“So we would like to bring that experience to these coming races and hopefully we can keep having some advantage in tyre wear and tyre behaviour,” he concluded. “And here, I don’t know. We will see how is the performance of the car, how the new parts work but as I said, the most important thing is how you approach the weekend and how you manage your tyres.”

While Alonso was the star of Thursday’s show, Webber had a lot to contribute on the likelihood of overtaking, his relative performance to teammate Sebastian Vettel, and the importance of tyre management.

“We need a perfect weekend,” the Australian driver said. “We know that. To win at this level you need to get everything right. It is not like I am starting to try now. I have been trying the last few races. Turkey was the first race where I had a clean weekend with the car, which was nice, so we managed to have reasonable quali, reasonable first stint, and after that it was a good race with Fernando and we still managed to get a good result. But the other races have been a bit more chaotic for different reasons, but we look to have less chaotic races and keep it as Turkey was and keep executing a clean grand prix and getting it all right and that’s what you need to do to win.”

While Barcelona marked the beginning of the Red Bull driver’s 2010 purple patch, Webber explained that he was still struggling to make the most of the Pirelli tyres, which explained the gap in qualifying performance between him and Vettel.

“What’s absolutely clear is that we were very, very, very even on the Bridgestone tyres, and it’s not quite like that on the Pirellis so far, particularly on new tyres,” Webber explained. “That’s not an excuse, I’m just answering your question. That’s the only thing that’s changed. It’s a big change for the drivers, obviously, to get used to that. Seb’s doing a good job and clearly it’s up to me to do better.”

Asked about overtaking at the traditionally processional Circuit de Catalunya, Webber said “it will definitely be better than what we have had in the past. It has to be. The tyres are playing a big role these days and the wing on this straight as well. The last sector in Turkey is a little bit more open for different moves, so Turn 1 here is a bit different but you can still get the job done with the tyres and with the wing. It will be a different Spanish Grand Prix to what we have seen in the past in terms of overtaking. Not the most overtakes we have seen here in the past but that will probably change on Sunday.

“I think we’ve seen the racing change, of course,” Webber continued. “It’s not often that you see what happened with Fernando and I in Turkey,

where Fernando comes past me and then I can come back past him again later in the race. I would like to see the last time we saw that in a grand prix, for a clean... no mechanical problems on the cars, obviously. It was just a different situation that we went through in the grand prix, so that was a little bit unusual and probably will happen again in the future.

“That’s mainly because of the tyres, so the tyres are now playing a big role in how the grands prix are executed and you’re right, yes, we’re getting a lot of help from the pit wall,” he concluded. “We’ve always had that, particularly in the fuelling days. In terms of influence from the pit wall, I don’t think that much has changed. It’s now maybe as busy – maybe a little bit more busy for us in the car than it was in fuelling days, for us, not to manipulate the strategy but we’ve got to try and look after the tyres a bit and that sort of stuff.”

And finally, the session’s light relief came courtesy of Mark Webber’s take on the blown floor debate.

Q: Blown floor? What do you feel about that?

MW: What’s the rule this hour?

Q: True. You tell me, I don’t know.

MW: We don’t know either. It changes every hour.

Q: What is your feeling about the performance you perhaps get from that? It has been around for quite a long time hasn’t it?

MW: Yeah, it will affect all the fast teams for sure.

Q: Do you imagine losing it?

MW: Out of our hands, isn’t it mate? At the start of the week it was banned, this week not, today not. Another Technical Working Group meeting after Monaco but I think it will affect all the top teams that have been utilising this system, not just this year but obviously a little bit last year.

F1 Sofa Blog – Components, upgrades, and aero packages in Barcelona

The Spanish Grand Prix at the Circuit de Catalunya is traditionally the home of the first serious update package of the season. Proximity to the teams’ factories and a wealth of data on the circuit’s characteristics makes life easier for everyone in the pitlane.

The prize for the biggest package of updates almost certainly goes to McLaren. Thanks to a pre-Turkey testing rig failure, the British team are bringing between I0 and I2 upgrades to Barcelona.

Chief engineer Tim Goss explains: “As usual, the relentless pace of upgrades continues. We have a package of upgrades that we’re taking to Spain – we take upgrades to every race – but in total we will have about I0 or I2 upgrades, some of which will be noticeable from the outside and some of them are not noticeable. Our objective obviously is to win races and ultimately win championships and to do that we’ve got to close the gap on Red Bull and we just keep chipping away at the problems. We had a package for the Turkish Grand Prix that we took there. As ever we’re always trying to accelerate getting upgrades to the circuit as quickly as possible and just prior to the Turkish Grand Prix we had a relatively minor issue which meant that I wasn’t confident that the upgrades would be durable for a race distance so we pulled out of that at the last minute. We’ll re-evaluate all of our upgrades on Friday in Spain and those that look good we’ll take forwards.”

A lot of McLaren’s work in Barcelona will concentrate on changes to the rear end and floor, Goss says. “As you know, we introduced a change of concept to the rear end of our car just before the start of the season. We’ve been living with some sub-optimal packaging in that region for several races now and I think what you’ll see is some bodywork and floor changes that aim to tidy up that area of the installation.”

Team Lotus are also bringing a major raft of upgrades to the Circuit de Catalunya, and chief technical officer Mike Gascoyne is confident that the new diffuser could be worth up to I s per lap.

Speaking to the team’s Lotus Notes publication ahead of the Spanish race, Gascoyne said “we think our update is going to allow us to take a clear step into the midfield, so that we are qualifying with them and out-racing them more and more. The update is all built around the rear end. It’s a Red Bull-style diffuser package. It’s been a hot topic at the start of the year, so it’s pretty natural that it was going to be an area we looked at. We’ve seen from the development that it is a very big step – far bigger than you would normally expect to be making, which is why everyone else has done it. It means we can catch up with those in front. We’re expecting it to be about I s, up to I s.

“It might take us a couple of races to fully exploit it,” he continued, “as I think it is going to depend on the blown floor and engine strategies, and some people have more experience than us with that. But we expect our update to be significant. I think we’ll see a big step and I think there is more to come over the coming races.”

Next on the major upgrades list is Sauber, who will be bringing a serious package of updates designed to compliment those new parts brought to Istanbul two weeks ago. The Swiss team are confident that the combination of new aero components and a tweaked exhaust should be worth a few tenths per lap.

James Key, technical director for Sauber, outlined the upgrades in more detail. “We’ll have a new, quite significant aero package on the car,” he said, “which will be a completely new front wing, updates to the front and rear brake ducts, new bodywork, new devices around the floor leading edge and under the chassis, and we’ll be testing the new exhaust system again. We’ll also be continuing our work on the mechanical update we had in Istanbul, which proved to be positive. So it will be interesting to see how this works. If it works well it should give us a good few tenths of a second improvement in lap time.”

Ferrari will be running with a modified floor and new front and rear wings as they attempt to improve their single-lap pace. The Scuderia’s Barcelona preview goes into more detail: “Continuing with the car development, the I50° Italia will be fitted with new floor configurations in Spain, along with modifications to the front and rear wings. Much of the development work has centred on improving the car’s performance over a single lap in

qualifying, a phrase that maybe sounds like a mantra now, as it has been the case since the start of the season and actually during previous years too.”

According to technical director James Allison, Renault are bringing a raft of updates to their aerodynamic package to the Circuit de Catalunya. Combined, the tweaks should add up to an overall improvement of 10s over the course of the race. “We bring another handful of aerodynamic upgrades for the next race – the development race never lets up,” he said. “None of them are individually large, but there are six in total and they add up to another 0.15-0.20s per lap. It isn’t a huge upgrade, but if we can keep that up for every race then it starts to tell.”

Mercedes are bringing upgrades to Barcelona, but the team’s main goal this weekend is consistency. Team principal Ross Brawn explains: “We will have an aerodynamic development package for the Spanish Grand Prix, along with refinements to our suspension package, which should help to find the consistency in the car that we are looking for.”

Williams have been working on improving the new rear wings they brought to Istanbul; the team will also be testing new exhaust blown diffusers.

Virgin brought their major package of updates to Istanbul, and will be using the Spanish Grand Prix weekend to extract more performance from the existing components.

Force India and HRT have admitted that they are bringing updates to Barcelona, but have not gone into any detail.

Red Bull and Toro Rosso have been completely tight-lipped about upgrades this weekend.

F1 Sofa Blog – F1 in Barcelona

There is a very strong argument for saying that Formula 1 grands prix should not take place at circuits used for testing.

The Circuit de Catalunya is the big daddy of F1 test tracks. Teams and drivers know every inch of the circuit, possibly better than they know their own back gardens. As a result, practice sessions in Barcelona are somewhat less stimulating than they are at other circuits.

But stimulating or otherwise, the show must go on, and go on it did.

Red Bull brought back memories of the 2010 season, setting fastest times that put them over a second ahead of the competition. Mark Webber bested his teammate by just over a second, while Sebastian Vettel finished the morning 0.2s ahead of third-placed Nico Rosberg.

