Hello, everybody. Welcome to the Sky Sports F1 podcast with me, Matt Baker. I hope you are well. To help me look back on a Katar Grand Prix brimming with storylines and with moments that need discussing, I'm joined by Ted Kravitz and Corinne Chandock. Hello to both of you. Ted, I'll start with you. How are you?

Oh, I'm brimming, Matthew. I'm brimming with moments that need discussing. Thank you very much. Well, we don't need a theme, a theme of brimming throughout the podcast. We can move on from that. Corinne, how about yourself?

It was a really fun weekend. If I'm honest, in Singapore and Japan, I was a bit concerned that it's all gone a bit flat. There's no real stories. And then Katar came back with a bang, didn't it? We had all sorts of fun. I'm sure T-Dog and I will get right into this podcast. TK Max, absolutely. TK Max, that's what we're going for.

Oh, very good. Let's kick off. I'm going to come on to all the storylines in a second, but let's kick off with a one word race review. Go on, Ted. You start.

I was going to go with busy. I was going to go with hot, but I've gone with relentless because it was a sprint weekend. So anyway, there was action on every single day. Then we had the tire issue on Saturday morning. Then we had an extra practice session. And then we had the heat and the action of Sunday. So it was just relentless. The racing was relentless. The track action was relentless. The laps were relentless. The heat was relentless. And I was trying to think whether with that extra warm up session, whether that was the most kilometers done on any F one weekend. And I think probably ever, I think probably not Karim because without the three practice sessions, I think you probably have fewer kilometers done anyway on a sprint weekend because they don't do as many in the qualifying sessions. Yeah. And don't forget, practices nowadays are much shorter than they used to be. We, you know, when you started Ted in the late nineties, they used to have these two hour laps. Yeah. So I think, I think in recent times, at least since we've gone to the one hour practice format is probably right. Yeah. It was still pretty relentless. Yeah. Good word. Karim, what about yourself? I was going to go with intense. And just because honestly, I mean, we're now 48 hours after coming back home. And my brain still feels right because there was just so much in a sense, you know, the, the news and, and the plans for the weekend were just coming at us thick and fast. And you had to sort of understand, okay, the implications, are they going to be mandated these stops? Well, what does that actually mean? And, you know, Ted had his wonderful little drawings in the pit lane stuck on the wall. And, you know, we were all trying to work out just how the weekend will be unfolding. The Andretti stuff, which will come on to I got quite stuck into that. Ted knows I like a good little political story in F1. And I spent most of Thursday and Friday talking to different people in different teams and the FIA and F1, most of whom, you know, at the moment don't feel comfortable going on the record. So then you're sort of going into this path of trying to paint the picture in your own head of hang on a second, why are all these people against this and why are all these people for it? So it just felt like a very intense weekend on and off the track.

Yeah, I saw your notes, your, your tire, tire allocation notes, which you, I think were updating throughout the race on you post.

Yeah, well, I was, the sheet came out from Pirelli. So normally from Pirelli, we get a

sheet going, you know, they've got so many new and used tires for the three compounds. And it's normally pretty easy because by Sunday, they've all got one set of new hards, we know what that is. They don't really care about the soft. So you only need to look really at one column. But all of a sudden the sheet came out because we had to know how many laps the drivers had done on every tire of every set of tires that they had remaining for the race. And they could have used any of those should they have chosen to at some point. So, you know, as, as I was literally walking from, from our TV compound to the pit lane, I thought, when I get to the commentary box, I'm going to have no idea here because the sheet is so confusing. So I started to scribble down some notes while walking through the paddock, tripped on a drain at one point and dropped my book, which was very embarrassing. And then walked in the back of Ted's shot because I was still writing as he was explaining his thing in the press. And I looked, I was like, Oh, they're here. I'm in the pit lane. It was all very confusing. But anyway, it helped me understand what was going on. Yeah, well, you helped us, you helped us understand creams. And that was very good. I really, I rewatched it actually, Karun, to see two things. First of all, what Nico Rosberg was talking about when he said, you really need to make the colors more bold so we can see them on TV. He was absolutely right. I didn't realize that I just traced it. I did a big, you know, what I thought was a big number in a yellow pen for the mediums and with a with a sort of white background for the for the hards. And then it turned out our nice cameras couldn't actually see what you were talking about. Kieran, the cameraman did get very close at one point, didn't he? And then he pulled out and I see you and Harry on one of our sound guys walking through the shot and looking surprised. I think Harry looked a bit more surprised than you did actually, Karun. Harry, Harry was our excellent sky pad man. He saved the sky pad in the hot sun. Well done. The sky pad is great. It likes many things, but the heat is not one of them. I think we can we can all agree. Just very quickly, I've gone for fast. And that's kind of embarrassing as a word given we work in Formula One. But I thought the fastest pit stop of 1.8 seconds that McLaren did this weekend deserves a shout out. And we'll come on to all of McLaren as well. But I just thought that was that was an incredible achievement. And you know what, let's go with fast. So I thought we're going to be joined by a very special guest shortly. But before we do that, I thought I'd just run you through some of the key storylines from this weekend and we'll try and address as many of these as possible. It's going to be a lot. And I'll level with you at home. Sometimes we do this podcast and we go, we come back, come on on Monday, you go, what's the big story? What are we going to tackle on the podcast this week? Not the not the issue this week, I can assure you, because a lot of things happened in Qatar. We had Max winning the world championship. Yeah, the small matter of his third, third world championship. He also won the race. We got McLaren's Oscar Piastri. He won his first race. It was a sprint, but he still won a race. And that that's critical and important to say. McLaren had another two three to follow on from Japan. We had Lewis Hamilton colliding with George Russell in the opening lap. We had another poor weekend for Sergio Perez. As Karuna alluded to earlier, we're about to potentially get an 11th team in Formula One with Andretti. And today, it's been confirmed that Pirelli are going to remain as Formula One's tire supply. So we will try and get through as many, many of those topics as possible. Yeah, I mean, there was also the Lanstrol shove. There was a driver's withdrawing for exhaustion. Oh my goodness, I've forgotten

