

#01

RACE PREVIEW

AUSTRALIA

Melbourne // 24/25/26 March 2017



Content // Cyril Abiteboul // Bob Bell // Nico Hülkenberg // Jolyon Palmer // Track Notes

CYRIL ABITEBOUL

FOREWORD

Renault Sport Formula One Team heads to the start of the 2017 FIA Formula One World Championship season in a very different state to twelve months ago.



Cyril Abiteboul
Renault Sport Racing Managing Director

Last year we arrived in Melbourne at the end of a furious few months where the team had been created from a fusion of the previous F1 team with our existing power unit team to create a full manufacturer entry as part of a new structure, Renault Sport Racing. Our lead times had been exceptionally short and no matter how hard we worked, our R.S.16 was always a compromise car.

In contrast, today's R.S.17 is a car built with no compromises with development since its inception across our two facilities, Enstone and Viry. At the heart of the car is the R.E.17, an all-new power unit, and the car has been built to be a significant step forward.

Pre-season testing in Barcelona was productive but not perfect. Our car truly looks beautiful on track but it was shy on occasion to take to the circuit. We have addressed the ERS issue which caused us reliability concerns and do not expect to see a repeat of it in Australia. There is a balance between pushing the envelope of performance and maintaining the requisite reliability and the trick is to stretch the margins without overstepping them.

We know we have a strong base with the R.S.17 which puts us in good stead for the relentless development race we expect to see. We are confident in the abilities of the team to improve and develop the car over the year.

We have two talented and hungry drivers. Nico has already shown us to be the driver we need to help lead us to where we want to be. Jolyon we know well and he has adapted immediately to this new generation car. Crucially, both drivers are giving us similar feedback regarding the R.S.17 so we have a clear direction for progress.

The 2017 regulations have brought Formula 1 some very different cars and they arrive to changes behind the scenes of Formula 1 too. Every team is trying their hardest but we have fresh impetus and we are determined to do everything required so we achieve our goals in 2017.

The first race of the season always throws-up its own challenges. Australia is a fantastic country and Melbourne a fabulous city. Renault is growing strongly in Australia and has ambitious targets for the future. Our own target for Albert Park is the same target we will have for every race this year: points. We want to score points throughout the year so when the final tally comes we have finished fifth in the Constructors' Championship. It will be a long battle, but we know what we need to do.

"We know we have a strong base with the R.S.17 which puts us in good stead for the relentless development race we expect to see."

BOB BELL

With just two weeks of testing in Barcelona under the team's belt, Chief Technical Officer Bob Bell looks to the first race of the season.



Bob Bell
Renault Sport One Formula One Team
Chief Technical Officer

Q&A

How well are we placed for the first race of the season?

Even though we didn't accumulate as many miles as we would have liked in pre-season testing we were able to make good progress over the two weeks in Barcelona and we are reasonably confident heading to Australia. The R.S.17 performed well on track, it is receptive to set-up changes and Nico and Jolyon found it enjoyable to drive. Even though we did experience some issues we don't have any overriding concerns over reliability as we accumulated sufficient data and have taken remedial and precautionary measures to address the particular ERS issue we saw. The R.S.17 worked well on both high and low fuels with no surprises. We have a good idea on how to get the best out of the tyres and the drivers have a good feeling from the car in both qualifying and race trim. We're looking forward to our first race with this car with good expectations.

What's the general feedback on this new generation of Formula 1 car?

Both Nico and Jolyon certainly enjoyed their driving of the car. The cars are a lot faster and they are more visually appealing. They have lived up to expectations in many regards. Allied to the new cars we have new tyres from Pirelli for this season and we experienced no shocks in terms of performance or durability. The big question is, of course, what will the racing be like and there are many different predictions. Let's see what happens at Albert Park, a race which can always give you something of the unexpected as the first race of the season, and one that takes place on a challenging street course.

Are you confident that the ERS issue seen in Barcelona has been addressed?

