

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Press Information

2014 Bahrain Grand Prix Friday Press Conference Transcript

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TEAM REPRESENTATIVES – Luigi FRABONI (Ferrari), Remi TAFFIN (Renault Sport F1), Robert FERNLEY (Force India), Pat SYMONDS (Williams), Adrian NEWEY (Red Bull Racing), Paddy LOWE (Mercedes)

PRESS CONFERENCE

Bob, could I start with you. It looks like you're in the battle again here this weekend behind the Mercedes. It's been a pretty decent start to the season on the while. Two battles with the fastest Ferrari at the first two races. What do you put it down to and how do you feel about the start you've made?

Robert FERNLEY: I think it has to be testament to the team really. We were in this position really last year and unfortunately the steam was taken out of us a little bit when the tyre change came in and we had to recover from that and really play catch-up from them on. But I think this year, Otmar [Szafnauer] and Andy Green and the whole team have done a fantastic job of putting together a very competitive chassis and of course it's not an accident that we've also got the Mercedes engine, which is very helpful.

For a team like yours in a the position you're currently in, how confident do you feel that you can develop along with the others and stay more of less where you are now throughout this year?

RB: I think it's always harder for a team like Force India to be able to completely keep the resources that are necessary for development. But I think we should be OK. I think we'll be alright. I think Red Bull have got a lot more to come yet and that's going to be a threat going forward. Other teams are doing a great job as well. It's only a matter of time before we're in the throes of an aero war.

Coming to you now Pat. It looked very strong today, especially the long runs. But you didn't go out until quite late one. Generally though it's been a reasonably strong start to the season, you've scored 10 points twice. A very different picture from last year. Do you feel you've taken full advantage of this early competitiveness so far?

Pat SYMONDS: No, I don't think anyone in Formula One is ever satisfied with what they've done until they totally dominate and while 20 points from the first two races is a huge improvement on where we were last year, I still feel that we have the potential to do a little bit more than that. I think we've underperformed a little bit and I hope that the next couple of races will allow us to improve on where we are.

There's been a lot of talk about the last race in Malaysia – the Massa and Bottas instructions. Now that you've done the analysis on that, what more can you say about that episode and possible outcomes?

PS: I think, as we've said, it's not a big deal. We could have maybe handled it better. We've learned from it and we've moved on. The drivers are happy so let's just continue with the rest of the season now.

Thank you for that, Pat. Coming to Luigi Fraboni – welcome. [Luigi is] head of track engineering for Ferrari on the engine side. Talk to us about the achievement of getting these very complex machines – the power units – operational and racing to the point we are now, particularly from where we were in testing here in Bahrain only a few weeks ago.

Luigi FRABONI: Of course for us and for all the other manufacturers of engines it was a very hard job. Honestly, looking at what we have now and what we were in the end of January, for me it is close to being a miracle. Of course the result we have achieved is due to the job of everyone in Ferrari, everyone at home and everyone here ay the track. It's something that we are still developing and there are a lot of things to learn. Basically with every run you learn something and every run you try to put something in the power units for the following one. I think that for us there are still a lot of things to do but there are a lot of jobs we have already done and we are very happy about this.

Talk about the strengths and weaknesses of the Ferrari power unit as you see it at the moment?

LF: Well, of course, I think it's quite early to say but in the first two races having four Ferrari engines on our side that saw the chequered flag I think is a very good result, as you said thinking about where we are in the end of January. And then so we also start to see the real reliability of the power unit because this is basically the third race for some one and they start to be above 2,000km by the end of this weekend and for sure I hope this is one of our strengths. In terms of mapping and in terms of fuel consumption I think we are in quite a good shape. Of course in terms of absolute power this is something... you can see there lap time between the car, there is a difference of speed between the cars but the difference of speed is not only the power unit. So we have some ideas. We know we have to improve on our side on the power unit but this is also car related so we'll have to do the best on this.