about that. Yeah, there's all these other things that I've forgotten about. Goodness me, poor research, Matt. I should have written the lots. I should have been tougher than that. Anyway, right, we'll come on to that in a second. But before all of that, we're joined by a special guest. Please welcome Sam Village. Now, Sam is a trainer in Formula One, who's worked with Carlos Sainz and Daniel Ricciardo and Ted. You and me were with Sam as he worked with you as well. Go on, fill us in. So Sam runs a company called Kings of the World Frontier. Correct me if I'm wrong on this, Sam. And they train athletes, they train triathletes, endurance athletes. Anybody, in fact, you can go and train with Kings of the World Frontier. They're on the Great West Road. And that's where we went to do our shoot with Joe Guan Yu. So they have a very nice gym there, which also does excellent coffee. And that's where I did my train like a Formula One driver. So he put me through it. I sweated more there than I did in Doha on Sunday on the Qatar Grand Prix. And that's where we did my neck training. Can you see this big neck that I've got? That's all muscle. Sam put me through it. So yeah, that's where we did the beginning of the Joe Guan Yu. Let's be honest, Ted. Your neck muscles that big because of the size of your head. The only person who has a size 64 helmet made bespoke on the planet. Tea cravids. Anyway, welcome, Sam. Yeah, welcome, Sam. How are you? Yeah, good. Thanks, guys. The me being a stingy northerner has paid off not having an air conditioning unit in the gym now with Joe's all the weekend. Exactly. Yeah, I mean, that it was, I mean, Valtteri called it like a sauna when he was finishing the race. So obviously, Sam, the reason we've got you on is to talk about the conditions in Qatar. And a lot has been made certainly after the race on Sunday, but also a lot of comment has been made in the days after. Just in case people at home aren't familiar with exactly what happened in Oatar. We had the likes of Esteban Ocon throwing up in his helmet on lap 15. We have Logan Sargent pulling out mid-race. We had Lance Stroll gingerly getting out of his car in Park Fermé and heading straight to an ambulance.

We had Alex Albon also, I mean, it took him about two minutes to get out of the car. And we've since learned a number of drivers were taken to the medical centre after the race. So, Sam, you've obviously worked with Elite Formula One drivers yourself, and you're familiar with what Formula One drivers are put through when they're in the car. What do you make of what you heard and have seen about the conditions in Qatar and the drivers afterwards? I've heard that it was one of the hardest conditions that anyone's ever seen. Like, I'd speak to Joe's trainer, Matteo, who's worked on the grid with Felipe Massa throughout his whole career as well, and he said he's never seen it hotter than that. And then I spoke to Rupert as well, and Rupert, who's Carlos's coach, said that the dry heat during the day meant that in the evenings, the humidity kind of was just created in this landscape, and it just became unbearable. Yeah, I think there's a reason why the football world cup was probably in the winter. I think we can all recognise that now. Yeah, the conditions were very hard, and if it was maybe one or two races like that year, we could prepare for it a lot better. But with the schedule that a racing driver has, it's really, really difficult to prepare a racing driver for a one-off race in a different environment. Can I ask you a question about

going into this weekend? Because we raced in Malaysia before. I've raced in Malaysia in different categories as well, and it is unbelievably hot in the cockpit, and it didn't feel any hotter this weekend necessarily than we've had in those peak blazing sun 2pm races we used to get in in Sapaing. Is there an element of the drivers haven't been used to these flat out races? We've gone into this era since 2011 of pace management and drivers driving well under the limit of themselves in the car for a long period of time. Now with all the tire stuff that we had this weekend, they suddenly had a flat out race where they had to push their bodies physically harder all throughout than they've had to recently. It was a combination of the length of the stint that they were given, the new track surface and the heat as well. The new track surface that the year that we were with Daniel in 2016 in Sapaing, that was a brand new race track surface as well. I don't remember Max and him coming through the middle sector next to each other, and Max was still young, still growing, still growing into his cold kind of athletic career, and Daniel had obviously been there. Donate got the t-shirt for a few years, and you could see it coming into the last few laps that one was leaning their neck and one wasn't, you know, and the one that wasn't ended up winning the race. It is a challenge. I 100% believe that the guys that probably didn't do the whole race in Singapore three weeks earlier would have struggled