Barcelona is traditionally the scene of major upgrades for the team. As the first entirely European race of the season, it is easier for the teams to transport sizeable upgrades to the track, and those upgrades that saw limited track time in Istanbul have returned for further testing.

As teams are busy gathering data on their new parts, it’s hard to read much into the times set in Friday practice. It goes without saying that the Red Bulls are fast, but that’s equivalent to saying that the sun rises in the east.

It is entirely possible that one of the Milton Keynes-based team’s opponents will have found the magic combination of updates that will shake up Saturday’s qualifying, but based on the currently available data, a Red Bull front-row is looking highly likely.

One team that does appear to have found the right combination of upgrades is Lotus, whose new rear end has reduced the gap to the mid-field to two-tenths of a second. In the run-up to the race Mike Gascoyne confidently asserted that his team would soon be out-racing the mid-field, and it looks as though he could be right.

The only incident of the morning came at the hands of Williams driver Pastor Maldonado, whose session was cut short when he beached his car in the gravel coming out of Turn 12.

F1 timings (unofficial)

1. Mark Webber (Red Bull) 1.25.142s [27 laps]
2. Sebastian Vettel (Red Bull) 1.26.149s [20 laps]
3. Nico Rosberg (Mercedes) 1.26.379s [29 laps]
4. Fernando Alonso (Ferrari) 1.26.480s [27 laps]
5. Sergio Perez (Sauber) 1.26.738s [26 laps]
6. Lewis Hamilton (McLaren) 1.26.988s [19 laps]
7. Michael Schumacher (Mercedes) 1.27.016s [32 laps]
8. Nick Heidfeld (Renault) 1.27.132s [21 laps]
9. Jenson Button (McLaren) 1.27.138s [22 laps]
10. Rubens Barrichello (Williams) 1.27.212s [20 laps]
11. Vitaly Petrov (Renault) 1.27.241s [22 laps]
12. Daniel Ricciardo (Toro Rosso) 1.27.471s [23 laps]
13. Pastor Maldonado (Williams) 1.28.005s [11 laps]
14. Nico Hulkenberg (Force India) 1.28.027s [26 laps]
15. Adrian Sutil (Force India) 1.28.163s [22 laps]
16. Felipe Massa (Ferrari) 1.28.654s [28 laps]
17. Kamui Kobayashi (Sauber) 1.28.819s [23 laps]
18. Jaime Alguersuari (Toro Rosso) 1.28.995s [9 laps]
19. Heikki Kovalainen (Lotus) 1.29.231s [21 laps]
20. Jerome D’Ambrosio (Virgin) 1.30.896s [18 laps]

21. Timo Glock (Virgin) 1.31.235s [24 laps]
 22. Tonio Liuzzi (HRT) 1.31.268s [23 laps]
 23. Jarno Trulli (Lotus) 1.31.418s [12 laps]
 24. Narain Karthikeyan (HRT) 1.32.106s [25 laps]
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F1 Sofa Blog – FP2 in Barcelona

There was a lot to learn at the Circuit de Catalunya in Friday afternoon's free practice session.

First and foremost, the new hard tyre compound is not proving to be popular among the drivers. Ferrari's Fernando Alonso has said he doesn't expect anyone to use it in Q1 tomorrow, breaking the established tradition of the season thus far, while McLaren's Lewis Hamilton told the BBC the new compound was a "disaster" in practice.

Second, the Red Bulls are fast. In other news, the Pope is believed to be of a Catholic persuasion, bears prefer forest-based bathroom facilities, and breathable air is important to human survival.

Finally, both Lotus and McLaren appear to have got the extra pace they'd hoped for from the latest round of developments, although finding the perfect balance on new equipment isn't always easy.

Mark Webber was fastest for Red Bull, while Hamilton was only 0.039s down on the Australian. Sebastian Vettel was 0.3s down on the McLaren driver, while Jenson Button was 0.3s slower than the Austrian.

Fernando Alonso ended the session in P5, which seems to be his home for the season. The Ferrari driver has qualified in P5 at every race this season, and could do so again tomorrow if this afternoon's form proves to be consistent.

Adrian Sutil saw dramatically reduced running this afternoon, and completed only 20 laps. He was having telemetry issues, and engine supplier Mercedes won't let the cars run without live telemetry.

Sutil's lack of running might be one of the reasons Lotus driver Heikki Kovalainen was able to outpace him this afternoon, but it looks as though the Norfolk team's new diffuser is really doing the business. The Finnish driver was sandwiched between the Force India pair, 0.3s slower than Paul di Resta and 0.3s faster than Sutil.

While the session saw a few spins and deviations from the line, there were no real incidents of note to report.

FP2 timings (unofficial)

1. Mark Webber (Red Bull) 1.22.470s [35 laps]
 2. Lewis Hamilton (McLaren) 1.22.509s [27 laps]
 3. Sebastian Vettel (Red Bull) 1.22.826s [37 laps]
 4. Jenson Button (McLaren) 1.23.188s [32 laps]
 5. Fernando Alonso (Ferrari) 1.23.568s [34 laps]
 6. Nico Rosberg (Mercedes) 1.23.586s [35 laps]
 7. Michael Schumacher (Mercedes) 1.23.981s [30 laps]
 8. Felipe Massa (Ferrari) 1.24.278s [30 laps]
 9. Kamui Kobayashi (Sauber) 1.24.290s [33 laps]
 10. Nick Heidfeld (Renault) 1.24.366s [31 laps]
 11. Sergio Perez (Sauber) 1.24.483s [38 laps]
 12. Vitaly Petrov (Renault) 1.24.786s [43 laps]
 13. Sebastien Buemi (Toro Rosso) 1.25.296s [33 laps]
 14. Rubens Barrichello (Williams) 1.25.303s [38 laps]
 15. Jaime Alguersuari (Toro Rosso) 1.25.457s [34 laps]
 16. Pastor Maldonado (Williams) 1.25.603s [43 laps]
 17. Paul di Resta (Force India) 1.26.073s [32 laps]
 18. Heikki Kovalainen (Lotus) 1.26.417s [37 laps]
 19. Adrian Sutil (Force India) 1.27.123s [20 laps]
 20. Jarno Trulli (Lotus) 1.27.189s [34 laps]
 21. Jerome D'Ambrosio (Virgin) 1.28.036s [36 laps]
 22. Timo Glock (Virgin) 1.28.062s [28 laps]
 23. Narain Karthikeyan (HRT) 1.29.469s [28 laps]
 24. Tonio Liuzzi (HRT) 1.29.476s [31 laps]
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F1 Sofa Blog – Friday press conference in Barcelona

For the more technically- and politically-minded Formula 1 fan, Friday's senior team personnel press conference offers a lot of food for thought.

Present were Jose Ramon Carabante (HRT), Jean-Francois Caubet (Renault Sport F1), Stefano Domenicali (Ferrari), Mark Gallagher (Cosworth), and Adam Parr (Williams).

The main topics of conversation were the 2013 engine regulations, plans for future engine supply, and the blown floor debate. While some teams have come out against the changes to the engine regulations, the majority of those present this afternoon thought that the change was a positive one for the sport.

"I think Renault is very clear on this point," Caubet said. "We are fully supporting the FIA. It makes a lot of sense for a carmaker like Renault to be road relevant. I think it is a key point for the future of Formula 1. We have started work now for a few months and we will be ready next year, November, to provide for four teams.

"For Renault, things are very clear," Caubet continued. "We have fully committed to the 2013 engine. In terms of strategy, it perfectly fits with the market. We conducted a long study on what would be the future market for road cars and we think that in between five and six years, probably 60 or 70 percent of the total car market will be hybrid or electric, so to have a relevant engine is a strategic problem. In terms of costs and price, in terms of price, we don't think there will be a huge difference between the current engine and the future engine, except probably the battery."

Parr was in complete agreement.

"Our view is no secret," the Williams chairman said. "For several years we have said Formula 1 needs to move to more sustainable technology. We were big supporters of KERS and we think the new engine formula is fundamental to the future of the sport. We understand that there are other views on that subject, but fundamental, if Formula 1 isn't about new technology areas and leading what happens on the road and elsewhere, then I am not sure exactly what it is about. We believe it is essential."

Given that Cosworth were involved in the development of the new regulations in an advisory role, it is hardly surprising that the engine supplier is also in favour of the new regulations.

Gallagher explained his company's involvement: "I think the view was always that the manufacturers, from the outset, agreed with the FIA that having an independent engine manufacturer available to Formula 1 teams was a good idea. The view was: if Cosworth was involved in the creation, or the formation, of the rules for 2013 and the way the engine would be conceived, that if we could do it, then any car manufacturer could do it. I think that was really the concept at the beginning of why Cosworth was involved and that was certainly the case at the beginning of last year.

"We're totally committed to 2013," Gallagher emphasised. "We have been heavily involved, from the outset, in the creation of the 2013 regulations in terms of our input to those discussions and we work as hard as ever and of course when a new programme comes along, you actually re-double your efforts because you're running the current programme and also looking to the future.

