## Longcross: Can you charm the 'Snake'?

"A 'baptism by snow' on a first visit to this unusual and demanding Surrey sprint course."

I'd always wanted to try Longcross since hearing reports from other kit car drivers of this incredible course that runs alongside the M3 near Bagshot in Surrey. It is also a venue that is not widely known; a few people have heard of it but fewer still are well acquainted with it. This included members of the HSA committee who knew of it but not much about it.

I thought I had missed my chance to get to Longcross when all competition ceased a couple of years ago for reasons there isn't space to go into here. However, through the efforts of the Sutton and Cheam Motor Club sprinting returned to the venue this Easter Monday with the traditional Chieftain sprint, which will be followed (on a variation of the course) in July by the Scorpion sprint.

These names rather give the game away as the venue is located on the site of the old MOD Tank factory and military testing ground. Added to the Royal Armament Research and Development Establishment in 1940, the test track was originally a facility for the testing of armoured vehicles including the Chieftain and Scorpion tanks which were built at Longcross, home of Chobham Armour. In fact the factory still exists on another part of the site and evidence of previous activities abounds with strange looking contraptions, pits, ramps and strange road surfaces visible all over the place.

The facility is now owned and operated by Crest Nicholson and is a very active film and TV location with current productions including Miss Marple, Primeval, Dr Who, Torchwood and James Bond Film No 22. Spooks and Ashes to Ashes have permanent studios at Longcross as do Disney and Orion

It is a standard photo-location for AutoExpress and AutoCar magazines as well as a popular venue for car launches and fleet operator driver days. Organisations such as McLaren and Porsche use the track for development testing as do Dennis Fire Engines and Buses.

On arrival you are directed through the site by security in a similar manner to MIRA and then confronted with two large tarmac areas joined by a short link road. The upper area is a huge circular paddock, which could cater for at least 150 competitors and their support vehicles. The lower area serves as a scrutineering area in the morning and an assembly area for timed runs later in the day. Both areas are served by large and heated toilet blocks (plus hot water!) for both sexes.

Being Easter in Britain the weather was appalling with snow, sleet and rain interspersed with a couple of brief periods of gloom. However, the organisation was impeccable and following a guided tour of the 'Snake' and a drivers briefing, practice began promptly at 9:45.

Now, this article is not intended as a poor substitute for a 'drive-it' as there was no time to walk the course or take suitable photographs and, anyway, it would take a Longcross regular to provide good advice on lines and braking & turn in points. Rather, this is intended to recount some initial impressions of the course and event.

Essentially the two Longcross sprint formats (it is also used for 3 tarmac rally stages) utilise parts of a gently banked perimeter road and a dramatic sinuous section called the 'Snake'. Reportedly the Chieftain course is favoured by regular sprinters while the Scorpion variant is preferred by the rally drivers but this report concentrates on the former.

From the start the track runs flat and straight for some distance on a fairly narrow strip of tarmac leading into an open but tightening right hander (#1 on the map) which quickly leads into a tight 90 degree left hander with a wide exit. You now enter the 'Snake', which is approximately ¾ mile of dramatic elevation and camber changes with blind brows and corner entries thrown in for good measure. The track is exceptionally wide leaving plenty of room to explore the optimum line.

Leaving the tight left hander you now enter the wooded section of the track, dropping down slightly into a blind but fast right hander (#2). Keeping left you climb a brow leading to a blind right left flick (#3), faster than it looks, which then steepens into a long right hand bend (#4) which flattens and begins to fall away on the exit. The road drops down gently before rearing up very, very steeply to a blind brow with a vertiginous drop on the other side. In the dry many cars get airborne here if the driver doesn't lift before the brow! Keeping to the right and plunging down the other side there is scant time to prepare for a dip, which turns and climbs to the left. The savage compression in the dip encourages breakfast/lunch to break loose from the confines of your stomach. Nice!

Climbing up to another blind left hand brow (#5) with the camber working against you, then down sharply to another right hand corner (#6) where both the camber and gradient change near the apex. Quickly moving across to the right of the track you hustle through another blind apex /crest before a quick blast down the hill to a very sharp but flat hairpin (#7) which is the end of the 'Snake' section. The exit of this hairpin needs to be right in order to maximise speed on what is to follow.

The track now flattens and opens bending gently around to the right, then left before starting the first section of a long, wide and gently banked track, which seems to go on forever. Depending on gearing most cars will reach terminal speeds by the time they approach a brow (#9). Brodie Branch's Caterham is reported to have reached 140mph here a couple of years ago. Cresting this brow the driver gets his or her first glimpse (at maximum velocity!) of the 'bus stop' chicane, which lies just below and beyond. Although fairly quick, heavy braking is required, for although the entry is fast the exit is a little tighter. However, the exit is very wide and power can be applied early, which is good as another section of gently banked track follows before flattening and straightening out for another quick blast over the finish line again at terminal velocity. Phew!

Two convoy laps at a reasonable pace were undertaken by all drivers (except for the unfortunate RX7 who beached his car up the bank exiting the final chicane!) followed

by two practice and three timed (all 3 counting) runs, completed efficiently despite the occasional off and recovery by just after 4pm.

The track length (Chieftain) is 2.5 miles and is, in places, up to 10 metres wide and due to its length and blind approaches requires upwards of 50 marshals for each event. The banking varies between 10 and 16 degrees and the course record is held by the aforementioned Brodie Branch at 1m 49.63s in a Caterham Duratec before he switched to single seaters. He also holds the record for the other, Scorpion, track layout.

In conclusion this course is really nothing like any other in the UK and well worth a visit just for the experience. I for one will certainly be back and hoping for drier weather.

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