Coming to you Remi. Same questions I asked Luigi a moment ago really: about the challenge, the achievement of going to this point. How do you evaluate from a Renault point of view?

Remi TAFFIN: I think we've made a big step from where we were one month ago. Obviously we had difficulties to get out – simply like this. I think now we can at least make our teams go out and do their programme, which is an achievement from that point of view. Obviously we keep on developing our engines and I think it's working well. Obviously it's not where would like to be but we can we have made some progress and there is still a lot to come.

To get eight cars to the finish in the first two races – how do you evaluate that side?

RT: I think it's just to put on the fact that the job being done at the factory is massive. We've seen where we were at the tests – very difficult to get cars on track. So yes it's a good first thing. We always say we need reliability to make some progress and work on the power of it. So I think we've got there in terms of reliability

and now we just need to develop as quick as we can. We are a bit behind schedule but we are doing as much as we can and we will see for the next two or three races how we can get up to speed.

Thank you. Coming to you now Paddy. A big margin again today. Two grands prix, two poles, two wins. There's not an awful lot more you could have done up to this points, but is it more of less difficult this season do you think, with this technology, to maintain that?

Paddy LOWE: To maintain through the season, do you mean? Yes.

PL: I think we're going to see far steeper gradients in terms of performance development through this season than we've seen in the past few years because there's so much new on the cars, particularly around the power unit, a great deal more optimization that can be done on that. I see performance development being far more rapid this season. It already has been that. We've seen some great steps made by all the teams since we were last here testing. I think that will continue through the season and I think there's potential for a lot more excitement as we develop during the year.

There's been a lot of talk about the new style of Formula One. What's your take on it? You've been around for a while, how do you evaluate it?

PL: I think it's very exciting. Some things have caused discussion. Always when things are different there are some people that appreciate them in different ways. I just find it exciting. I love the technology. One of the great things about Formula One as a sport is that it's not just about the athlete – the driver – it's also about the car and the technology and that. Our fans like that richness in the sport. So I hope they also appreciate what's been done on the cars and it's sort of relevance to the future in the automotive industry generally. It's very exciting. What we've seen in the past two races is that it, for me, hasn't affected the racing and the demands made on the driver. That to me seems very normal.

Adrian, coming to you. At the test here things looked quite bleak for Red Bull Racing but you arrive here off the back of a podium. Can you tell us a little bit about the turnaround and how far away you think you are from victory?

Adrian NEWEY: Yeah, certainly we had a very difficult pre-season. That was down to a whole number of reasons. We didn't manage to get as much running done on the dyno as we would have liked, which is where a lot of the problems that afflicted us, you would normally sort out, from a chassis side and from and engine side. We came unprepared in many ways. We had a problem with a component overheating and with the lead time involved in some of those components it takes time to sort that out. So while we kind of figured out what we needed to do, it still takes time to do that and when tests are coming thick and fast you don't have time to come up proper solutions between those. So I think all the guys back at Milton Keynes on our side did a fantastic job of coming up with solutions to that and Renault on their side. From a performance point of view we're clearly giving a lot away on the straights still. But there's a lot of development to be had.

You've obviously worked under a lot of different types of technical regulations in your years in Formula One. How do you rank these rules among others that you've designed cars to?

AN: Ah well, that's a very complicated question is the truthful answer to that. I guess the other obvious answer to that is probably whether you have a Mercedes engine,