"The one aspect of the 2013 regulations that concerns us – and it's a significant concern – is that when we look at our customers and we consider the future from the point of view of Cosworth as a business in Formula 1 ... we know that our customers do not have an appetite to spend more money on Formula 1 engines. So we believe that there is a responsible discussion to be had about the costs involved in the 2013 programme," he continued.

"So we're very clear that the costs remain an issue and the regulations, as currently drafted, do leave a number of options to spend a great deal of money," Gallagher concluded. "I think there was always a clear understanding that to have new regulations, whilst being welcomed from the point of view of innovation, would never be welcome from the point of view of creating a financial space race which I think everyone in Formula 1 does agree – or at least they should agree – is not what we want at a time when we're really still emerging from what has been a very difficult economic time for many many teams."

Ferrari have been publicly critical of the costs involved in the switch to a new engine specification.

"For me, on my part, I've always said it's pretty easy," Domenicali said. "I totally share the second part of Mark's answer, but – as always in this discussion – we do it with the other manufacturers and the FIA. So I think it's something that we are progressing in this discussion and really, you know, our position is not really to make official declarations outside but try to work in a constructive way with all the parties involved. But I think that what Mark said is really a fundamental point.

"As you can imagine, on the road car side we are a manufacturer that produces a very specific car with a very high number of cylinders," Domenicali continued. "But as always in our co-operation with the FIA we are discussing it and I think the discussion is still on and in a constructive way we are trying to work on this subject as it is an important element for the future, both on the technological side, but also we need to consider the level of investment that the new project needs. These are the things we need to consider as a lot of things have moved on in a couple of months and it is another thing that has to be considered, full stop."

It is not just the engine manufacturers who are worried about rising costs in 2013. Both Carabante and Parr also expressed their concern.

"This is very, very important, as you say, especially because of the costs," Carabante said. "For a small team, as we are, the budget is very important, so we have to try to ensure that all the costs are affordable for us. This is very important. At the end, we will take the decision that the regulations say but for sure, the best for us – not just for us, for all the teams – that have a good and affordable budget and this, I think, should be the future."

Parr has a broader perspective on the engines, and accepts that higher costs might be a price the sport has to pay to entice new sponsors.

"I think we're very passionate in believing that we must bring new technology into Formula 1 in 2013," Parr said. "From my personal perspective and our team's perspective, if you look at sponsorship in Formula 1, there are very few teams, if any, bringing new sponsors into Formula 1 and the fundamental reason for that, without any question, is the sustainability of the sport, because if you look at our global audience, you look at geographical presence, you look at the quality of the racing, especially with these tyres, it is absolutely riveting.

"Formula 1 is in fantastic health on its own current terms, but there is a fundamental flaw which is that many companies do not want to be associated with the sport at the moment because of the perception that it is not green enough and there is not a single big company in the world for whom sustainability is not a core part of their brand," he concluded. "So I think that for the sake of the future of the sport and attracting new sponsors, attracting a younger audience, we absolutely need to do this and as far as the costs are concerned, I agree that what Mark and Stefano said, that the

rules as set out today, could be improved a little bit, in very minor ways that would make a significant reduction in the cost for developing and providing those engines. So I think that with an intelligent debate, which is going on at the moment, we can achieve everything that everybody wants.”

Staying on the engine theme, Gallagher, Domenicali, and Caubet were asked about engine supply plans. It is known that Renault would like to supply four teams in future, and the other suppliers were asked how they felt about the threat.

Cosworth’s Gallagher was quite pragmatic about the possible threat to his company’s business as a result of an expanding Renault Sport.

“Maybe they might want to supply Stefano with an engine,” he said. “I think Cosworth is not the only potential victim of Renault wanting to have a fourth team. But, actually, Cosworth wants to have a fourth team and I am sure if Norbert Haug was sat here he might say he would like a fourth team. The reality is, in all seriousness, competition on the track technically is always matched by competition off the track commercially. We are well used to that at Cosworth and we believe we have an extremely good product and we don’t really fear competition from anyone.”

According to Domenicali, “Ferrari’s position is not willing to find new customers because our structure is basically the one that we have so the future for us will always be to supply the engines to ourselves and a maximum of two customers, no more than that.”

Finally, the team personnel discussed the legality of the blown floor.

Speaking for Williams, Parr said his team “have mixed feelings, because since Spa last year we have been using the same technology. If it is illegal we are illegal. On the other hand, to take it to another level is a significant investment for us and logically we would like to understand the legality of it before we do it. I think we will be very interested to see how that plays out over the next month.

“The diffuser is something that some teams started a good job earlier than other teams so, as always, a big reward to the one that understood the potential of that development on the car,” Parr continued. “Then, of course, we have seen that and we were working flat out to see how we can improve that area of the car. The meeting that will [take place] in 2-3 weeks is fundamental, as we need to understand what will be the future of the development. If that area, let me put it this way, closed, then we need to target a new area of development, and as you know, the season is very long. But after I would say six, seven grands prix, the margin that some teams can have taken put the other teams in a different situation so that’s another element the technical people will consider.”

Carabantes’ opinion on the diffuser is driven by cost.

“What is important, especially for a small team, is also about the costs,” the HRT boss said. “This is something that that we hope stays in consideration. The costs in Formula 1, I think that it should be affordable and should be in the right way. We need stability in the technology side and we need to know what the future is going to be otherwise we take the wrong way and it is going to be difficult to start in a different way and we are not in a position to spend money just trying things. We just hope the decision is clear and we hope that the small teams’ opinion will be taken into consideration.”

It has been rumoured that Williams were the blown diffuser whistleblowers, and Parr was asked to justify his team’s position on the device.

“As I said earlier on, we have been doing this exhaust blowing since Spa last year but there is another level which other teams are doing, as Stefano said, they were clever enough to do that,” Parr said. “Before embarking on any major investment, we would always check the situation with the FIA because there are some arguments concerning the legality of this, especially because of a change in the rules this year compared with last year so yes, we – and I don’t know if we are the only team – but we have checked the situation with the FIA to make sure before we spend a lot of money.”

F1 Sofa Blog – FP3 in Barcelona

The final practice session at the Circuit de Catalunya was all about the drama, from Nick Heidfeld’s towering inferno to Sebastian Vettel’s instant domination of his opponents.

The big story of the morning came fairly early into FP3, when Nick Heidfeld stopped his flaming Renault at Turn 10.

The German driver spotted flames climbing from his front-exit right exhaust, and stopped on the grass when he saw marshalls with fire extinguishers to hand. By the time he was out of the car, flames were licking up the sidepods and smoke was billowing across the track. According to the team, sensors had pointed to a temperature issue while Heidfeld was still in the pits, but Renault thought the problem was a faulty sensor.

While the fire is bad news for Heidfeld and the Renault mechanics, who must now work hard to rebuild the car in time for this afternoon’s qualifying session, it could prove to be a lifeline for the other teams.

Given that the Renault’s rear end experienced significant damage, and the electrics and internals appear to be completely fried, it is likely that Heidfeld will not make qualifying, and will have to start from the pits or the back of the grid.

There had been concerns that the new hard tyre compound being used this weekend was so much slower than its predecessor that teams would have to use the option compound in Q1 if they wanted to guarantee a spot in Q2. But if Heidfeld is out of the running, the mid-field and front runners are more likely to make it through to Q2 on primes, saving fresh soft tyres for Sunday’s race.

The other big story of FP3 was Sebastian Vettel’s pace-setting lap, which will have had the other drivers sobbing into their cornflakes.

The current world champion sat out of the bulk of the morning session thanks to engine problems. But once he made it out on track, Vettel’s first timed lap put him straight at the top of the timesheets, nearly 0.1s clear of teammate Mark Webber.

Red Bull appear to have a clear advantage at this circuit, much as they did last year. While the Milton Keynes-based team closed Friday's running with its lead over the competition, FP3 saw Webber and Vettel in the 1.21.7s, while Michael Schumacher – their nearest rival – could only manage a 1.23.057s.

Schumacher will be pleased with the morning's result given the criticism he faced after his sorry performance at the Turkish Grand Prix. Barcelona has traditionally been a good track for the German legend, whose best 2010 result came at the Circuit de Catalunya. In his pre-retirement days, Schumacher managed six race wins, seven pole positions, and seven fastest laps in Barcelona.

In other news, McLaren changed both drivers' gearboxes before FP3, but will suffer no penalty as both gearboxes have seen action in four races, as per FIA rules.