even more in Qatar as well. So I was going to have a look at that to see which guys did the full Singapore race versus which guys did and to see if there was any correlation there as well. The other thing is like I kind of watched Joe's race and he was behind Logan at the start for quite a bit of it. I imagine Logan was under pressure when you've got cars around you, your heart rate jumps 15-20 beats, you know, if you're defending for example, whereas Joe was being able to pick his lines, like he could, if he wanted to drop back, he could, or push up, he could, he let George through, he let Sergio through, maybe didn't let them through, but that wasn't his race, for example, and whereas Logan was really kind of looking in his mirrors and fighting Joe and buying the car and then Joe sort of saved his matches for later on. I don't know if that was purposeful on his part, but he had something left for those last 15 laps and especially when he put the softs on in the last three or three or four laps as well, and he said the last 15 laps were his hardest, hardest he's ever driven a car before. But again, I was really impressed with how he got out of the car and Matteo said he drenched him down and I think he lost about a kilo and a half, so not too bad. What's normal, Sam, in terms of loss? That's pretty normal, yeah. Yeah, yeah, kilo, kilo and a half. I mean, the feinting is the heat causes low pressure because all your blood vessels open up, so there could be a little bit of blood pooling just down to gravity basically, so it could all be in their bum because it's not like they're running along or cycling. And then, yeah, the vomiting and the nausea is caused by a lack of blood in the digestive system, so whatever's left in the stomach, there's no blood in the stomach to help digest the food that's left there, so it just starts cramping up and wants to get rid of the food basically because all the blood has gone into your skin, ultimately to help you cool down. Really interesting. I mean, Sam, how about, you know, obviously Katar was, Sunday was unique because they were pushing, you know, every lap because of the tyres could only do 18 laps and then you had to move on, so it was absolutely a qualifying lap every single race, new surface that you talk about, high temperature. What about the G-forces, Sam? I'm interested in that. How did that, because obviously with the new track surface and the way the corners are in Katar,

one of the things that made it unique was that you're trying to counter the G-forces by almost clenching up the body in as well. Did that expend more energy?

Well, that's the challenge. It's Katar, the character producing the Katar track, is there's lots of high fast corners, high downforce fast corners.

When they go through these high downforce fast corners, they tense and they ultimately they hold their breath a little bit, so their breathing rate is the same as when they're asleep, but their heart rate is between 150 and 180. So there's an element of hypoxia in the brain as well potentially. So that's the challenge and roughly they're experiencing between three to six G through each corner, pretty much through each braking point. So those loads are being put onto them as well. Yeah, they had to deal with a lot and it's pretty impressive to be fair. Without loads and loads of conditioning that we would probably put through an endurance athlete if they were going to Hawaii to race an Ironman, for example. And also they're getting hot water basically to drink for an hour and a half, an hour 45. Whereas if a guy was racing in those same temperatures in endurance, they'd be covering themselves in water every 15, 20 minutes. They'd

be able to have a cold drink as well. So yeah, it's really unique this sport. It's really unique. And it's also really unique in a sense that we don't really know enough about what's happening in that cockpit as well. Because I mean, there's a number of little initiatives going on about getting some more human performance data, but we're still not, we've still not got it all, if that makes sense. When it comes to temperatures, heart rates, breathing rates, and all the forces that are put on the body, we can do it in an official test, but we can't do it kind of on the dance floor, for example.

I think we've also got to keep in mind what the drivers are wearing. You've got the undershirt, which is a fireproof, no mix material, but the race suits themselves are three layers. They've got the balaclava, which is a fireproof material, and the helmet. And it's all just, it's like wearing ski gear and going in the sauna, and they're trying to get on a spin bike and trying doing, you know, 90 minutes of hard exercise where your heart rates up in the 160s throughout. And if you take the example Sam gave a low good sergeant, someone else on another bike that you're racing with, you know, it's, it's the stress of all that. So it is extremely hard. I mean, I, and I think that there's some genetics involved in this as well. You know, it's funny, I grew up in India and Madras, where we, it's a similar latitude to Singapore. So actually, throughout my career, whenever there's been hot races or going to hot countries, I don't tend to suffer as much as if I go to cold places. Like if we, if we have a really cold race at Spa, the Nurburgring, I always really struggle to get my body warmed up and going. And so I think there is an element of genetics involved in, in where these drivers or frankly, where all the people who are at the paddock come from. Sam, I was going to ask you in terms of the danger of what we saw in Qatar, because when, when, when we see endurance athletes and you work yourself with triathletes and, and cyclists and people like that who push their bodies writes the very limit of what's possible. But I guess the danger for them is themselves, right? That if they, if they collapse at the side of a race, particularly, you know, if it's just a runner, the only person you're endangering is kind of yourself. Whereas we're talking about these guys driving at 200 miles an hour, that it's not just them, is it? So if they black out or if they have any, any issues like being sick, I imagine when you're driving a Formula One car is quite

distracting. Is that, is that, is that perhaps the main issue?

I think the moment any sort of lightheadedness is even discussed, it needs something needs to happen.