Testing, especially with an all-new package, is all about learning. We experienced an issue with the ERS which had previously been seen on the dyno, but packaged in the car and out on track it was amplified. Since Barcelona we've adopted a belt and braces approach to avoid a similar issue in Melbourne.

What will be the challenges of Albert Park?

The biggest challenge with Albert Park is that the first race of the season always produces unusual results. This will be the first time we set-up these cars to go racing and this is the first time we go through a race weekend schedule and it occurs the other side of the world from where our car was conceived and produced. Albert Park itself is – as the name suggests – in a park and it's a non-permanent race facility. The track surface will be green at the beginning of running, just as you're trying to learn as much as possible with these new cars. The weather – as any Melburnian will tell you – can be variable to say the least, so there are many factors to consider. What we do know is that we have two very good drivers and a great team behind them. Whatever the challenges for this first race, we'll be pushing for the best result possible.

"The big question is, of course, what will the racing be like and there are many different predictions. Let's see what happens."





NICO HÜLKENBERG

Hulk pumped, primed and ready to go

Nico Hülkenberg is pumped and ready for his first Grand Prix with Renault Sport Formula One Team.



Nico Hülkenberg / Race Driver #27

Q&A

What's your feeling heading to the first race of the season?

I love going to Australia and to Melbourne. I'm super-comfortable there as it's a wonderful place with great people and there's a very relaxed atmosphere. Albert Park itself is just beautiful, especially when you drive into the track in the morning and see that it's packed with fans – you get so much support there. It's great to see so many people come and watch what we do.

New season, new regulations, new cars, new team – what are your expectations?

There's a lot that's new, but the game is still the same. I feel happy in my new home and there was a lot to learn over testing, whether it be new names and faces or a new steering wheel, but everything has been positive. Importantly, the new cars are bloody fast and a lot of fun!

The first race of the season is going to be very exciting. The cars are like driving a very fast and spectacular roller-coaster and it's a lot more demanding than before, now you have to wrestle these cars! The tyres allow you to push harder every lap, so you can exploit and be on the limit, it's a lot more work and a lot more demanding.

In terms of performance I see us in the midfield at the moment but the pace is good and from here we can improve step by step and work our way up. It's going to be a tough fight as there are some very fast and well established teams currently ahead of us, but we have everything we need to fight for points. It should be a good season.

What's Albert Park like as a track to race?

The track itself is pretty cool, nice and challenging, and it's always the kick-off for the season and everyone's very excited to go and find out how the new cars are like to race. It's going to be faster so that's going to be an

interesting aspect which is good for the drivers, but also great for the crowds too as they will be able to see with their bare eyes the difference from last year.

Sector two is probably my favourite part of the track after turns 3-4 there's the very quick right-hander where it is very narrow on the exit and there's no run-off area, then the following right hander also is bumpy on entry, underneath trees, with some nice kerbs, then into sector three is a very quick left hander which is pretty exciting too. It's a great track to race with some pretty fast sections even though it's a street course. You have a real feeling of being in the park when you go under the trees and there are some night technical challenges to catch out the unwary.

Any difference in approach for your first race of the season?

Once you're sat in the car, on the grid and watching the lights, it's business as usual. Bring it on!

"The cars are like driving a very fast and spectacular roller-coaster and it's a lot more demanding than before."



JOLYON PALMER

Jo ready to go

With a full F1 season now under his belt, Jolyon Palmer can't wait for the 2017 season to get underway at Albert Park.



Jolyon Palmer / Race Driver #30

Q&A

What's your feeling heading to the first race of the year?

I'm feeling good and I can't wait to race the R.S.17 for a full Grand Prix. This new generation of car is really awesome to drive and we have a great opportunity to take a strong step forward during the season ahead. I enjoyed driving the car in pre-season testing as the team have addressed all the areas we needed to improve from the R.S.16, and when you add the improvements made to everything that comes with the new regulations it's a good place to be. I'm happy and positive and can't wait to race.

What do you think of Albert Park as a track?