FP3 timings (unofficial)

1. Sebastian Vettel (Red Bull) 1.21.707s [6 laps]
2. Mark Webber (Red Bull) 1.21.791s [17 laps]
3. Michael Schumacher (Mercedes) 1.23.057s [16 laps]
4. Lewis Hamilton (McLaren) 1.23.068s [13 laps]
5. Jenson Button (McLaren) 1.23.214s [14 laps]
6. Nico Rosberg (Mercedes) 1.23.397s [18 laps]
7. Kamui Kobayashi (Sauber) 1.23.669s [17 laps]
8. Vitaly Petrov (Renault) 1.24.043s [18 laps]
9. Fernando Alonso (Ferrari) 1.24.270s [11 laps]
10. Rubens Barrichello (Williams) 1.24.318s [18 laps]
11. Felipe Massa (Ferrari) 1.24.322s [17 laps]
12. Sergio Perez (Sauber) 1.24.329s [19 laps]
13. Pastor Maldonado (Williams) 1.24.399s [17 laps]
14. Sebastien Buemi (Toro Rosso) 1.24.535s [16 laps]
15. Adrian Sutil (Force India) 1.24.695s [18 laps]
16. Jaime Alguersuari (Toro Rosso) 1.24.722s [14 laps]
17. Paul di Resta (Force India) 1.25.223s [19 laps]
18. Heikki Kovalainen (Lotus) 1.26.236s [11 laps]
19. Jarno Trulli (Lotus) 1.27.000s [20 laps]
20. Timo Glock (Virgin) 1.27.706s [20 laps]
21. Tonio Liuzzi (HRT) 1.28.330s [17 laps]
22. Jerome D'Ambrosio (Virgin) 1.29.057s [18 laps]
23. Nick Heidfeld (Renault) 1.29.200s [6 laps]
24. Narain Karthikeyan (HRT) 1.29.562s [16 laps]

F1 Sofa Blog – Q1 in Barcelona

As teams prepare themselves for qualifying in Barcelona, Renault engineers are still working on Nick Heidfeld's car following an FP3 fire caused by a hole in his exhaust. If Heidfeld is unable to qualify, then his rivals will not need to waste a set of soft tyres to guarantee a slot in Q2.

Before Heidfeld's accident, there were concerns that the new hard tyre was not fast enough for qualifying – there is said to be a 2s difference between the existing options and new primes.

But because the super hard also leads to reduced grip, the tactical move is to spend as much time as possible on the softs during the race. With limited sets of tyres available for the weekend, and the softs the preferred compound, any chance to run on hards in qualifying will prove to be advantageous as the weekend progresses.

And qualifying is underway at the Circuit de Catalunya.

The Red Bulls, Ferraris, and McLarens have gone out on prime tyres, trying their chances on the harder compound with a view to saving their softs for Q2 and Q3. But the less confident teams have had to go out on softs.

There is also potential drama concerning the blown diffuser being used by the bulk of the grid. It's currently in a legal grey area which sees the EBD concept legal but open to protest from the teams who aren't using it. FIA technical delegate Charlie Whiting warned teams yesterday that there was a chance the majority of them could be disqualified from the race if such protests are successful.

Ten minutes into Q1, and Renault have announced that Heidfeld is in his car and will take part in the session.

Depressing everyone but Red Bull, Mark Webber's prime laps are faster than the mid-field's option laps. Toro Rosso, Williams, Sauber, and Force India are almost certainly going to have to use a set of softs in Q1 to be safe for Q2, thanks to Lotus' recent improvement.

Even Ferrari are worried they might need to use softs to get into Q2, partly due to the speed lost when they FIA declared their new rear wing illegal. The Scuderia have reverted to the slower Turkey-spec wing, and that loss in pace – when added to the 2s loss in speed from the new hard compound – looks to be making this a tough session for the Italian team.

And with less than one minute remaining, Heidfeld has not made it to the chequered flag in time to complete a lap in Q1.

Heikki Kovalainen has made it through to Q2 for the first time this season. Lotus asserted they would be fighting the mid-field at this race, and the Finnish driver has proved his team right. Teammate Jarno Trulli was sidelined by a gearbox error, and has dropped out in P18.

Dropout zone

18. Jarno Trulli (Lotus)
 19. Rubens Barrichello (Williams)
 20. Timo Glock (Virgin)
 21. Tonio Liuzzi (HRT)
 22. Narain Karthikeyan (HRT)
 23. Jerome D'Ambrosio (Virgin)
 24. Nick Heidfeld (Renault)
-

F1 Sofa Blog – Q2 in Barcelona

The news that Rubens Barrichello dropped out in Q1 thanks to a gearbox problem was a blow to Williams, who had hoped that their improved Turkey qualifying was a sign of a turnaround in form.

Nick Heidfeld was the other high-profile scalp to drop out in the first session, although the Renault driver was unable to complete a time thanks to a FP3 fire that necessitated a complete rebuild of his car.

After a few minutes spent staring at a desolate and empty track, Sebastian Vettel leaves the garage on soft tyres to set the first time of Q2.

Ferrari have sent both drivers out on soft tyres. The Scuderia used options to ensure a slot in Q2, making this the second set of soft tyres the Italian team will have burned through in qualifying.

McLaren have joined the group of drivers setting times on soft tyres. Half-way through the session, the Red Bull drivers lead the Working pair by about 0.6s, but both teams look to be safely through to Q1 on a single run.

Just behind are Ferrari, currently in fifth and sixth, and down to their last set of soft tyres. The Scuderia's times might not be safe in the final push for Q3, so there will be a lot of soul-searching on the pit wall as the strategists debate the wisdom of using those vital tyres to make it to the final qualifying session.

Vettel's pace-setting lap was set without using KERS, prompting fears that Red Bull's KERS unit is acting up once more. So far this season, only the Turkish weekend has seen the team run trouble-free KERS.

Force India have taken the decision to send both their drivers out on hard tyres. It looks as though Heikki Kovalainen has outqualified both Adrian Sutil and Paul di Resta, although the Finnish driver will lack the KERS advantage off the start line on Sunday.

And that's it! Out in Q2 are both Toro Rossos, both Saubers, both Force Indias, and Lotus driver Heikki Kovalainen.

The top-ten shoot-out will be comprised of both Red Bulls, both McLarens, both Mercedes, both Ferraris, Williams driver Pastor Maldonado, and Renault's Vitaly Petrov.

Dropout zone

11. Sebastien Buemi (Toro Rosso)
 12. Sergio Perez (Sauber)
 13. Jaime Alguersuari (Toro Rosso)
 14. Kamui Kobayashi (Sauber)
 15. Heikki Kovalainen (Lotus)
 16. Paul di Resta (Force India)
 17. Adrian Sutil (Force India)
-

F1 Sofa Blog – Q3 in Barcelona

Qualifying has become more strategic this season, and today's session at the Circuit de Catalunya has proved to be no exception.

Teams have had to balance grid position and tyre supply, leading to a shake-up in qualifying order that only makes the racing more interesting. Ferrari opted to do one run on softs in Q2 and cross their fingers that they'd make it through to Q3. This time, the Scuderia's gamble paid off.

Force India also chose to preserve rubber for the race, but took the decision to set their Q2 laps on the harder tyre. As a result, both men will line up behind Heikki Kovalainen on tomorrow's grid, but thanks to the KERS advantage they are both likely to overtake him at the start of Sunday's race.

The strategising extends to Q3, which now seems to be permanently relegated to a single-lap run for all those teams wishing to preserve their fresh rubber for the race.

Red Bull and McLaren have one extra set of soft tyres going into the final session, but the smart money is on both teams completing a single lap with a view to maintaining their rubber advantage in the race.

Theoretically, Mark Webber goes into Q3 in a stronger position than his teammate. Sebastian Vettel's KERS device is not in proper working order, whereas the Australian's KERS is working fine.

Vettel is the first of the Red Bull drivers to cross the line. Surprising no one, he makes all times currently on the board irrelevant.

But Webber takes provisional pole from Vettel on his first flying lap! Unless Vettel goes out for a second run, it's almost certain that the Australian has broken his teammate's seemingly infinite run of pole positions.

Michael Schumacher went out on the prime tyre, but entered the pits before completing a timed lap.

Despite the flurry of activity towards the end of the session, no one was able to make a dent in Red Bull's front row lock-out.

Fernando Alonso qualified in P4, marking the first time this season he's not wound up on the grid in P5, while P3 Hamilton flat-spotted his left-front tyre during his timed run. As Hamilton will have to start the race on his qualifying rubber, that could hand the advantage to Alonso, who has already proved himself to have impressive race pace.

Provisional grid

1. Mark Webber (Red Bull)
2. Sebastian Vettel (Red Bull)
3. Lewis Hamilton (McLaren)
4. Fernando Alonso (Ferrari)
5. Jenson Button (McLaren)
6. Vitaly Petrov (Renault)
7. Nico Rosberg (Mercedes)
8. Felipe Massa (Ferrari)
9. Pastor Maldonado (Williams)
10. Michael Schumacher (Mercedes)
11. Sebastien Buemi (Toro Rosso)
12. Sergio Perez (Sauber)
13. Jaime Alguersuari (Toro Rosso)
14. Kamui Kobayashi (Sauber)
15. Heikki Kovalainen (Lotus)
16. Paul di Resta (Force India)
17. Adrian Sutil (Force India)
18. Jarno Trulli (Lotus)
19. Rubens Barrichello (Williams)
20. Timo Glock (Virgin)
21. Tonio Liuzzi (HRT)
22. Narain Karthikeyan (HRT)
23. Jerome D'Ambrosio (Virgin)
24. Nick Heidfeld (Renault)

F1 Sofa Blog – The post-qualifying analysis

A few weeks ago, Jarno Trulli spoke of the end of qualifying. While his comments seemed slightly premature at the time, the Italian driver appears to have been right.