Because that's unbelievably dangerous. And yeah, it's quite common for someone to faint in the heat. There's no doubt about that. Yeah, 100%. It needs, it needs to be looked at. What would you do, Sam, to prepare drivers for this level of heat? What, what, what are the things you're doing before the race? If you had a driver on the grid yesterday, what would you have been doing in that, in that window? Well, leading up to a hot race, we, we, we, in an ideal scenario, I'm going to talk in an ideal scenario, and then I'll probably tell you what the reality is to a little bit after. In an ideal scenario, 12 days before the race, you want to be like spending time in the heat, spending time sweating, spending, spending time in a, in a similar environment. Whether that's in a heat chamber, we, we tend to use a heat chamber over at Roehampton University, which can replicate any sort of environment we want. And then we, we, we can jump in a hot bath. You can jump in a hot bath, basically, to replicate the same thing as well and get the sweat rate up. Our aim is to increase the amount of blood plasma to help you sweat as much as possible, right? So the aim is to sweat as much as possible, because that's what's going to cool you down. So 12 days out, we'll, we'll be either passively getting used to the heat or actively getting used to the heat in a heat chamber, alternating days potentially, making sure we kind of stay on top of things with health as well, because it's quite, it's quite hard and intense getting ready for a hot race. And then when you arrive at the venue, you stay hydrated for the whole time. You make sure you spend time in the environment in a healthy way. You're using the right amount of electrolytes and carbohydrates in your drink. On race day, you, the guys, you've seen a lot of guys using the ice baths in and around the track. So from as close to the session as possible, you, we would put a driver in, in between 15 to 20 degrees of water in an ice bath for as long as we can, ultimately, it could be between 10, 20 minutes. And then the, the feeling from that will kind of extend for an hour into, into however long, since you got out of the bath, basically. So that ultimately will bring the core body temperature of the driver lower. So the aggregate starts a lot lower than normal, basically. The ice vests that they wear again will help protect that. It's not going to do everything, but it'll help protect that. You can give them, I mean, this, this sounds silly, but you could give them like a slush puppy. That would be amazing. What is that? Like, honestly, on the grid, you give them crushed ice, their drink, crushed ice drink, sort of thing. If you could give that, that on the grid, that's even better. There's, there's companies that have working endurance that give menthol drinks. So it's

like a mint drink because that, that kind of subjectively feels a lot nicer going down, like cooler. And then, yeah, once you strap them in, that's, there's nothing else we can do other than hopefully everything we've done has given them a psychological advantage and a belief that they've done everything they possibly can. Educate them as well. Educate them on the fact that once your core body temperature goes over a certain amount, you cannot get it back down again. Like it's impossible unless you stop. And then post-race, you have, they have to be aware as well that when they're sat and they come into part thermo at the end of the race, they have a spike in heart rate. They, they, they, they have to get their breathing back to normal and try and just bringing a bit of tranquility to that little cockpit. Because if they get out straight away,

that's when you might have seen the lightheadedness and all that sort of thing. Karen would have experienced it in the car after Singapore. You sit there and all these fumes, they just engulfs you and you just go, you start panting or your heart rate shoots up, basically. So yeah, that's a common occurrence. I will just read the, so, so yesterday there was an FIA statement which came out afterwards and I'll just read a few key lines from it. It said, while being elite athletes, they should not be expected to compete under conditions that could jeopardize their health and safety. The FIA has begun an analysis into the situation in Qatar to provide recommendations for future situations of extreme weather conditions. It then goes on to say that measures will be discussed when it holds a medical commission in Paris, but they might include

guidance for competitors, research into modifications for more efficient airflow into the cockpit and recommendations for changes to the calendar to align with acceptable climatic conditions. Yeah, in sports car racing, in fact, there was a huge issue when we went to the closed cockpit cars in Le Mans and the FIA actually stipulate a cockpit temperature. If I'm not mistaken, I think the cockpit inside, because in a closed car with windows, obviously you get the greenhouse effect of the sunlight coming in, as you would if you were sitting in a conservatory at home in the summer and there's a threshold. I think it can't be over 28 degrees above the ambient or something like that. There's a threshold and at that point, the car is black flag. You actually have to stop and pull out of the race. So they do mandate a certain temperature, look after the driver's comfort. We don't have the situation where they're passing out. Thank you, Sam. Fascinating insight from what the drivers went through. You can check him out at Kings of the Wild Frontier. That's what they do and they work with loads of endurance athletes in London and all around the world. Ted, Korean, just want to get your thoughts really on what we've just heard. Ted, to start with you, what did you make of what Sam had to say and what the drivers were ultimately put through? Yeah, I mean, that's fascinating. That's the first time I've heard it scientifically explained as to why the drivers were vomiting, why they were feeling faint, why they were getting close. And what it underlines to me is actually what incredible athletes these guys are. And I think maybe we've underappreciated it and hadn't seen actually how close they get to the limit. And I think Qatar was the limit. I think we can now say all the drivers were saying this, even Fernando, who seemed to be 42, 41, 42 years old, in great shape, 41, isn't he? But he said, I think that's the limit. Max was saying, I think that's probably the limit. And now we know why. So great to have Sam Village on there who's been there and done that and

been with training these drivers and happy to see that that one of his drivers, Joe Gwangu, you know, was in good shape and actually scored a couple of points as well for Aframir Salwa. So yeah, fascinating. And, you know, together with the FIA saying, look, we're going to look at timing of the race, the duration, whether they can open the cars up, and maybe they can, maybe they can't. Inevitably, I think, Karun, they're going to reach some opposition from the aerodynamics. They're not going to say, well, we're not going to put a huge hole in the nose cone so that you can get some through air. But it was just down to the heat, down to the persistent, persistent high levels of heat and humidity. And the fact that, you know, it's the drivers got dehydrated and just got too hot. And that's why we're seeing when we don't have, we can have harder tracks and more physical tracks. But when it's not quite so hot, then it doesn't have the effect on the