a Ferrari engine or a Renault engine will cloud your answer to it, in truth. Such is the nature of Formula One. My opinion of it is that from a technical aspect first of all you have to question whether...the whole thing behind. When you get into things like batteries then an electric car is only green if it gets its power from a green source. If it gets its power from a coal-fired power station then clearly it's not green at all. A hybrid car, which is effectively what the Formula One regulations are then a lot of energy goes into manufacturing those batteries and into the cars which is why they're so expensive. And whether that then gives you a negative or a positive carbon footprint or not depends on the duty cycle of the car - how many miles does it do, is it cruising along the motorway at constant speed or stop-starting in a city. So this concept that a hybrid car is automatically green is a gross simplification. On top of that there are other ways, if you're going to put that cost into a car, to make it fuel efficient. You can make it lighter, you can make it more aerodynamic, both of which are things that Formula One is good at. For instance the cars are 10 per cent heavier this year, a result, directly, of the hybrid content. So I think technically, to be perfectly honest, it's slightly questionable. From a sporting point of view, to me, efficiency, strategy etc, economy of driving, is very well placed for sportscars, which is a slightly different way of going racing. Formula One should be about excitement. It should be about man and machine performing at its maximum every single lap.

QUESTIONS FROM THE FLOOR

Q: (Dieter Rencken – Racing Lines) I'd like to pick up on what Paddy said and also what Adrian said. So for Bob and Pat Symonds in particular: how do you see the show? There has been a lot of talk about taxi cab driving and economy run racing and there are calls for a summit this weekend and people have said it's a fiasco. How do you two gentlemen feel about it?

RF: I'm not aligned with Adrian or Luca [di Montezemolo NdR] actually on this one obviously Adrian just now and Luca previously. For me what we're representing today in Formula One is the peak of technology available in automotive and I think it's a very exciting concept. I think the fans are very much more sophisticated today than they every have been and whilst noise is one element of it. I don't believe that's the be all and end all. I think there's a lot more to it and I think we're going to find that the fans are going to embrace this as we go on in the years to come. So I'm very pro the technology and the challenges that it's given the teams. I think all teams have done an amazing job and the manufacturers to bring this in in the time that they have. So from my side it's a good thing and I think that it's great that we're seeing cars that are difficult to drive, that are on the limit, that are breaking away at the rear end, which is something that we've not done for a long, long time, so I think the show is good. Also one thing that is important is that Honda are coming in next year and it's the first time we've had another major motor manufacturer coming back into Formula One for a long, long time, so that's a tick in the box that says that actually Formula One has got it right.

Pat?

PS: I think as a business we ought to focus on the positives and I think that the technology that we're employing in Formula One now is impressive. The road car industry – rightly or wrongly – has to hit CO_2 per kilometre targets and those are very difficult targets to meet. And they will have to employ technologies such as we are using in Formula One. So we are moving things forward, we are more relevant than we used to be and I think that's very important.

I think there was a great danger – and I mentioned this in one of these press conferences last year – that we would become irrelevant. We would become the focus of gas-guzzling and not having social responsibility. And I think it was really important that we did move away from that. And you've got to remember that the seeds of this were sown many, many years ago, before the world economic recession hit which of course has had a bearing on things. And now we're in a good place and I think as a business we should focus on the positives. I think many people from the UK will remember a guy called Ratner who basically killed his business by negative comments on it. I think we should be positive. We've done something good and we should tell the world about it.

Q: (Abhishek Takle – Midday) Question to all six of you. Formula One at the moment seems to be an engine-based formula where engines are acting as a performance differentiator. As the season goes along do you expect those performance gaps to disappear to the extent that the sport will once again be an aero-based formula?

Luigi, would you like to start with that one?

LF: It's part of the thing that we were saying before. Now, for sure, this year there is the new power unit so the difference is bigger than in the past due to the fact that the project is at the beginning. I'm sure that during the season things are going to close up because there is a lot of learning. And what you are doing is improving every race. I am sure that every engine manufacturer will do the maximum to get the maximum performance from what they have. Of course the engine is freezed, I mean we know the power unit is freezed so you can have just modification for the reliability but I think there is still a margin.

The other thing, as you said, the aerodynamics is free, so that you do a lot of things with this so about this Ferrari and the other teams will be working very strongly because there are a lot tenths that you can gain on this point.

Remi?

