

The London Circuit



After British Grand Prix sponsor Santander released their concept film of what a London Grand Prix circuit would look like, Formula One took to the spotlight.



Taking in a number of iconic landmarks around the 14 corner, 5.1 km (3.2 mile) circuit, including Buckingham Palace, Trafalgar Square and Big Ben, the Santander CGI simulator portrayed the fantasy of a London Grand Prix...or did it? Both McLaren drivers Jenson Button and Lewis Hamilton who tested the simulator circuit can envisage races taking place in London and Bernie Ecclestone, the foremost authority of Formula One is continuing to show interest. Even London Mayor Boris Johnson gave qualified support to the bold plan. The event could easily become the richest race on the road with around 120,000 fans filling the grandstands around the capital's most famous landmarks and a potential global TV audience of a billion. Another

option if Intelligent Transport Services win their bid may be staging a track around the Olympic Stadium.

Whether a London Grand Prix is on the table in the near future may be debatable, but there is no doubt that when the French held the first grand prix in 1906, the race organisers would have had no idea how big the motor sport would become. The first race featured 32 cars on a 65 mile course near Le Mans and took two days to complete. The average speed of the winning Renault driven by Hungarian Ferenc Szisz was 62.887 mph, a mere patch on the speed of the race now.

From these humble beginnings, Formula One racing has grown into one of the most popular sports in the world,

appealing to millions of fans globally, attracting enough sponsorship to keep it as a 'richest sport in the world' contender, and delivering champions who are seen as modern day heroes.

Formula One seems to satisfy a fundamental need in the population to push technology to its limits and to enjoy, even vicariously, the thrill and excitement of extreme speed. The roar of a throaty engine propelling its caged human around the track seems to have some kind of instinctual base appeal. The excitement of excessive speed comes second only to the potential for unforeseen disaster – the thrills and spills that keep spectators coming back for more.

Formula racing specifically refers to the class of motor sport defined by open wheeled, single seat racing cars. Open wheeled cars have their wheels outside of the car's body, rather than under the fender. To be a champion in Formula One is to be the best of the best, which is why most Formula One drivers cut their teeth in other types of formula racing.

Formula racing is highly regulated. Specific rules define exactly how cars must be configured and how the race must be run. Sporting regulations cover the race itself, from start to finish and everything in between, while technical regulations provide the details about the vehicle systems, such as the engine, transmission and suspension. It is precisely this; the abundance of rules and regulations that elevates the driver's skill to center stage along with the performance and efficiency of the cars.

It is easy to think that Formula One racing all comes down to the skill of the driver but a typical Formula One team is so much more. Some teams are owned by the car manufacturers, others are privately owned, but both types will have a Team Boss to manage the overall direction and strategy of the team and



a Commercial Director to manage the commercial and technical aspects of the business and seek sponsorship. A Technical Director heads up the crew of Engineers and Designers who construct the cars and the Chief Aerodynamicist oversees a team dedicated to ensuring the car design reduces air resistance, while creating the right amount of down force. The Chief Designer determines the basic layout of the car and the materials and the Chief of Research and Development leads innovation projects, exploring new materials and technologies. The two Drivers are a small, but naturally integral, part of this team.

The Formula One season consists of a series of races held on circuits across the world with the results of each race combined to determine two annual championships: the Formula One World Drivers' Championship and the Formula One Constructors' Championship. The first circuits were on public roads, not permanent tracks. Public pressure moved many of the races off the roads but London would not be alone as a street race. From Monaco to Barcelona to Buenos Aires road races continue to be part of the season and every track requires its own unique strategy. The number of races per season varies as tracks are added and retired constantly. Generally a season consists of 15 to 17 races, with the majority of the races concentrated in Europe. The 2012 season is being contested over twenty races – the most races in a season in the sport's history.

Few sports have the same logistical issues as motor sports do, and for Formula One with circuits scattered across the globe, logistics are an enormous challenge. This starts with the transportation of team members, which usually numbers around 100 per team. Most teams transport three cars, a spare chassis and several spare engines to each race. Technical partners and local contractors ship any



equipment not manufactured by the team itself, such as tyres and fuel. Formula One races are held on Sundays but practice and qualifying sessions begin on Friday. Drivers can practice as much or as little as they want during the sessions to determine their driving strategy. The two qualifying sessions almost immediately follow the practice sessions. Friday qualifying measures one speed around a single lap. Saturday qualifying is a little different. The rules specify that no fuel can be added between the end of this qualifying race and the first pit stop during the race on Sunday. This means the cars carry more fuel on Saturday, making them heavier and harder to control.

Sunday is race day in the world of Formula One, and it kicks off with each team plotting its strategy, trying to gain

some advantage while adhering to regulations. Most of this planning and tuning comes down to the most critical part of a Formula One race - the start. On many circuits, where overtaking is nearly impossible, the race start all but determines the winner of the race. We all know what happens next. The drivers jockey for position around the course with the occasional pit stop until the checkered flag signals the end of the race. After the winner's car is checked to confirm adherence to the regulations, the champagne cork is popped on the winner's podium and the lead up to the next race starts.

As long as automotive technology continues to advance, Formula One racing continues to evolve and the next race will be keenly anticipated. Whether a London circuit evolves, however, remains to be seen.