With tyre strategy and conservation now more important than grid position, Saturday's qualifying is not as intense as it used to be. Instead of last minute runs for pole, teams and drivers are setting an early banker and then sitting back and waiting to see if the opposition have bested them, or if they can sit pretty and save a set or two of rubber.

What was a trend in the fly-aways has now become fact, thanks in no small part to the new super-hard tyre compound Pirelli brought to the Circuit de Catalunya.

The Italian tyre supplier's latest compound tweak offers drivers added durability at the cost of approximately 2s per lap. In Friday practice, the majority of drivers discovered that the loss of pace was matched by a loss of grip, although some men were more comfortable using the new hard compound.

But for those who struggled for both grip and pace, the primary aim of qualifying was to get through Saturday with as many sets of fresh option tyres as possible. While drivers are required to use both compounds over the course of the race, for those uncomfortable on the hard the best Sunday solution is to run the bulk of the race on as many softs as you have at your disposal, and to minimise running on the hard.

Which would be great, were it not for the fact that Red Bull are so blisteringly quick.

Add to that the fact that Lotus are now moving firmly into the mid-field, and there is now a real risk that three drivers from the established teams could see themselves dropping out in Q1. The three new teams plus one unlucky other is an equation that no longer exists as a certainty.

So while it was safe – at the beginning of the season – for the established teams to run on the harder tyre in Q1, that safety net is no more. In Barcelona, even Ferrari took the decision to run their drivers on softs in Q1 to guarantee a slot in Q2. Only Red Bull and McLaren had the confidence to bank a lap on hards and then spend the rest of the first session daydreaming in the pits.

Things were back to normal for Q2 – of the 17 men to make it through to the second session, 15 set their times on the option tyre.

But Force India made the strategic decision to sacrifice grid position for an extra set of soft tyres on Sunday, so Paul di Resta and Adrian Sutil were sent out on the prime tyre.

Robert Fernley, deputy team principal for the Silverstone-based team, explained: “We took the decision today to sacrifice grid position to be better prepared for the race. It means losing a few places on the grid but gives Paul and Adrian three sets of new tyres for the race. From P16 and P17 it will be tough to score points, but the races so far this season have demonstrated that there is plenty of room to make the strategy work to our advantage.”

Pirelli said this week that they were aiming to deliver tyres that would see a return to Shanghai-style racing, with two or three stops as standard, and not the three to four stop free-for-all of the Turkish Grand Prix two weeks ago.

But whatever the Italian tyre supplier do with tweaks to the rubber in the next few races, a careful study of the 2011 season thus far shows that there is no one size fits all approach to tyre strategy while the teams are still learning about the limitations of the Pirellis. And the more Pirelli play around with their compounds, adjusting performance and grip, the less the teams will be able to predict the outcomes of various strategies.

Trulli might have been right when he called it the end of qualifying, but is that such a high price to pay for the return of racing?

Provisional grid

1. Mark Webber (Red Bull)
2. Sebastian Vettel (Red Bull)
3. Lewis Hamilton (McLaren)
4. Fernando Alonso (Ferrari)
5. Jenson Button (McLaren)
6. Vitaly Petrov (Renault)
7. Nico Rosberg (Mercedes)
8. Felipe Massa (Ferrari)
9. Pastor Maldonado (Williams)
10. Michael Schumacher (Mercedes)
11. Sebastien Buemi (Toro Rosso)
12. Sergio Perez (Sauber)
13. Jaime Alguersuari (Toro Rosso)
14. Kamui Kobayashi (Sauber)
15. Heikki Kovalainen (Lotus)
16. Paul di Resta (Force India)
17. Adrian Sutil (Force India)
18. Jarno Trulli (Lotus)
19. Rubens Barrichello (Williams)
20. Timo Glock (Virgin)
21. Tonio Liuzzi (HRT)
22. Narain Karthikeyan (HRT)
23. Jerome D'Ambrosio (Virgin)
24. Nick Heidfeld (Renault)

F1 Sofa Blog – Saturday press conference in Barcelona

It was a little bit of *dèjà vu* all over again at the post-qualifying press conference, with the three seats occupied by two Red Bulls and a McLaren. But shaking things up a bit was pole sitter Mark Webber, who managed to end his teammate's P1 streak.

“It was a good session,” Webber said. “I think it was pretty clear going into qualifying we might have had a bit of margin so it was going to be probably down to Seb and I, maybe, for the front row. Without being arrogant, but it just looked like that. You can never underestimate these guys but we thought we were probably going to battle for pole between ourselves.

“We got through on the first set of hards so that was nice to do that. Some other people did as well. Then coming to the crucial part of qualifying it was just getting the lap right for Q3 so that lap was pretty good. I was just praying my number went above number one when I crossed the gantry over the start–finish line and it did. It was a nice lap. It was a good battle with Seb and today was my day.”

Despite losing out on pole to his teammate, Sebastian Vettel was not disappointed by the afternoon's result. Instead, his mind was firmly set on the race to come.

“I don't think we can speak of big disappointments,” the Austrian said. “At the end of the day I think we made a good step forward. Barcelona is usually the place where everyone brings a lot of parts and you are here to find out if all of them work. I think we did a step so did the others, but it looks like we like this track and our car feels very comfortable. In quali itself, Q1 I did not really get into the rhythm immediately so it was not the smoothest run but I made it on the primes. Then Q2 I felt much happier on the soft compound and unfortunately then the last qualifying I lost a little

bit too much. I wasn't entirely happy with my lap. We had some problems. Mark did a good job so it was between us and he did a better job today. We see tomorrow. It is a long race. We saved a set of tyres, so did I think the top three and Jenson (Button) as well so we will see what we can do tomorrow."

The Spanish Grand Prix "is long," Vettel said. "Is it 66 laps? It is a long time, I guess, and as we have seen so far there are a lot of things that can happen in the race so it is over when it's over, not before. Usually around Barcelona it is quite tricky. I had some races where I followed one or the same car for 60 out of 66 laps and it was not very entertaining but I think tomorrow could be quite different."

Vettel is not alone in thinking that the new regulations could shake up tomorrow's race.

"It should be a good race," Webber agreed. "As you say, a lot of changes from previous years with the tyres and the rear wing around here but in the end I have got a lot of experience already from the first few races and looking forward to trying to get the victory tomorrow."

While much of the attention went to Webber's first pole of the season, Lewis Hamilton was not ignored by the media.

Asked whether he thought his race pace would be good enough to stay within reach of the Red Bulls, the McLaren driver replied "No. No. They have got a second in qualifying, probably a second and a bit. But we will push as hard as we can. Obviously we have got to push to the amount where you also save your tyres through the run. We have been closer in the previous races so I anticipate we will be much closer than one second but whether or not it's within a tenth or so we will wait and see."

"That was as fast as it was going to go," Hamilton continued. "We made some changes going into qualifying with the set-up, which was the wrong change basically, and the car was quite a bit worse in qualifying than it was in P3. But you are stuck with it and you have to go through qualifying and the race with it but it would only be maybe a tenth or two if you were to improve the set-up. But I did the best I could with it and the team, as always, did a great job getting us out in good gaps so I am looking forward, hopefully, to a good battle, at least for the first 100 metres with the Red Bulls. After that with whoever is behind."

The British driver flat-spotted his left-front tyre during his Q3 run, and was asked if the damaged tyre would hamper his chances off the start.

"No, I don't think it will," the 2008 champion said. "I do have a slight flat spot but fortunately I can start on those tyres and we can rebalance the wheel so it shouldn't be a problem for the race."

The flat spot is "nowhere near as bad as Malaysia," Hamilton continued. "Malaysia wasn't really too bad, but we were overly cautious - or the engineers were overly cautious going into the race. But no, there's no way that they could put me on another set of tyres for tomorrow. They think the tyres will be fine; we just need to re-balance them a little bit. That's one of the limitations of our car. Since I've been in the team we've always had lock-ups - it almost as if other teams look as if they have ABS brakes, because they never lock up like we do. But it's something that we're trying to improve and it is much, much better this year. But yeah, when you're trying to eke every little bit out of the car, you sometimes happen to lock the front wheel. I did, but hopefully it won't impede my race tomorrow."

Another man with a potential problem in Sunday's race is Vettel, who didn't have a working KERS unit in qualifying.

"I am not afraid," the 2010 champion said. "In the race I think we will be on top of it again. It seems to be a bit of an endless story. The guys are pushing very hard and I think we did an exceptional job today. We proved that our car has become quicker. We had a quick base but we made it even better so big compliments to the aero department in the factory and to all the guys. Yes, we are working very hard on the KERS. No, I didn't use it for Q2 and Q3 but I am sure we will have it tomorrow. It is difficult to say. It is not right to say I did not have KERS that is why Mark is on pole. I think he deserved pole. He did a better job today but surely it was not ideal."

While this is Webber's first pole of the season, the Australian driver has full confidence in his car. The RB7 has such good aerodynamic balance that the Red Bull pair can make the most of the DRS in qualifying, activating their rear wings in corners the opposition have to tiptoe round gently.

