

Days that Shook the F1 World – Brabham Introduce Refuelling

Welcome to the second series of Days that Shook the F1 World, brought to you by Sidepodcast. We're halfway through now, and ready to look at another important date in Formula 1's history – 15th August 1982.

The date in question is the Austrian Grand Prix, which was the 13th round of the season. However, the story begins a few races beforehand. Up until this point, the pit lane was a place to stop if a car was struggling. Fixing punctures, sorting out broken wings, generally to be avoided.

In 1982, the Brabham team, under the expert guidance of one Bernie Ecclestone, decided to utilise the pit lane for their own benefit. The BT49 was using BMW engines, and needed a lot of fuel to get through an entire race distance. Chief Designer Gordon Murray worked out that if you purposefully stopped halfway through the race and filled up with fuel, then you could run the two stints much lighter, and hopefully faster, than everybody else. It also meant that the tyre compounds could be softer, as they could be changed at the halfway point. It seemed like an obvious and easy solution, and the team tried it out at Brands Hatch.

It started out as it should, with Piquet in the Brabham leading nicely. His aim was to build up enough of a lead to allow time for a pit stop, before rejoining in first place. Unfortunately, after only nine laps, there was a problem with the fuel injection and Piquet retired from the race. His teammate Patrese was involved in a collision and also retired.

They tried again at the next Grand Prix in France. On the second lap, the Brabham's shot past the leading Renault to pull out a nice gap. Once again, Patrese retired from the race with his car in flames, whilst Piquet continued. He didn't quite make the halfway point, though, as the team suffered their second engine failure of the race.

Brabham moved swiftly on to the German Grand Prix. Things were looking good, with Piquet once again taking a nice, early lead and stretching out a gap. Patrese had to pit early due to a mechanical problem, which ruined his strategy. Piquet was getting ready to come in for his pit stop, until a collision knocked him out of the race.

Would they ever make it work? Roll on the Austrian GP. The Brabham boys qualified on the front row of the grid, which allowed them to sprint off into the distance. Piquet's tyres were ruined, but Patrese managed to get to the pit lane as planned. It took 14 seconds for a tyre change and for the Brabham to be pumped half full of fuel. Success. Almost. Patrese's engine couldn't last the entire race distance and they faced a double retirement once more.

Nevertheless, the strategy had proved successful and by the next season, planned pit stops were the way forward. Of course, these days, the cars couldn't do a full race distance if they tried, and pit stops provide the basis for a successful race strategy. The FIA have proposed regulations for 2010 that include banning refueling, which has caused great debate amongst fans and teams alike.

That's all for this fifth episode of the second series. As suggested, refueling is a subject that comes up for debate on Sidepodcast over and over again, so if you have any opinions on the subject, feel free to share them in the comments, or even better, leave us a voicemail on 0121 28 87225. See you tomorrow.