Motorsports Part 4 Putting Cars to the Test

By Bob Vitrikas

Starting off the New Year we began with some of the earliest motorsports competitions which by necessity used existing roads. These were usually long distance affairs and a test of drivers, mechanics and machines. In the U.K. racing on public roads was prohibited. This prompted Hugh Fortescue Locke-King to build the Brooklands automobile racing and testing complex which was opened in June 1907. Best known for its racing history, Brooklands also served as a testing ground for vehicle manufacturers.



John Cobb sets the all-time Brooklands lap record at 143.44 mph, "catching air" on the notoriously bumpy track.

Distance and time records were set on the banked track which permitted sustained speeds of over 120 mph. The lap record of 143.44 mph was set on 7 October 1935 by John Cobb driving the 24 liter Napier Railton. Cobb's top speed was 151.97 mph. Endurance testing was regularly done using everything from motorcycles to buses.

In 1909 a Test Hill for testing brakes and hill climbing ability, was constructed on the inside of the track. It ran for 352 feet from bottom to top consisting of three increasingly steep gradients; 1 in 8 at the bottom, 1 in 5 in the middle and 1 in 4 at the top. Not surprisingly, the test hill quickly became a contest of who could make it to the top in the least amount of time. It didn't take long before the cars and motorcycles were airborne at the crest of the test hill. Wheeee!



With the onset of WWII Brooklands was closed in 1939, and German bombing rendered it useless for any vehicle testing after the war. In 1948 the British government stepped in and in cooperation with the Institution of Automobile Engineers (IAE) and the Society of Motor Manufacturers and Traders, established the Motor Industry Research Association (MIRA) to provide member British car manufacturers a place to pool their scarce resources, reduce costs and develop new technologies that could be incorporated into all British makes. Dr. Albert Fogg, MIRA's first Director, opened the facility 28 April 1949 using explosives to cut the ribbon! Dr. Fogg would later become

Engineering Chief at British Leyland. Starting with disused runways, the facility gradually improved adding testing areas such as the half-mile Belgian Pave (cobblestone) road which was completed in 1950. In April 1968 an indoor test rig was set up for testing head-on impacts at speeds up to 30 mph to satisfy U.S. safety requirements.

The Japanese bought the MIRA facility in 2015 following on the heels of the Germans buying Rolls-Royce, Bentley and (gasp!) the Mini. MIRA is still used for transportation R&D but for a worldwide clientele.



The now named HORIBA MIRA test facility is located on the site of the former RAF Lindley Airfield, claimed to be the geographic center of England providing convenient access for most British car manufacturers.