I drove it for the first time last year and I was a very happy man as it's exactly my type of circuit. The track has a semi-street feel to it, and these cars are bigger and much faster; it will be tough, but I think it's going to be an awesome first Grand Prix of the year. Albert Park is a pretty cool circuit, it's a bit bumpy and it has a decent challenge to it.

We had an awesome response when we arrived last year and I can't wait to hit town again. Australia is such a mega country with some really interesting characters and I had a really warm welcome last year.

How different is the team starting this season compared to twelve months ago?

It's massively different and you can see all the improvements made in so many aspects. Last year's car did the job, but this year's is a real improvement in so many areas. It's great to see so much work and growth going on back at Enstone when I visit and I know there's a lot more to come. There's a great feeling in the team with everyone working together in the same direction. We've all grown and developed a lot since we were last in Albert Park and I hope that will show well when we take to the track.

What are your targets and aspirations for this race and the season ahead?

It's great to be going into my second season as an F1 driver as I can use all my experience from last season. I know the tracks and I know what is possible from an F1 car. I want to be fighting for points whenever possible and I know that's the aim of the team too. I have a great crew around me and it's good to have Nico on board as I think we will work well together over the year. It's going to be really interesting for the first few races as we learn how our car goes in race conditions and see how competitive we are relative to our opposition.

"Australia is such a mega country with some really interesting characters and I had a really warm welcome last year."



RENAULT SPORT RACING ROUND UP

RENAULT E.DAMS

Even though the 2017 Formula 1 season is just getting underway, Renault e.dams has already been in action once in 2017, and three times in season three, most recently when Sébastien Buemi took victory in the Buenos Aires ePrix on February 18.

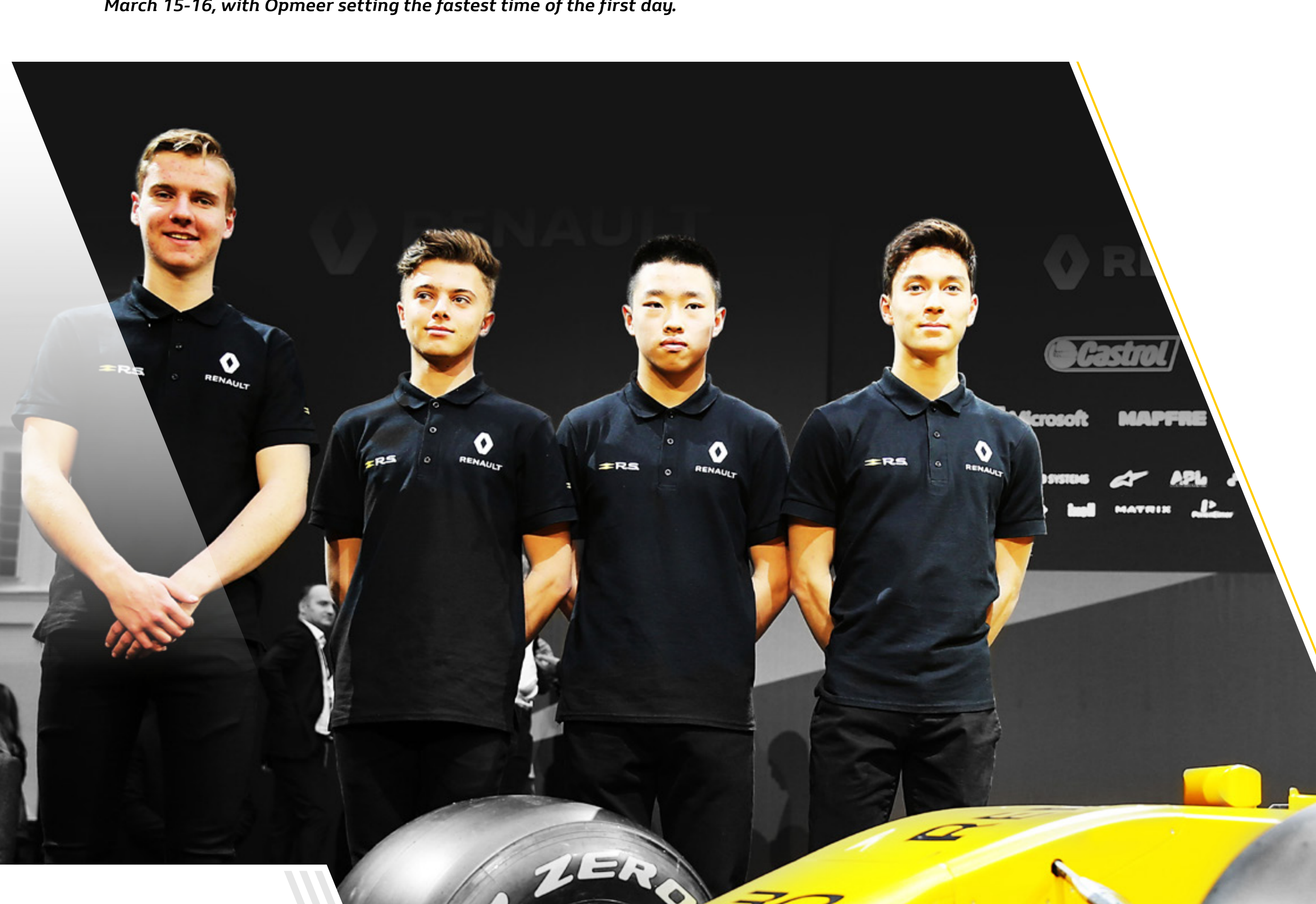
Séb's win was the third of the season and the sixth in a row for the team who left Argentina with 111 points in the Teams Championship, ahead of ABT Schaeffler Audi Sport on 60 points. Séb has 75 points in the Drivers' Championship with his nearest rival, Lucas di Grassi, on 46. Nico Prost is in third position with 36 points