"We have a good car aerodynamically, there is no secret about it, and we know how to get the car to perform well in most conditions," Webber said. "This is what we decided to do today and we won't leave much change on the table in terms of performance wherever we can."

But despite his teammate's confidence in the car, and Red Bull's impressive run of victories and poles this season, Vettel has one eye firmly planted on the competition.

"I'm generally a bit against the temptation that, for tomorrow, it's all clear, it's either one or the other car, but surely a Red Bull," the Austrian driver said. "A grand prix is a long, long way, it's a long distance, it will be tough tomorrow and the McLaren is very competitive in the race. So is Ferrari. I only want to remind you of the pace they had in qualifying two weeks ago in Turkey and then on Sunday. You cannot take anything for granted tomorrow."

Having said earlier this week that Vettel had done a better job in adapting to the new Pirelli tyres, Webber was asked whether today's result was down to a better understanding of the rubber, or familiarity with the Circuit de Catalunya.

"Probably a little bit of both, actually," Webber said. "I'm getting a better understanding of the tyres more and more. Obviously, they're new for everybody and it's up to everybody to get on top of them. Also, I wasn't particularly slow in Sepang and also in China, but we didn't have the smoothest of weekends in terms of the car, technically, so, whether it was not the best qualifying strategy in terms of tyres or blah, blah, blah, then you're at the back of the grid, or you don't have KERS at the start - all those little things add up. Seb's also done a good job. Turkey was a fair weekend and I wasn't as close as this. Obviously, Seb didn't have the smoothest day today but also there's still an improvement from my side. I don't mind the track here so I hope that I can start being a bit more competitive now. A few things together have added up, it's small margins as we know. It doesn't take much and before you know it you're back in the ball game."

Hamilton was very critical of Pirelli's new harder tyre compound after Friday practice, labelling them a "disaster". But when taken to task by the

media, the McLaren driver brushed off his earlier criticisms.

“I think on that side of things I really was just joking,” the Briton said. “It was a bit of a disaster to drive yesterday with the balance of the car that I had and I think everyone was struggling to switch on the tyres. If you look at the season so far Pirelli have done an incredible job really. I think we have all underestimated how good a job they would have done and when we got to the first race the tyres were fantastic. These tyres, the super hard, isn’t as good as the hard tyre that we had previously but hopefully tomorrow they will go longer, which will still allow exciting racing. I did say it was a disaster, but I was really referring to the balance of my car and I think they are pretty good.”

Finally, Hamilton provided the light relief when he was asked how best to get ahead of the Red Bulls in Sunday’s race.

“I’ve just been thinking about it,” he said with a wry grin. “The old circuit is still there, the last two corners so I could maybe use the last two corners and then I will be able to match their pace maybe, if I don’t take the chicane. But otherwise, no.”

F1 Sofa Blog – The Spanish Grand Prix as it happened

As the drivers line up on the grid at the Circuit de Catalunya, everything looks to be normal. Two Red Bulls on the front row? Check. McLaren and Ferrari just behind? Check. Nico Rosberg and a Renault in the mix? Check.

But there is one vital difference. The man on pole is Mark Webber, and not Sebastian Vettel. The current world champion could be forgiven should he accidentally line up in P1 as a force of habit.

One man who finds himself dramatically out of position is Renault driver Nick Heidfeld, who will be starting from the back of the grid after an FP3 fire prevented him from setting a time in qualifying.

Today’s race is widely expected to be a litmus test of the 2011 rule changes. Traditionally a parade won from pole, position changes throughout the pack will justify the FIA’s faith in the new regulations. But another key factor this afternoon will be tyre strategy. Important all season, rubber is make or break today, thanks to a change to a revised hard compound that is more durable but costs drivers around 2.5s per lap.

Force India sacrificed grid position for an extra set of Sunday rubber, while Lotus driver Heikki Kovalainen took the opposite decision. Further up the grid, the top nine set their qualifying times on softs, while Michael Schumacher begins the race with a free choice of rubber as he did not complete a lap in Q3. The German legend has elected to use a fresh pair of softs for the starts.

The mix of strategies up and down the grid will add another dimension to the Spanish Grand Prix, and comparative analysis of those strategies could determine pit stops in the races to come. The Circuit de Catalunya is seen as a one size fits all circuit, and strategies that work here are likely to pay dividends elsewhere.

And they’re off!

The charge to the first corner is one of the longest on the calendar, and the jostling for position starts here.

Alonso takes the lead! Both Red Bulls have functioning KERS devices, but the Spaniard takes them both up the inside, showing them who’s boss at his home circuit. Vettel also gets past Webber, pushing the Australian down into P3.

Button gets a bad start and is down to P10 by the first corner. Maldonado also has a bad start, and is pushed back into P13 from his P9 start.

Schumacher gets a great start from P10, up to P6 by the end of the first lap and past teammate Rosberg who started in P7.

Kobayashi comes into contact with someone off-camera, and has to pit for new rubber on lap 2.

But with the DRS now activated by race control, early lap positions mean very little. Overtaking is now a real possibility at every circuit, and there’s no need for balls to the wall manoeuvres on the first lap.

By lap 7, Button is closing in on the Rosberg-Massa battle for P7 ahead. The added pressure from the Brit causes Massa to flat-spot his front-left tyre twice, and the loss in handling is immediately obvious.

And the first round of pit stops is underway on lap 9. Alonso briefly cedes the lead while in the pits, and Hamilton is race leader. But the British driver pits himself, and rejoins the track in P3, behind Alonso and Vettel but – crucially – ahead of Webber.

Button has made it up to P5, but has yet to pit. Maldonado loses time in his own stop, and is fighting down in P15.

The three race leaders – Alonso, Vettel, and Hamilton, are split by 1s. The battle starts here, folks. Each of the three men is within DRS reach of the other, putting Alonso in a vulnerable position.

The Lotus pair are currently up in P11 and P12, but neither man has pitted yet.

Lap 15, and Button pits from P5, rejoining the action in P7.

Liuzzi is in the mix with his HRT, racing the likes of Kobayashi and Perez. It’s a good run for the Spanish team at their home race.

Di Resta pits his Force India from P5 on lap 16, rejoining the action in P15. Before his stop, Force India’s tyre gamble was working better for the

Scottish driver than his teammate, currently in P20. And with fresh rubber on his car, di Resta looks to be in a good position to maintain the intra-team advantage.

Schumacher is currently running in P6, having been passed by Button for P5. The German legend has won the Spanish Grand Prix six times, and had his best 2010 result at the track.

On lap 18, coming up for a third of the race distance, everyone bar Heidfeld and D'Ambrosio has pitted for fresh rubber.

Vettel pits for a second time from P2, and rejoins the race in P4, behind his teammate.

Rosberg and Schumacher are currently split by half a second in the battle for P6. While the German elder statesman has better lines through the corners, he locks up his tyres and the resulting flat-spot affects his pace.

Alonso and Webber pit on lap 20. Both teams have clean stops, and the Spanish driver comes out ahead of his Australian rival. Alonso returns in P3, with Webber in P4.

The current round of front-runner pit stops sees the men at the head of the pack swap for fresh soft rubber, having got the pesky stint on hards out of the way.

Hamilton now has a 16s lead at the head of the pack, but the men behind have pitted twice to his once.

By lap 23, Webber and Alonso are so tight you couldn't split them with a razor blade. As soon as they're in the DRS zone, Webber should be able to use the DRS advantage to get past his Spanish rival.

Hamilton pits from the lead on lap 24, and comes out in P2. But close on his tail is the Alonso-Webber battle, and the Brit's best hope is that the in-fighting slows them down.

With fresher tyres than the pair behind, Vettel and Hamilton are pulling away from Alonso and Webber, who are still jostling for position. Webber is 0.4s behind the Ferrari driver, but can't get close enough to make the DRS do its thing when it counts.

There's a lot of tense action at the front of the pack, and it's very easy to forget about the mid-field.

Despite starting side by side, di Resta in P8 is now eight slots ahead of his teammate. The Lotus drivers are still fighting in P14 and P18, having stopped once apiece.

But Kovalainen pits for fresh rubber on lap 30, as do Webber and Alonso.

There's a pitlane battle between the pair, and the stewards are likely to investigate Ferrari for an unsafe release. Webber was too close for comfort, and the pair come out in P4 and P5, with Alonso just ahead.

With three pit stops apiece under their belts, it's hard to believe that the race is just under half distance.

Button looks to be on a three-stop strategy, as he was in Turkey. It didn't work there, and it doesn't look like it will pay off here either.

Lap 33, and Alonso has an Australian cling-on stuck to his rear wheel. Lap 34, and the battle continues. Either Webber will get past or the pair will run into each other in the heat of the moment. This is too close for comfort. For them, anyway. It's brilliant for the rest of us.

The battle is slowing the pair down, and allowing Button to close up, despite his much older rubber.

Vettel pits from the lead on lap 35, his third stop of the race. The current champion rejoins the action in P2, safely out of reach of the battle behind.

Webber made it past Alonso, but couldn't make it stick. The Ferrari driver reclaimed his position on the next corner.