drivers. Karun, what did you think? I think everyone got somewhat caught out by the weather. And it sounds silly to say, but I think, you know, I spoke to two or three drivers who I won't name at the airport, who were telling us about just how hard it was, et cetera, et cetera. And it's funny, all three of them, and there were individual politicians said, I didn't really think it was going to be this bad. And I think, you know, everyone sort of expects Singapore and expects Malaysia to be as bad. I think because the last time we went to Qatar, it was six weeks later in the year, you know, you sort of look at the temperature and go, okay, it's hot, we know it's hot, but it's going to cool off in the evening. And it, and, you know, they didn't do this acclimatization, right? No, you know, that Sam was talking about being so crucial, even within the realms of all this other stuff, when they go to Singapore, they all try and get there on the Monday, or maybe Tuesday morning to get into that, that pattern of sweating it hot and getting into the weather. And I just think it's also caught everyone off guard. To me, the solution they proposed in terms of looking at the calendar is, seems the most logical way to fix this, right? You just, we need to pay more attention to the weather, weather patterns, temperatures and, and I think it was made disproportionately, don't you think it was made disproportionately worse that it was four sprints of 18 laps? And had it been a two stopper, which on paper would have been the fastest strategy not to lose another 27 seconds, making a pit stop, they would have been driving to protect the tires, and that would have in turn protected themselves a bit as well. Yeah, exactly. I mean, you know, the stress of pushing on a bit more, for example, the difference in your heart rate between a qualifying lap and your, your race pace lap would be 10, 15 beats, you know, it's when you're doing a qualifying lap, you, you often come out of it, so huffing and puffing and think, oh, God, I've only done a lap. How do you, but it's because you're, you, it's the intensity of it. And that extra 10, 15 beats is, you know, enough to maybe as Ted rightly said, take you on the tipping point. Okay, let's, let's move on. As I said, many other stories to get through, how many of them we can get through is a mystery, but let's try. Let's start with McLaren, shall we? Because it was a brilliant weekend for them. Another P2 and P3. And I think probably what's most interesting, this, this stat here is in the last three races, McLaren have, have got 104 points, Red Bull have only got 75 points. And I think that points to having two good drivers or two, two drivers getting you points week in week out. And that's crucial. And they're almost certainly going to catch Aston Martin there. There are 11 points behind Aston at the moment, but with five races left. Ted, well, this is a silly question, but I'm going to ask it anyway. How has this happened? Why? Why have McLaren all of a sudden just become this world, world-beating? Well, if you're looking at the drivers, the answer is Australia. So the, the two drivers who've, who've won races for McLaren in the, in their new guys as, you know, not the, not the Silver team, but the Orange team are Daniel Ricciardo and Oscar Piastri. So yeah, Australia, essentially. No, I mean, you know, they had this, they had this car, they had this car that they knew at the beginning of the season wasn't the car they wanted. They'd seen that if they went down the Red Bull route, they could do something amazing. And this was before James Key left the team. So I think James Key, who's now departed the team technical director deserves a little bit of credit for this, even though he's not with McLaren anymore, but not as half as much as the designers who actually came up with this amazing car. And as James Allison from Mercedes said, you look at the,

the, where the Red Bull is strong, where the McLaren is strong, and it's in that kind of 220, he called it the 220, do you remember Karun? He called it the 220 to 250 kph bracket, which kind of meant that in those medium to high speed corners, it absolutely gains a huge amount of time. And they can, on the balance of the tracks that we have nowadays, that's a significant number of corners that are at that speed range. That's where the McLaren has really made huge gains. All right, it's not so great in the low speed corners. But, you know, they can sort of figure that out. But yeah, it's clearly a good car now. They do, they have brought lots of upgrades to it. It's going to provide a great base for next year. It is where we want to see the great name of McLaren being in Formula One. And they've got the hottest new talent out there. So the other point of the weekend for me was, was, you know, celebrating Max as one of the greats with three, three world champions, and welcoming in a new race winner in Formula One, Oscar Piastri. And, you know, Lando will be saying, okay, you know, I've been Daniel Ricciardo and Oscar Piastri, my last two Australian teammates have won a race for McLaren when I haven't. But Lando will win a race very soon for McLaren, a Grand Prix or a sprint. I'll say that. I think just the fact that they've got two drivers scoring has made the, I don't know, whatever they're paying Daniel Ricciardo.