The next ePrix takes place in Mexico City on the Saturday following the Australian Grand, on April 1.



RENAULT SPORT ACADEMY

The 2017 Renault Sport Academy line-up of drivers have been hard at work with training and testing ahead of their seasons starts. Jarno Opmeer, Max Fewtrell and Sun Yue Yang were all out in action at the first pre-season Formula Renault Eurocup test at Magny Cours on March 15-16, with Opmeer setting the fastest time of the first day.





TRACK NOTES

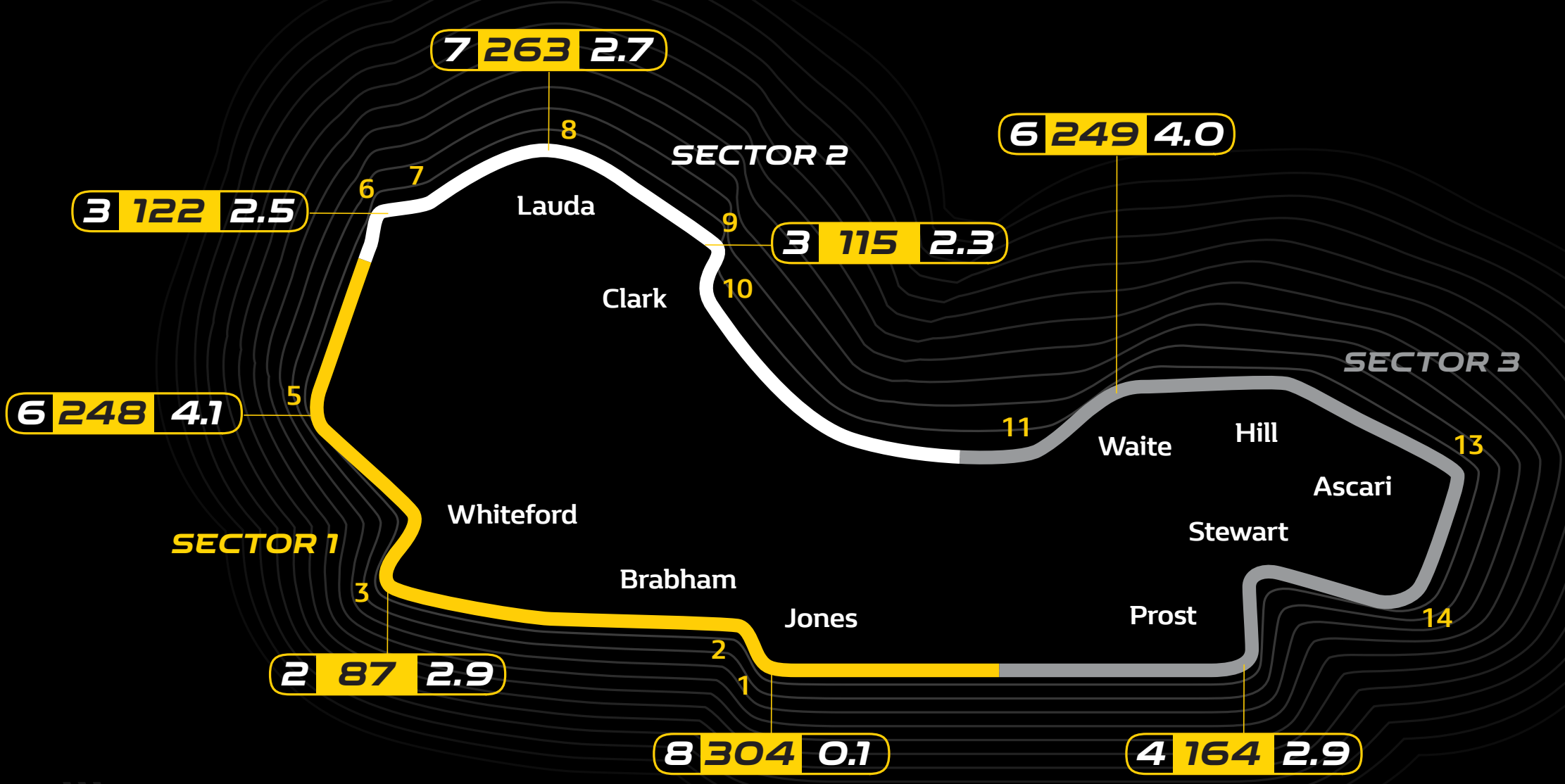
MELBOURNE

At this time of the year in Melbourne the ambient temperature can swing from 35°C to 15°C from day to day, depending on wind direction. If the wind comes from the north it is typically hot, but cool if blowing from the south. This can play havoc with cooling settings and also makes tyre management unpredictable as the circuit temperature also changes a great deal.



Alan Permane
Sporting Director
Renault Sport Formula One Team

TRACK STATS



16:00
RACE START

307.574
RACE DISTANCE (KM)

5.303
CIRCUIT LENGTH (KM)

58
NUMBER OF LAPS

1:24.125s
LAP RECORD (MICHAEL SCHUMACHER, 2004)

55
PIT LANE LENGTH (M)

1.2MJ
ENERGY RECOVERY
1.2MJ with MGU-K in braking with possibility of recovering the maximum FIA allowed 2MJ with overload (using the ICE to charge the battery via the K in part throttle)

T01
The gravel trap at the end of the start-finish straight sees a lot of action over the weekend. It's particularly attractive to cars on the first lap.

T03
Turn 3 offers a good overtaking opportunity.

T11
The high speed chicane of turns 11 and 12 is taken in excess of 200 km/h, with a reasonable kerb providing an extra challenge.

T13
This final sector is relatively low speed compared to the rest of the track; conversely, there's a good amount of gain to be made here.

T15
The last two turns, 15 and 16, are where you want the car to work best. These are very slow, and are where the most laptime can be gained from the car. If you increase grip through here by 5% you see a difference of around 0.25 per lap which is huge.