RT: I think if we look at the timing sheet we've got , for example today or the first two races you can clearly see that you have got the three engine manufacturers which are putting engines in cars that are in the top ten, so I think we already have this championship going on, and we've got the engine championship too. Whether we're going to have a champion, I don't think so because there is no championship for engines but as my colleagues say, there will be a lot more development through the year. I think we still have a lot to come so obviously we will get with some parameters I think will be levelling I think to the top. And that's always the same story. We will just be trying to do as much as we can and we will see what we get later in the season.

Bob?

BF: I disagree. I think if it was an engine formula you would have all four Mercedes teams at the top and they're not. Ferrari-engined cars and Renault-engined cars are competing very strongly in the top end of the grid and already you've got differentials coming in with aerodynamics, so I think it's a mix of performance that delivers.

Paddy?

PL: Yeah, I agree with Bob. I mean, I think that already the evidence is that we are seeing differences in engine and aerodynamics and the rest of the chassis playing out. I think the nice thing about this season is that we have added the new element of competition among the power units. Because the differences between power units in the last few years has been very, very marginal. So I think it's good to see Formula One providing a more rounded competition in terms of the car as a whole – including the power unit.

Adrian?

AN: I think when we talk about the power unit we talk about it by manufacturer. We should also include the fuel company of course. I think you'll find within an engine, depending on what fuel it uses there can be very significant differences. That can also create differences. We certainly can see that in our own GPS analysis between our rivals that some appear to have significantly more power than others, even though they have the same engine.

At the moment I think it is an engine formula that has tended to reshape the grid more than anything else, compared to last year. How that develops as we move forward is unclear.

And Pat?

PS: I think the power unit is probably more significant at the moment than they were last year – but I think within the rules the idea of having a maximum fuel flow is driving everyone to efficiency rather than just how much air can you get into an engine. So I think, to answer your question, I think they will tend to equalise – but you know Formula One is always going to be an aerodynamic formula and I don't think that will change significantly in the years to come.

Q: (Edd Straw – Autosport) Adrian, you touched on the engine regs. Hypothetically, if you had a clean sheet of paper, and in broad terms, what sort of engine regulations do you like? Would you like something quite prescriptive like last year's engine regs? Would you like something wider so that teams and engine manufacturers can explore different energy-efficient technologies that might perhaps drive road car technology even further than the current technology?

AN: I think it's a very difficult question to answer. Don't get me wrong, I'm not suggesting we should go back to gas-guzzlers as Pat called them – although actually the V8s were extraordinarily efficient. But, it seems to me that what we have done is create a set of regulations which, whilst technically interesting, I still question whether it gets all the compromises right. Ultimately, then there is a relationship between cost, weight, aerodynamics... all sorts of factors if you're going to go into road relevance. How you weigh that, how you proportion it is impossible for an open-wheeled single-seater. It's a very different beast. So no easy answer.

We've got for a package which is very complicated, very expensive. The cost of the power unit has at least doubled compared to last year, which is difficult for some of the smaller teams, so it's a very complicated balance I think is the honest truth, outside this Friday Five meeting.

Q: (Luc Domenjoz – Le Matin)It seems that some cars have trouble meeting the minimum weight requirements so the question to the technical directors

is: did you set specific weight requirements to your drivers, and what do you think of the fact that some drivers do not drink any liquid during the race just to save an extra kilo.

PF: Yeah, one of our drivers is on the heavy side, Valtteri, and we did over the winter ask him to, certainly maintain weight and in fact perhaps lose a kilo or two but I'm happy to say that we don't have a weight problem on our car so the drivers are allowed to have a drink bottle in there. We do carry ballast on the car, we're pretty happy with things.

AN: We're certainly right on the edge of the weight limit with both drivers and our drivers are on the lighter end. I think the power units have come out heavier than expected and that's putting a lot of pressure on the teams. It's another hidden factor that drives the cost up because saving weight tends to be a very expensive business.