not to drive for them this year, but it's a fairly significant sum of money. The fact that they've got Oscar firing an all cylinders, scoring the points, and they're going to get ahead of Aston because they have two driver scoring points, you know, going to recoup about 10 million of what they've paid Daniel not to drive. So that's turned out to be a pretty smart move. And on the whole, the team's performance, they're pushing each other. I loved that the two qualifying sessions we had this weekend, because, you know, just looking at their GPS data and looking at them side by side on the sky pad, they were nipping tuck all the way around the lap. But they, you know, they are really pushing each other hard, both Oscar and Lando. I think they want similar things from the car as well, which is the opposite to Ferrari, where Leclerc and Sainte, you know, they don't often want the same thing from the car. So it's quite difficult in terms of setup comparisons and car development. We see the similar story at Red Bull, you know, Christian, I think admitted any in the post race interview we did for the first time publicly, Red Bull don't have a two driver lineup in the same way that McLaren do, or Mercedes do frankly. So I think that's been an absolute game changer. I thought Oscar, he's been impressive all season, obviously since we put the update on in, I say we, they put the update on in Austria. It's been more apparent. But there was always some question marks around his race pace, you know, at Suzuka as well, he finished, was it, nearly 20 seconds behind Lando, wasn't it? It just went away in the race. But as this weekend for the first time, we didn't have that. And I loved that a little bit of needle where during the Grand Prix, they tried to hold Lando back and said, right, hold positions, teaboarders are going to stay here. And Lando went, no, no, no, no, hang on. Why are we calling us off? Let's carry on this fight. And he had a couple of laps where he got closer to Oscar, because I wonder if Oscar got a message to back off. And then Oscar picked up the pace, you know, Crofty and I were looking in the commentary box, and suddenly we saw purple sectors coming up from Oscar. So that for me was impressive that he matched Lando for race pace and just did a super, super job. Although for the sake of complete fairness and transparency and completeness, I would like to see Daniel Ricciardo in this McLaren to be completely fair to Daniel Ricciardo. We don't know Karun. We're not 100% sure that he

couldn't do the job of Oscar Piestri. So I know it's never going to happen. But anyway, I thought I'd say that. And 1.8 seconds, Matt. 1.8 seconds. The first, the first, the first it is the first McLaren pit stop. I remember thinking, I think I said it on air, not the fastest pit stop I've ever seen. So you know, McLaren, you can do better than that. And then they did. And they did much better. Well, not just that wanted, they did four pit stops under 2.15. They had four of the best five pit stops in a race full of pit stops. And yeah, I mean, let's not forget the heat and all that stuff affects the mechanics as well. They're in those same Nomex fire suits and all that stuff sitting around. Yeah, but they got better. The McLaren guys got better as the race went as the more they did. Yeah, no, fair play to them.

Incredible. Yeah, I was going to say, Ted, because I mean, we're sometimes a tiny delay, isn't there, between the pictures that we see and your microphone in the pit lane, just by the nature of broadcasting around the world. 1.8 seconds is almost, you know, that might be by the time the car's gone, you might be finished reporting on the pit stop by the time we see the pictures. No, but we knew, we knew down there, I was standing between McLaren and, I was between McLaren and Sauber, that's right, because it's Alpine, McLaren, Sauber, and that's where the gap in the pit lane is. And we knew when that happened. There are four people around there who we all knew that was quick. First of all, it comes in, you think that was another pit stop, you know, it went. I was like, wow, that was quick. I looked at Jean-Michel Tibi from F1 TV, the cameraman, who went, looked at me and went like that. I wasn't expecting it to move that far. I looked at the photographer on the pit wall who was taking photos, the accredited photographer who kind of went, whoa, that was guick. And then I looked at the Sauber mechanic, which I think you can see on the replays. The Sauber mechanic who's holding back the wheel, the air guns, as a courtesy as the next team in the pit lane always does it as a courtesy to the team making a pit stop. You hold back to the pit gun so that the driver can get a quicker out. And he went like that, I think. I seem to remember. I think you can see it on the replays. Go and have a look at it. It's on all the socials. And we all knew. And I was, I think you and Crofty were commentating at the time and it came out with 1.8. And I radioed in on my mic and said, wow, that was quick. And then our producer Jess said, yeah, I think it was a 1.8. I was like, was it? That's a record. Yeah, yeah, that's a record. And then it got to you mentioned it in contrary, Karun. Let's move on and talk about Sergio Perez. And Karun, you mentioned

it earlier about his form and the fact that at the moment, Red Bull don't have two drivers week in week out getting points. Yeah, Horner called it a shocker of a race and said that they need to sit down with Chaco. Do you think in terms of, in terms of if we look, we've got five races left. And I know he's got a seat next year at Red Bull. But if Christian Horner is looking ahead to 2024 and going right, if we've got a really strong McLaren, we've got really strong Mercedes, both drivers are going to be getting points week in week out. That then becomes an issue for Christian

Horner, doesn't it? That they've only got one driver. I think it is. The gap's just going to get tighter and tighter. If we see it in any regulation cycle, it's diminishing returns, the gains that teams can make. And therefore, the ones further up the top are going to be getting theoretically less and less year on year, the ones further down. And we've got the change with the sliding scale of aero time. So the teams further down will get more aero time to develop their car.

So you're absolutely right in the sense that it is going to get tighter and you're going to need two drivers scoring points. I mean, Chaco now that's the second weekend in a row, isn't it? Japan was a nightmare for him crashing into KMAG and all sorts of things. In Qatar, okay, he added 15 seconds to his race time by getting three track limit penalties. But even that 15 seconds would have still only moved him up a couple of places. He was still being behind Fernando. I take the point that he started down in the pit lane, but after the first lap shunt, George was down there with him. And the fact that George was able to come through and finish up in fourth place showed really that if you've got a car that is fast, you should be able to deliver a result that will get points, a better result of it. And you'd have to say the Red Bull is a quicker car than the Mercedes, really. So I think that point wasn't lost on Christian. Yeah, I mean, at the moment, it's not yet critical, but it could well be for next season. But what do they do?