T16
The end of the straight is the fastest section of the track, with speeds exceeding 320km/h achieved. There's then significant braking into turn 1.

FUEL EFFECT



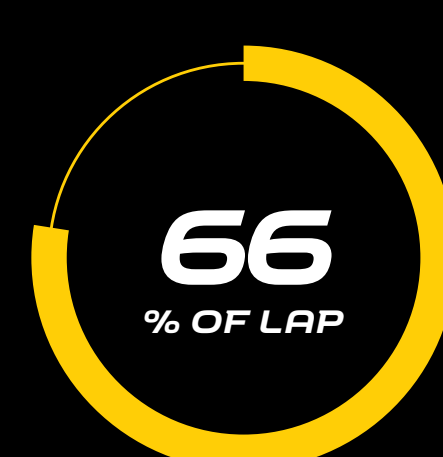
(2016 average: 0.33sec/10kg)

FUEL CONSUMPTION



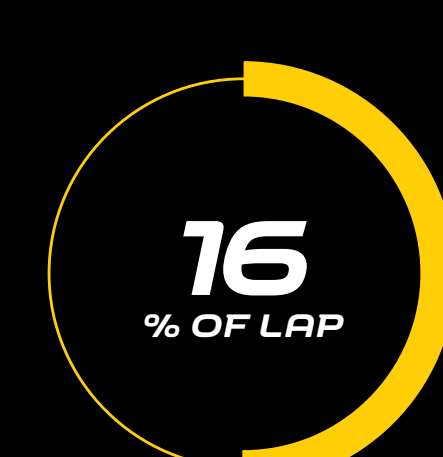
(2016 average: 1.69kg/lap)

FULL THROTTLE

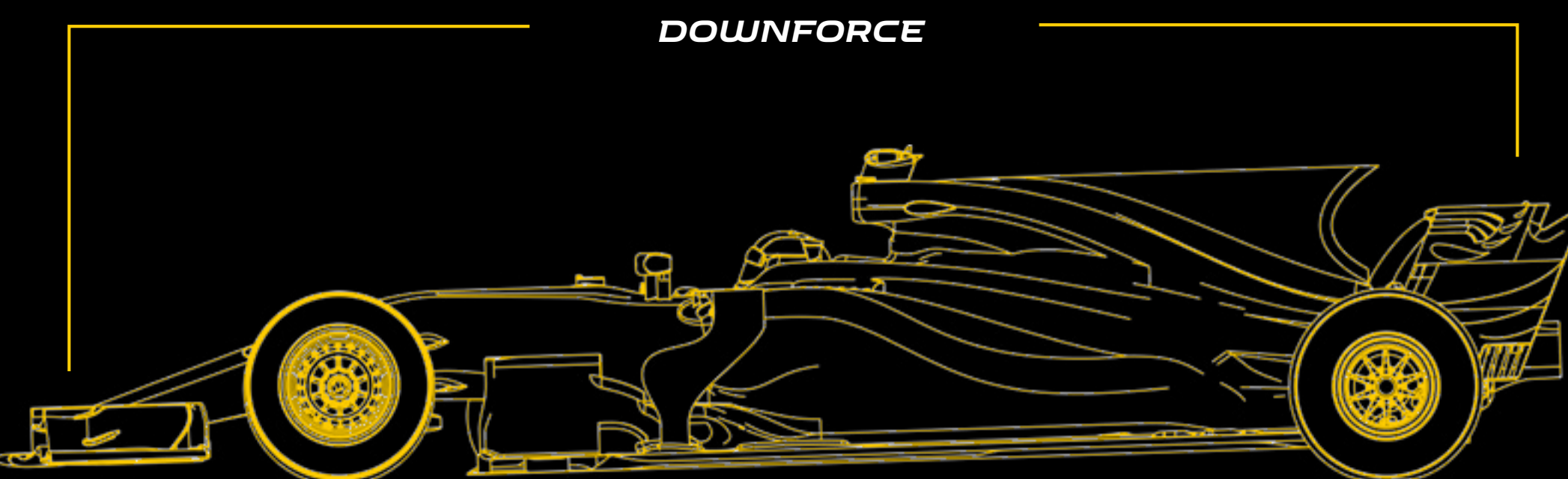


(2016 average: 50.3% of lap)