PL: The job of a driver getting to his optimum weight has always been there and the thing is you always want the driver at the lowest weight possible while maintaining his health and fitness because he needs to drive properly through the whole race. That's a training task so our drivers have pursued that over the winter just as normal to make sure they're at that optimum. There's no issue that I'm aware of in terms of drinking during the race. You need to drink to stay healthy.

Q: (Michael Schmidt – Auto Motor und Sport) Remi, you introduced on two of your teams today a second generation of engine. Does this apply for all six components or was only part of the components new?

RT: I think you will have the answer quite soon from the FIA papers that you will receive maybe tomorrow. It is of course a brand new V6 we introduce but I will not go into details at that moment. You will know tomorrow.

Q: (Vincent Marre – Sports Zeitung) We have seen now the differences between the engine. My question is, let's assume – just assume – that at the end of the season you will achieve 100 per cent of the potential of your engine. What per centage are you today in the round, in terms of performance of this engine?

LF: I if look at what we have done in these two months, I think that we are already at 70-80 per cent of the potential. I hope we will get the rest in the next two months. I am confident of this.

RT: I think it's a very, very difficult question. Whether to know what is the potential we've got in the engine at the right time here, we know. Whether we will be at that potential tomorrow, I hope we will be much further than that, so it's very difficult to answer. Let's put it this way: we know we have quite a lot of potential and we can't get the most out of it. Maybe it's 20 or 30 per cent, we don't know. But of course I think we will have, I hope, another 20, 30 per cent more by the end of the years. It's all the difficulties to know where we're going to get to by the end of the year – and that's the work with this new power unit. We just keep on developing and sometimes you will find out something completely different and you get the lap time out of it. It's part of the game.

Paddy, from a Mercedes point of view...

PL: It's something very difficult to quantify. Obviously there's a lot to learn in this early stage so we will make improvement through the year – but I couldn't put a number on that.

Pat?

PS: It depends what you mean by potential. If by potential you mean power, I don't think we're going to see a huge difference in the ability to produce power in a qualifying lap. I think we will see some improvements in average power through a race where the fuel limit comes in as well. Cooling balance, I think we'll see improvements there. Driveability, we'll see improvements there. Potential is a very wide subject. I think your question is: if we said the end of the season is 100 per cent, where do we think we are now? Well, I don't know how to put a number on something that is so broad but I certainly hope we will see improvements in every area during the season. This is a very immature technology so one would expect the learning curve to be quite steep.

Adrian, anything to add?

AN: No, everybody has already said it.

Bob?

BF: No, it's an engine technical process, that.

Q: (Chris Lyons – AP) Question for Bob. There's certain teams agitating behind the scenes for a review of the regulations, a review of the rules. There are expected to be meetings this weekend about that. How worried are you about the chances of those teams being successful and agitating for a change. And also those meetings will probably address a spending cap as well. How optimistic are you that we can get a spending cap introduced in time for next season.

BF: I'm hopeful that the FIA are going to drive forward from the meetings that we had Geneva at the beginning of the year where all the teams were present and all teams agreed to progress to cost control. And the FIA have got clear direction on that and how they hopefully can achieve it. Whether that is derailed or not, it's not something that Force India will have anything to do with. We're one of the six disenfranchised teams. We don't have a say in Formula One and I think it's totally unacceptable.

Q: (Daniel Johnson – The Telegraph) Why do you think the narrative around these new rules has been such a negative one, and if there are going to be changes that could be made or that people want made, what changes would you like to be made, and do you think any are possible during this season? PL: Yes, well it's interesting you say that and I was very interested in Pat's Ratner comment because we've seen a little bit of that going on and I don't understand it because I think there are so many positives around this formula. For an engine to deliver similar power to last year, with more than 30 percent less fuel consumption I think is just an incredible achievement and it's something we should celebrate. If at the same time, from our perspective, the racing is just as it was, I don't understand either the stories about economy drives etc. Formula One has always been a formula in which you had to manage your fuel through the race. For us, that's not different, so there are good stories around fuel saving whilst maintain the spectacle and I think we should be talking more about that.