Hamilton pits from the inherited lead on lap 36, and hands the lead back to Vettel. The British driver is now on the slower hard tyre, and will need to charge as hard as he can if he is to stay out of reach of the battling pair behind.

But there's all change down the pack!

Button makes it past Webber, who was distracted by the battle with Alonso. The three drivers are split by less than a second, putting them in prime position for a three-way battle. But Webber is slowing down - the combination of old tyres and rubber stress from the Alonso battle appears to hampered his performance.

Lap 37, and Button makes it past Alonso for P3. No battle, just a smooth pass for the McLaren driver whose soft tyres appear to be working at peak efficiency.

Massa has a crazy moment, attempting a reverse bay park into the run-off area. Having passed his driving test, he carries on with the race unscathed.

Despite being on the hard tyre, Hamilton is eating away at Vettel's lead.

Lap 40, and Alonso pits for the 49th time. The Spanish driver rejoins the action in P5 with enough fresh rubber to threaten Webber and Button ahead.

Button still needs to do a stint on the hard tyre, which is likely to affect his grid position in the run to the chequered flag. Webber has cooled off his

pursuit in the knowledge he's in the stronger position for the final run.

Hamilton is delivering a masterclass on driving the new hards to their limit, having called them a disaster earlier in the weekend. The British driver keeps eating away at Vettel's lead, and then getting stuck in traffic. Nevertheless, the gap between the two men hovers around 1s.

Down in P8, Massa has been lapped. It's lap 44, so the Brazilian has one-third of the race remaining in which to unlap himself.

Lap 48, and Webber pits from P4 and holds position. Now is the time for a charge on Button.

Vettel pits from the lead on the next lap, and rejoins in P2. The gap to Hamilton is now 1.8s, nearly enough time for the Brit to pit and hold position at the head of the pack.

But on lap 49 the Brit enters the pits for what his presumably his last stop of the race. He rejoins behind Vettel, but on hard tyres that are one lap younger. There's 2s between the pair.

Vettel's just been warned against using his KERS, possibly handing the advantage to Hamilton.

And the yellow flags come out on lap 51 thanks to Kovalainen's retirement. The Lotus driver planted his car in the gravel at Turn 4. Mea culpa, the Finnish driver tells the team. Was he tweeting during the race? (I jest.)

Vettel's KERS is now operational again. Looks like it was just a temporary glitch.

Fourteen laps to go, and all cars lapped to P6. There is plenty of time for it all to change, and no one's position is safe.

Least of all Vettel – Hamilton has closed the gap to 0.69s. But the gap between the two has just doubled. This tug of war will give us all heart attacks before the day is out.

While there's plenty to keep us occupied throughout the grid, the real drama this afternoon is at the head of the pack. Half a second splits the two frontrunners, and traffic is making Vettel's life even more complicated than it needs to be.

Drama as Hamilton takes a look at Vettel down the straight on lap 56, but he doesn't get past. Get ready for an epic battle in the next few laps. Lap 57, and he has another look. No dice.

Elsewhere on the track, stuff is happening. But it's all about Vettel and Hamilton, who are still joined at the wing on lap 59.

Ferrari are in trouble, and have told the world on Twitter that they're looking to bring home points, no more. Very disappointing for the team, especially in light of Alonso's absolutely faultless start.

Compounding Ferrari's bad day, Massa stops in the gravel on Turn 7 thanks to a gearbox problem. Yellow flags out on lap 61, but no need for a Safety Car. Have we seen the Safety Car yet this year? Bernd must be pretty bored of all this th8umb-twiddling.

Heidfeld is up to P8 from his back of the grid start. Good for him! Renault will be pretty chuffed to see him in the points, although P11 Petrov is probably feeling a bit cheesed off.

The Hamilton-Vettel gap is now 0.3s, not that you'd know it. Epic battle for the win, but the TV director doesn't seem all that bothered about showing it.

And we're back at the front at last, with only four laps remaining. Vettel's got the advantage on corner exits, especially on the chicane, thanks to his insane levels of downforce. That looks to be the main thing keeping Hamilton from taking the lead.

Three laps to go and the gap is now half a second.

We're now at the point in the race that saw Hamilton retire last year with an exploding wheel. Let's hope nothing of the sort happens to any of the frontrunners this year – being denied an epic battle would be a loss for us all.

It's the last lap. This is our last chance for some drama at the front. Will Vettel win comfortably? Will Hamilton pass him? Will they both crash out?

Does it even matter? Aren't Williams, Virgin, and HRT going to get everyone else disqualified anyway?

And Vettel takes the chequered flag, with Hamilton close behind.

Half a minute later, Button secures the third step of the podium, while pole sitter Webber crosses the line in fourth. The rest of the point-scorers are: Alonso, Schumacher, Rosberg, Heidfeld, Perez, Kobayashi.

Vettel's finger of victory makes its fourth appearance of the season, and the crowd braces themselves for another rendition of the Austrian national anthem.

Spanish Grand Prix race result

1. Sebastian Vettel (Red Bull) 1h39.03.301s
2. Lewis Hamilton (McLaren) + 0.630s
3. Jenson Button (McLaren) + 35.697s

4. Mark Webber (Red Bull) + 47.966s
5. Fernando Alonso (Ferrari) + 1 lap
6. Michael Schumacher (Mercedes) + 1 lap
7. Nico Rosberg (Mercedes) + 1 lap
8. Nick Heidfeld (Renault) + 1 lap
9. Sergio Perez (Sauber) + 1 lap
10. Kamui Kobayashi (Sauber) + 1 lap
11. Vitaly Petrov (Renault) + 1 lap
12. Paul di Resta (Force India) + 1 lap
13. Adrian Sutil (Force India) + 1 lap
14. Sebastien Buemi (Toro Rosso) + 1 lap
15. Pastor Maldonado (Williams) + 1 lap
16. Jaime Alguersuari (Toro Rosso) + 2 laps
17. Rubens Barrichello (Williams) + 2 laps
18. Jarno Trulli (Lotus) + 2 laps
19. Timo Glock (Virgin) + 3 laps
20. Jerome D'Ambrosio (Virgin) + 3 laps
21. Narain Karthikeyan (HRT) + 4 laps

Felipe Massa (Ferrari) RET lap 60

Heikki Kovalainen (Lotus) RET lap 49

Tonio Liuzzi (HRT) RET lap 29

Drivers' standings

1. Sebastian Vettel - 118 pts
2. Lewis Hamilton - 77 pts
3. Mark Webber - 67 pts
4. Jenson Button - 61 pts
5. Fernando Alonso - 51 pts
6. Nico Rosberg - 26 pts
7. Nick Heidfeld - 25 pts
8. Felipe Massa - 24 pts
9. Vitaly Petrov - 21 pts
10. Michael Schumacher - 14 pts
11. Kamui Kobayashi - 9 pts
12. Sebastien Buemi - 6 pts
13. Adrian Sutil - 2 pts
14. Sergio Perez - 2pts
15. Paul di Resta - 2 pts
16. Jaime Alguersuari - 0 pts
17. Rubens Barrichello - 0 pts
18. Jarno Trulli - 0 pts
19. Jérôme D'Ambrosio - 0 pts
20. Heikki Kovalainen - 0 pts
21. Pastor Maldonado - 0 pts
22. Timo Glock - 0 pts
23. Narain Karthikeyan - 0 pts
24. Tonio Liuzzi - 0 pts

Constructors' standings

1. Red Bull - 185 pts
2. McLaren - 138 pts
3. Ferrari - 75 pts
4. Renault - 46 pts
5. Mercedes - 40 pts
6. Sauber - 11 pts
7. Toro Rosso - 6pts
8. Force India - 4 pts
9. Williams - 0 pts
10. Lotus - 0 pts
11. Virgin - 0 pts
12. HRT - 0 pts

F1 Sofa Blog – Sunday press conference in Barcelona

After a nail-biting Spanish Grand Prix, podium-sitters Sebastian Vettel (Red Bull), Lewis Hamilton (McLaren), and Jenson Button (McLaren) were brought out to face the media.

One thing all three men agreed on was Fernando Alonso's blistering start. Vettel was so impressed, he mentioned it twice.

"At the beginning of the race, I think I had a good start but I didn't understand where Fernando came from," Vettel said. "He started behind me, some 16 metres behind, and half way down the straight he was already side-by-side. He went on the inside of Mark and I went on the outside, so he was leading after the first lap. We couldn't get really close enough to get into the DRS, so we got [no] advantage and [couldn't] pass him, but then we got him with a pit stop."

Later on, the championship leader returned to the subject of Alonso.

"The start of the race we were very surprised by Fernando and his start in particular," Vettel reiterated. "I don't know where he came from. Then he was holding us off a little bit. He did a good job, so I don't think we could have gone massively quicker but it would have helped especially against the McLarens."

Button was taken to task for his poor first lap, and admitted it wasn't the best he'd ever driven.