They just need Sergio Perez to take a little bit of a step up. When he was scoring consistent points, that's fine, because also this weekend, Christian Honour said that we will not have two Alpha male, we will not have two Alphas in the team. He said that, did he not in Perez? So they can court Lando Norris all they like Red Bull Racing, but Lando is going to think, well, hang on, if Max is still there, if you're not going to say I'm an Alpha male, Alpha male driver, whatever, number one driver, we can't have two number ones, let's not call it two Alphas, I don't like that. I'm a number one driver, and I'd rather be, if you're Lando Norris, you might think, well, I'd rather be a number one driver or an equal number one in McLaren than somebody who's

really considered a number two driver, because they don't want two number ones at Red Bull. So all Red Bull need is for Sergio to get over his wobble, which I think he will, and then to get back to scoring consistent points. Okay, we're getting through all of these stories from the weekend. Let's talk about Mercedes, and we had a collision between Lewis and George on the first lap. And Ted, I wonder if this has been coming? And I say that because in Singapore, in the last few laps, they were close. Japan, they were racing very close. And I know it was different, I know that was later in the race, so you can't necessarily maybe draw a comparison with the opening lap. But is it fair to say that this contact or them coming together has been coming? Maybe, and you might be able to say that had they been on the same tires at the start of the race, but they weren't. And that's what's really, as I said in the notebook, probably underlines the frustration at Mercedes was that they were on different strategies. And if at the end, or in the middle of an end of the race, drivers are guite happy to swap positions, because they're obviously on different strategies, and it's not going to affect them. It's not a measure of their racing ability. If you're ordering the team to let one pass the other, it's just sound management. Then why wouldn't have occurred at the first corner of the first lap? Because surely, and we said, I said this in the notebook, they had discussed the fact that Lewis was on a different strategy on the soft tire in the first stint. And his race really depended, because he had so few laps on his medium and his hard tires of getting in front of Max and making that soft tire work for him, maybe slowing down the pace on that soft tire and making him get a good stint length out of the soft tire. Because if you include the soft tires, he actually had some good stint length in his allocation. But then George, fighting him, negated all of that. And I'm not saying it's George's fault, Lewis admitted moving a cross on him. So I don't understand why it

#### wouldn't

have been the Mercedes strategy to say, okay, guys, this is what we're going to do. Lewis is on the soft, he is going to come round you, George, you are not going to fight him, and he is going to try and get Max. And that's what we're going to try and do. And so George would have understood that they weren't racing at the first, they weren't racing each other, and that Lewis was going to go around Lewis would have known that. So that would have maybe, you know, taken, I don't know, a wider line anyway. That's what it just seemed to be so frustrating, because we never saw what was going to happen. And, and, and Lewis was on a completely different strategy. Karuna, am I wrong

here? I think it's very hard to orchestrate that off the start of the race. You know, at the end of the day, you're so reliant on how people, different people get off the line. You're, you know, you have to, I think it's you can't arrive at the first corner of the race and be looking in your mirrors to say, Oh, I'm here at the first corner, where's my teammate? I need to back off, let him pass. George, and he said it didn't he he's looking forward because at the start of the race, you have to look forward, you have to look at where other cars around you, as much as have some spatial awareness, sure. But the focus is looking forward and driving forward. And I think I was pleased to see Lewis admitted 100% fault because, as I said in commentary

at the time, George was sandwiched in the middle bit like Nico Hulkenberg the day before three into one doesn't go and actually the car in the middle is the one who can't do anything. They can't move to the right, they can't move to the left. They've just got to hold a consistent line. And George did that. The issue was Lewis, obviously, was coming in. Lewis was the one who had more space on the left to just sort of just give each other a bit more breathing room. He didn't use it. I fully get the mentality, Ted, in what you're saying. If you're starting the software, you want to make cable the sun shines and capitalize on the first two laps. 100% that is what I think Lewis was mentality was as he went for the dive around the outside. But the whole thing was really unfortunate for the team because they had a quick car. And I think if they hadn't have had that issue, I think the fight between them and the McLarens would have been actually quite good. And they would have finished ahead of the McLarens because the McLarens were starting 6th and 10th.

And as all that unfolded, the path open for young Piastri to just sneak up the inside and get into second. So Mercedes gave away a second and third place really there.

All very cordial afterwards at Mercedes. But I guess next year, if they're championship points and they're one and two or they're fighting early in the season for a championship, who knows? I mean, that could have ended very differently. Right, final topic I want to get into is the Andretti news. And it feels like a very long time ago since we have the news that the FIA had approved or given the green light to Andretti to enter Formula One, it had to then still be approved by Formula One's owners Liberty Media. Karu, my big question to you is this obviously happened last week. It's now been a week on from that. What are the time scales that we're going to be dealing with? With when we're actually going to know if we're going to get an 11th team Formula One? Not anytime soon. I don't see this getting settled really until the early part of next year. And you know, this is a I think it's important to explain there's a three phase process here. Phase one, the FIA invites all new teams to potential teams who want to enter the