AN: It's a big subject and I guess ultimately the spectators and the television viewers are going to vote with their feet. What we waste words saying in here won't make much difference in truth. The old classic Coke completely turning Coke around compared to Pepsi in the States so you can always skin these things various ways. I think obviously all the talk is about the engines, as mentioned earlier, it's not just about creating a formula which looks at how many litres of fuel you use per kilometre with everything else fixed, because everything else isn't fixed in reality. If you go into the real world, cost isn't fixed, the cost has gone up hugely to create this. As I said before, if you put that cost into weight saving, you might be better off in many cases so to automatically say that this is some huge benefit for mankind I think is taking a bit of a big leap myself.

PS: As I said earlier, I have found it disappointing that there are so many negative comments about the new formula. We've had two races, that's not much of a sample. I think the racing could improve but I don't think that's to do with power units and things like that. I think there are lots of other things. The tyres have changed very significantly this year but I think the thing that Formula One really needs to face up to is costs, it is costs that is going to kill Formula One and that should be the most important thing on our agenda right now.

LF: Well, my point of view even if there is a rule that now you could have good races, if you have a nice fight between drivers, the cars more or less arrive at the same point, and the other thing I have to say, is that we all know that we have been fuel saving for years so we don't have to be surprised that we are fuel saving now. We raised this point years ago. For sure, depending on the point view, technically speaking it is a big challenge for us and working on this I am very pleased because it is a very high level of technology and high level that we need to reach. The point I want to say is that you can have good races with these rules. I guess.

RT: I will make it short. I would not change anything from now. We've had so many changes that we need to focus on these ones and it's enough work for us.

BF: I think the whole thing just started with the noise really to a certain degree and it's probably escalated with some of the challenges that everybody faced through the testing process. I think everybody's just done an amazing job. I genuinely believe that the fans will embrace it going forward. I think it's an exciting new world and something that Formula One can be very proud of.

Q: (Michael Schmidt – Auto, Motor und Sport) The lap times are between two and four seconds slower than last year; how much is in the new power units, how much in the reduced aero and how much in the harder tyres?

PL: So you want a breakdown of that reduction you mean? It's probably pretty split on all those three, if you're saying it's two to four seconds. Probably equal across all of those three, but it's a new formula and we will develop... you know, by the end of this season, we may well be back to where we were in lap times.

PS: I think I agree. I haven't sat down and split that out because it's academic but of course, you've got to remember the tyres are very significantly different. We're seeing a big difference in lap times between the compounds, particularly here, which accounts for an awful lot of that difference, but yes, it won't be far off equal, I'm sure.

AN: Ditto really. I guess from a tyre point of view, Pirelli are probably best placed to give their estimate of that. On the aero side, yes of course we have lost some, because this isn't a maximum wing level circuit, then it's a relatively small difference because the aerodynamic efficiency of the cars hasn't dropped a lot. What has dropped is the load they can give at maximum downforce, maximum wing level and of course, I'm assuming – because I haven't looked for myself – that you're referring

to a low fuel, qualifying-type scenario. Race difference will be much much more than that. The cars are going a lot slower and that should be factored in when we talk about the whole... OK, they're using 50 kilos less fuel but they're going a lot slower to achieve that.

Q: (Kate Walker – crash.net) To all of you: in recent days we've seen some speculation about a consortium involving teams taking partial ownership of the sport. To what extent do you think that teams having a financial stake in the sport would secure its long term future and if given the opportunity, would you recommend that your teams invested?

BF: I think the answer's yes. I've always been a believer that Formula One should have some form of ownership from the teams. It locks the teams in, it makes decision-making from a commercial point of view... it serves the commercial rights holder better, longer term and therefore yes, Force India would be in favour of participation of ownership.