"My first lap was an absolute disaster," he said. "I got a poor start. It didn't feel too bad but then everyone just came by. I got stuck on the outside of turn one and then turn three. I don't know where I was but I think I was 11th or 12th after the start. Very, very tricky then, and the guy in front was making it very difficult to overtake. But I was able to pick them off and with a fantastic strategy, I would say this race, we were able to get a podium. It was great fun for me coming through and passing Fernando and Mark when they were on the prime tyres and I was on the option and we made the three-stop work. Two weeks ago it wasn't the right call, but this week it was and it is good to get some nice points and also to have fought my way through. I really felt like I raced today."

As your average hardened hack is unlikely to shy from rubbing salt in a wound, later in the press conference Button was asked to talk about his poor start once again.

"The first lap was a disaster," he repeated. "I got a pretty poor start, and three or four cars came past. Then braking for Turn 1 I was on the outside of about three cars and I ran wide; the same in Turn 3. It was a frustrating first lap and then initially, I couldn't overtake the car in front. But once we got up to speed, the pace was good and I was able to make some pretty good overtaking moves."

"We went for a different strategy to most people, which worked very well," Button emphasised. "I had a lot of fun overtaking Mark and Fernando. They had been fighting for about 40 laps, I think, so to come up and overtake them within one lap and then pull away was a lot of fun. It was a fun race – after lap 1 – and great to get on the podium. I think it really proves how good a job we've done with the car but also as a team, through the pit stops and the strategy, so yeah, I'm happy with the result but it would be interesting to see what would have happened if I didn't have those issues at the start."

Having spent much of the race putting pressure on Vettel, Hamilton was asked if he thought the team's improved race pace would absolve McLaren of the need to beat the Red Bulls in qualifying.

"I think in the last race people were saying qualifying is not so important," Hamilton said, "but clearly it is very important and while strategy can still help quite a lot throughout the race... I think positioning for us, trying to pass the Red Bulls and Sebastian is very, very difficult with the step in downforce they have against us."

"We are just going to continue to push," he continued. "Hopefully, we will have something good coming in Monaco next week. It is good to come from this race on a positive foot going into Monaco, where a driver can make even more of a difference, so hopefully the gap will be even closer from me and Jenson to the Red Bulls."

Given that the Pirelli tyres turned the Barcelona Grand Prix into an edge-of-your-seat chase to the finish, the drivers were asked if they thought the next race in Monaco would also be a festival of overtakes and position changes.

"I don't think you are going to be having fights like we had out on the circuit in Monaco," Button said. "There is going to be a lot of tyre degradation as we have got the super soft and the soft tyres there, so it is going to be very tricky for all of us but we are all in the same boat. It will make it fun for sure. But lastly, I need to say a big thank you to the team for the pit stops as well. We have been working on them and this race they were much improved as Lewis would probably say from the last race."

The final stint battle between Hamilton and Vettel provided some of the most exciting racing of the season thus far. The two men were separated by a whisker in the closing stages, but Hamilton says he couldn't get close enough to pass, thanks to the RB7's impressive cornering pace.

"I never had an opportunity to overtake," he said. "I was quite impressed with the job we were able to do today, myself and Jenson, considering that their car is quite a good step faster than ours, particularly in the higher speed (corners). Our race pace really has improved since the last race so that was a positive, but I just wasn't able to follow through the high speed Turn 3. It was incredible how much downforce he had, a good step on us, and also through Turn Nine and through the last corner. So I was never ever able to get close enough to maintain the gap that I was then able to use the DRS to get by. I'm thoroughly happy with the job; the pit stops were much, much better today, I think, for both me and Jenson, and to be able to apply the pressure to a Red Bull, considering the circumstances, is quite an achievement."

But despite the Red Bull's pace in high-speed corners, Hamilton thinks the McLaren was top on outright speed.

"I think our raw speed was... We were faster," he said. "If I was able to get past I think I would have been able to pull away. I was really losing quite a lot through the high speed corners behind him, but nevertheless – as I said – they are quicker through certain corners and we were quicker through some others, so it was almost balanced."

Reminded that they had all lapped one-time race leader Alonso, who ended the race a lap down in P5, Vettel and Button reacted with surprise.

“One lap?” Button asked. “I don’t think his pace was very good in the race and basically he stayed in front because people couldn’t overtake.”

“I was surprised,” Vettel conceded. “At some stage, I saw into Turn 7 that there was a Ferrari that went off, but it was Felipe. Then I think ten or fifteen laps to the end – ten laps from the end – we caught up Fernando and we lapped him. Obviously we passed him, I passed him, I undercut him at the pit stop and Lewis stayed out longer and went past him that way but I don’t know. Obviously I had Lewis in my mirrors for the rest of my race so I was quite busy so I don’t know what happened to him, but then I saw his number going down on the tower on the straight, but I don’t know why there was such a big gap all of a sudden.”

And finally, Vettel’s light relief, in the form of a question about Crazy Frog.

Q. Seb, could you just explain what the crazy frog impression was for, over the team radio?

SV: It’s a long story, to be honest. I think the first time we picked it up was in 2009 at Silverstone when we won the Grand Prix there, and then, I don’t know. It’s a bit of a joke between my race engineer and myself that he comes on the radio and gives this crazy impression and if I feel like it I do it back.

F1 Sofa Blog – Analysing the Spanish Grand Prix

McLaren covered the wrong horse. Literally. The British team saw the prancing horse of Fernando Alonso as Lewis Hamilton’s biggest threat for a podium, and it was only when the race was nearly half run that the brains on the pitwall turned their attention to challenging Vettel for the lead.

With the fastest car on race pace, and a grand prix leader with ailing KERS, the Spanish Grand Prix could have been a victory for Hamilton. But much as Red Bull lost the Chinese race on strategy, not performance, so too did McLaren lose in Barcelona.

Which isn’t to say it wasn’t a sterling result for the boys from Woking. Two men on the podium is hardly a disappointment by anyone’s standards, and Ferrari team principal Stefano Domenicali would have bitten your hand off if you’d offered that result to him in the closing stages of Sunday’s race.

Fernando Alonso may have finished fifth this weekend, and a lap down on the leaders, but the Spanish driver has a lot to smile about on his way to next weekend’s Monaco Grand Prix.

The Ferrari was shockingly bad all weekend, except for two key moments: Alonso’s near-perfect qualifying lap, which split the two McLarens and popped the Asturian into P4 on the grid, and what will almost certainly go down as the best start of the 2011 season.

Post-race, Domenicali admitted that the 150° Italia was lacking in downforce and overall performance. The tyres weren’t working, grip was non-existent, and – as demonstrated by Felipe Massa – the car was barely recognisable as the title-contender we saw in Istanbul.

Despite these failings, Alonso managed to lead the race – stops aside – for the first 18 laps. He might have slowed down the Red Bulls and McLarens behind, adding to the late-race drama, but the Ferrari driver’s performance at the front was very convincing. The car might have been riddled with fatal flaws, but Alonso hid them all with some excellent racecraft and a lot of balls.

While Alonso deserves plaudits for his performance on Sunday, so too does race winner Sebastian Vettel. The current world champion is often criticised for his inability to overtake, and detractors point to the sheer speed of the Red Bull over the past few seasons as an explanation for the German’s impressive string of wins and podiums.

But that is an unfair criticism of the man, as anyone who remembers his stunning maiden win at Monza in 2008 will attest. In the hands of Vettel, Toro Rosso saw the first step of the podium eight races and one season before Red Bull managed the same feat (again courtesy of Vettel).

In Barcelona, Vettel showed us all the extent to which he has matured – as a driver and as a man – since winning the 2010 drivers’ crown in Abu Dhabi. After pitting for the second time on lap 18, the Red Bull driver cleared the men ahead at the rate of one every two corners on his outlap. He might have had fresher rubber, but it was an impressive performance nonetheless – he made a difficult task look easy.

Another difficult task that didn’t seem to faze Vettel 2.0 was holding off the advancing Hamilton in the final laps. Despite being under increasing pressure as the British driver closed the gap to half a second, Vettel kept his cool, made the traffic work to his advantage, and refused to be bullied into making a mistake. A year or two ago, it would almost certainly have been a very different result.

While Vettel, Alonso, and Hamilton all had races that will affect a single weekend already consigned to history, it was a very different story for Nick Heidfeld, who started the Spanish Grand Prix from the back of the grid after his car caught fire in FP3, preventing the German driver from completing any running in qualifying.

We saw in China that the 2011 rules mean that a back of the grid start no longer ruins a driver’s Sunday, provided he has a fast enough car beneath him. Mark Webber’s John Watson-esque drive to the podium proved that in spades.

But Heidfeld’s run to the points in Barcelona could prove to be the death knell for qualifying. Grid position is no longer the be-all and end-all. Fellow Renault driver Vitaly Petrov started Sunday’s race in P6, and finished out of the points. Heidfeld started in P24, and ended in P8 with four points to add to his tally.

The key difference between the two men? Heidfeld started the race with so much fresh rubber he could have single-handedly kept the Springfield tyre fire burning for a decade. Or six sets of unused softs, if you want to get all specific about it.

While those drivers challenging for the title will continue to do timed runs in Q3 – grid position does still matter to a certain extent – those in the

mid-field will not have missed the tactical advantage to be gained from sitting out an entire Saturday afternoon on occasion.
