

The birth of Dorian

Once upon a time, there was a tyre shop owner who, as a hobby, ran a racing track. He thought it would be a good idea to extend the track by building an oval next to the track so that he could also run NASCARs or their Australian equivalent, and so it came to be.

The Big Day arrived for the first race meeting on the oval and a field of American cars and crews came to the track. They also stated that we would be using their 'timing' system and the Aussies would assist. At this time, MUCC's involvement in timing was limited as timing was being undertaken a system using Commodore 64's (which produced times in 1/64's of a second but that's another story). I was in the CAMS office for AKADEMOS or Bog-a-duck and was asked if I would like to be involved at the NASCAR meeting to help.

Qualifying was run conventionally but I think there was either only one car at a time or there was a limited number of cars at a time. Lap times were roughly 28-30 seconds a lap.

The 'timing' system required every car to provide a 'timer' who had a card with their car number filling one side of the card, while on the other side was a lap chart. The timers marked off the laps of their car, then every 10 laps held up their card with the number facing behind them for about 30 seconds. At the rear of the timing box, on an elevated platform was a group of spotters who then recorded car order based on the cards held up. There was also a clock running to provide a race time.

Bob was shown the 'timing' in operation by the enthusiastic NASCAR people and he was so impressed that on the following Monday morning he contacted Longines to try & negotiate access to their timing system as used by F1. They declined. The next step was to go to market for a system, ultimately won by Dorian. Several months later, there were loops installed under the tracks and a number of boxes were delivered containing the transponders.

The system worked by having a passive transponder on the car that had a receiver running all the time, which when the car passed over a loop set into the track. The loop acted as both a transmitter and receiver. When the transponder received a signal from the loop, it activated a coded transmitter, which pulsed until the receiver lost signal. The loop received the pulse signals from the transponder and determined when the transponder passed over the loop, this then became a time signal, coded to a particular transponder & car.

For the technically minded, with my limited knowledge, effectively the received pulses formed a histogram of signal strength, the width of which was determined by the car speed. The number pulses received also depended on speed as well as the number of transmitters passing over the timing loop at any given time.

To test the system, the system was switched on and the clock started. The transponders in one box were turned on and were carried across the timing loop. All registered a time, the box was passed over the loop a second time – all ‘cars’ now had a lap time.

To really show how timing could be done, timing loops were installed at various locations around the oval track and also separate loops across the track. This enabled crews to determine not only lap times but also where to place the car on the track for the quickest line around the track was – a high line into turn 1, low through turn 2 etc.

The then CAMS saw the potential and quickly adopted the system and MUCC was asked if we would be interested in running it (silly question). Bob’s aim was to also sell the system internationally for use by NASCAR and others.

There has no doubt been a number of updates and enhancements to both hardware and software since its introduction but the principal of operation remains similar and now the system is used in many forms across Australia and, presumably beyond.

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