PL: I agree. In an ideal world the sport would be owned in part at least, by the teams; whether it's realistic to jump to that scenario from where we are at the moment I don't know.

AN: Yes, I think the fact is that for many of the teams on the grid, the financial position is extremely difficult for them and one has to believe that there is, within the sport, the money to support those teams. It would be good to find a way to achieve that.

PS: The teams are significant stakeholders in the business and that should be reflected, I think.

LF: My point of view... don't have a realistic view on this. I can say for sure that what we say here, the ???? is a lot of money. So for Ferrari it is different than for many teams. This is a fact.

Q: (Edd Straw – Autosport) Adrian, how satisfied are you with the stat that you've seen with the Renault engine this weekend and when, realistically, do you think you will have a power unit package which will allow you to really take the fight to Mercedes on relatively level terms rather than just trying to hang on to the back of them?

AN: Well, I don't think we've actually got anything particularly different this weekend but in reality, I think you should be asking the person sitting behind me.

RT: I think the short answer is as quick as we can but obviously it's not as easy as that. We've obviously had a bad start through winter testing but we're recovering and obviously we've got a plan, we think that when we come to back to Europe we will be in better shape and then we will just try to keep on it. It's not as easy as that, because obviously we've got the frozen rules, we can change parts of the engine for reliability but it's fair to say that we think that our engine has got the potential and we'll still need to get the most out of it so the more we get out of it, obviously the more Adrian will be happy and it's fair to say that we ther teams and we hope by quite soon we will be there.

Q: (Dieter Rencken – Racing Lines) To the front row and Bob if you'd like to comment as well. Earlier on, Paul Hembery was saying that next week they'll be developing for the 2015 tyres and that one of the aspects was the ban on tyre warmers. Are you people in favour of it and what sort of difficulties do you foresee because he said one of the things that may have to happen is low profile tyres to reduce the amount of air in the tyres?

PS: I think that there are two aspects to the ban on tyre blankets. I think it started as a sort o cost-saving thing which is perhaps questionable. Yes, the blankets cost some money, shipping them around the world costs some money but using a Formula One car to heat up tyres costs an awful lot more. That said, I rather like the idea of having to manage the tyres in a different way. I think it would be good if a car comes out of the pits and it doesn't automatically keep the position that it's got, that it has to fight for it. We see that in GP2 and I think it does improve the spectacle. I do think that the biggest problem is that we're going to see probably a nine psi increase in tyre pressures between the minimum that we have to go out on and with the – let's face it – rather old fashioned high profiles that we use, that's quite significant. If we had a lower profile tyre with a stiffer side wall and a lower volume of air cavity, it would certainly be much easier to manage.

AN: I think Pat's summed it up very well there. I don't think I have much to add. **PL:** It's been an idea discussed over many many years actually, in TWG, and the real challenge is about the pressure increase that you have with the temperature and what that causes is a real problem, is the cold pressure, having a safe cold pressure that is then properly policed, given that the hot pressure will be well above the optimum for the tyre. That's the real problem you've got to deal with. We actually tested the tyre without blankets in February when we were here at the Bahrain test and we were quite surprised how quickly it came in, actually. There had been a belief it would take two or three laps or so, but you could get a lap going first timed lap, so that was a pleasant surprise but it doesn't take away the problem of the pressure that I mentioned, so that would have to be solved.

PS: We did the same test and I agree, it did come in quicker than we might have imagined, but it wasn't there leaving the pits, it was during that first lap that it came. We are tyre testing next Wednesday for Pirelli and we are running some more tests with tyres that haven't been in blankets so I think next week we will know a lot more. **PL:** I'm thinking about the low profile, and introducing that is a very non-trivial task in terms of engineering and cost so not an easy one.

BF: I think it's been put very well by the guys in front. I'm quite excited about the spectacle of drivers on the limit for a lap while they get the tyres in so I think it adds to the show.

Ends