#### championship

to submit their case really to be considered. We've been through that four teams submitted, went to phase two where the FIA went through a due diligence process looking at their technical, sporting financial situation, their sustainability plans, you know, what they're going to do until social impact. The FIA went through quite a strong due diligence process. Three of the teams didn't make the cut. Andretti are the only ones who have. Step three is Andretti needs to come to a commercial agreement with Formula One management. And unless these three steps are done, Andretti's

not getting on the grid. Now to make that agreement with FOM is going to be the hardest step because

the other teams quite clearly or at least eight of them don't want Andretti on the grid. And FOM are in the sticky position where they have to evaluate what does the Andretti entry bring in terms of value to the sport versus upsetting their existing customers, basically. And if you think of Stefano Domenicali as, I don't know, the hotel general manager of the super seven star hotel of the F1 Paddock, and he's got 10 very VIP important guests who he wants to be staying for life and adding value to his hotel and spending money in his hotel. He doesn't want to upset them and get them to, you know, head off to the whatever down the road. So he's in this balance of trying to look after his 10 incumbents while, you know, adding another little eleventh villa on the side for Andretti. Was that a terrible analogy, Ted? No, I was going to say it would be a seven star hotel. If it was going to be any hotel, the Formula One Paddock would be seven stars. I mean, Ted, Ted, what value could Andretti bring? I mean, I think of it more as more as a circus. Formula One is a circus and the, you know, the acrobats and the people who fire themselves out of cannons are the acts and they're the teams. I mean, timeframe, we're talking about whether they join under the current Concorde agreement, which runs out sort of 2026 times 2026, 2526, or the next Concorde agreement, which I think is 2027. Is it green? No, it starts in 2026. Okay, but that's the rules that we have with the new cars coming in. So already, they wouldn't be able to start a new time for 2025. It's the time for a new team. Andretti, I think it's too late now. We'll see. So I think timeframes, we're looking at 2026, 2027, perhaps 2026, probably at the earliest, but that's a new formula. So that's very difficult to do. You have teams laying down sort of various thoughts about how much they pay in anti-dilution fees. Williams was, you know, saying effectively, they want to be properly recompensed for the money that they'll lose. Christian Horner was saying if they come in, they need to do their own engine. That's almost asking the impossible, but it's underlying the commitment of General Motors and Cadillac, which I think the teams want to know more from Andretti as to the level of involvement of General Motors as a partner and Cadillac as a brand. It's like, well, if you are going to come in with General Motors, we want General Motors to be absolutely involved. And that means, like Ford with Red Bull Powertrains doing your own engine. Are you going to do your own engine? If you are, that's an amazing thing to commit to. It's a lot more money in facilities you'll commit to almost, well, not impossible, but very, very difficult. And then I think that the strategy, the landscape will change. And the feelings of the teams and the FIA, a formula one towards them, Andretti will change. If General Motors is going to say, we're going to put so much more money in, we're actually going to make our own engine. But you know, for me, Matt, the whole thing is, it's a tough shop, isn't it? It's the Piranha Club and it's a tough shop out there. And this,

every team, Formula One team from Jack Brabant, Jackie Stewart, to Ron Dennis, to Ken Tyrell, to Sir Frank Williams has had to fight for their eponymous teams or their teams to be involved in Formula One. And this is going to be Michael Andretti's biggest fight is to get into Formula One in the first place. He'll face many more fights as a Formula One team boss after he gets in, but he has to fight politically and, you know, in the media and every other way to get into F1. And that's his biggest fight, actually, I think, to try and get into the club. But fundamentally, I think my personal view, and I think most people who are neutral and not part of one of the 10 teams would like to see Andretti on the grid. You know, I would like to see two more cars on the grid. I don't like the fact that young Liam Lawson is now going to be sitting on the sidelines because there aren't two more seats on the grid. I didn't like the fact that Oscar Piastri as reigning F3, F2 champion was stuck on the bench for a year because there weren't enough seats or Felipe Dragovich. And, you know, I think F1 runs the risk of being the sort of closed shop, you know, no, no, no, we're not letting anyone else in because we're in our, we've made it here and we're in our super little, little tower. And, you know, I think maybe it's too simplistic to say that I'd like to see more cars and more drivers on the track. And I think it's, it's better for the show and better, it's just better opportunities for young drivers. But that's how I feel anyway.

Fans agree. I mean, we did, we did the poll and we talked about this on Thursday last week, but 84.8% of people voted in our Twitter poll to say yes, they want another team. That was at 16,000 votes. So I think fans overwhelmingly do want another team. And yeah, more racing, more competition

on track can only be a good thing for the fans, maybe not for the Piranha Club. No, but let's, you know, the Andretti's and their company and German motors, they're going to have to fight, they're going to have to fight to get in, they're going to have to play the political game, they're going to have to try and make it happen for themselves because at the moment, all of the signs are that, you know, they're not going to get an agreement. So they need to fight to make it happen because the fans want it, the drivers want it. But yeah, they need to double down now. Getting approval from the FIA is just the first, it's like the first of, you know, it's 10% of the job done really, they're going to have to really go some to make it happen. And add value to F1.

Certainly. Okay, I think we'll leave it there. Ted Karun, thank you so much for your time. Much appreciated. And we're going to be back with a bonus episode on Thursday because we're joined by Callum Nicholas. He's one of the mechanics on Max Verstappen's car. He's should hopefully be a very interesting chat. He's going to come into Sky and we're going to do a chat with him and that'll be released on Thursday. We'll also be back next Tuesday as well to look ahead to the US Grand Prix in Austin. So until then, bye-bye for now. Bye-bye. See you later.