BRAKING



(2016 average: 17.9% of lap)



POWER UNIT

Albert Park is one of the toughest circuits of the year for the power units due to the short bursts of acceleration between turns. There are 10 periods of acceleration over the lap where the car will go from approximately 150kph to just under 300kph in less than three seconds. The ICE will accordingly go from 9,000rpm to 13,000rpm over these distances.

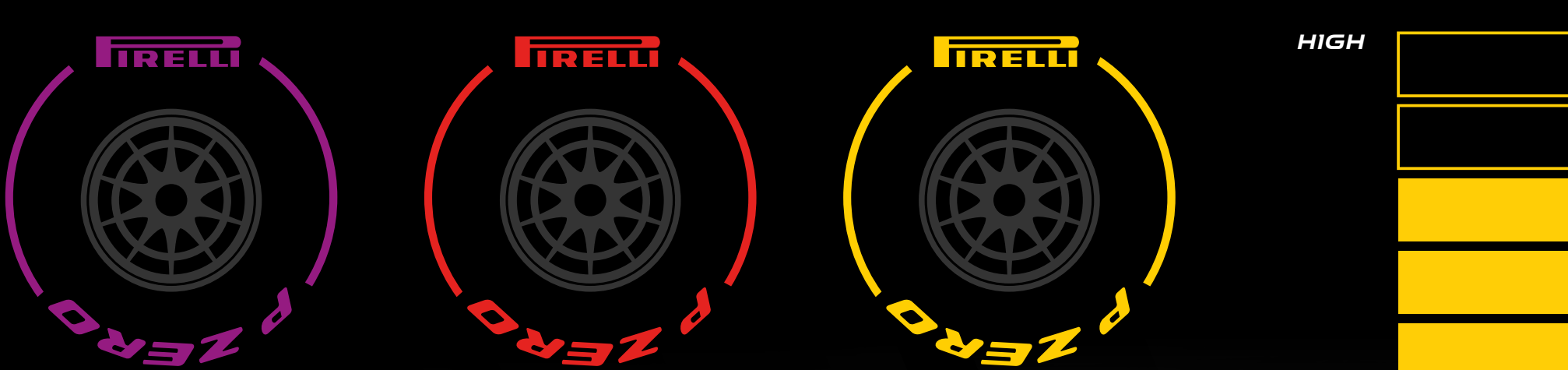
Large forces run through the engine in the heavy braking zones. The load in Turn 13 is the heaviest 'stop' of the circuit. The car brakes from 300kph to 125kph in 2.5secs, generating peaks of 4g, approximately the same forces a jet pilot will encounter.

With the majority of corners taken in first to third gear with a period of acceleration straight after, good traction and engine response is key. The turbo will need to be correctly calibrated (or 'driveable') to avoid any lag between the driver putting his foot on the gas and the engine kicking in.

Correctly mapping the Power Unit to give good power delivery could gain a few tenths of a second over the course of the lap.

TYRES

Greater girth in 2017 and compounds which are harder like for like means degradation could be a distant memory. A wider contact patch allied to greater downforce pushing the tyre into the track surface means more grip however the wider tyres mean that teams need to be careful with suspension settings such as camber and toe.



ULTRASOFT

The ultrasoft is the speediest compound of Pirelli's line-up although not quite as speedy as the Australian Tiger Beetle, capable of covering 171 body lengths per second, which rather kicks into touch a cheetah which ambles along at a mere 16 body lengths per second.

SUPERSOFT

Like a cuddly koala, the second softest compound expends its energy quickly and then spends the rest of the time resting.

SOFT

The kangaroo of the range. Biased towards bursts of speed, it can still cover long distances. Has some jumpy peaks too.

