



Sound measurements circuit park Zandvoort.

Between 0900 and 1300 on August 11th and 12th at the circuit park Zandvoort there have been a series of sound tests carried out to help the circuit comply with local rules. Most of top teams/ drivers attended, coming directly from the EK RIZLA ASSEN meeting the weekend before.

The INTERNATIONAL SUPERKART SERIE and the circuit were looking to reach the sound level of 92 dB, measured by their own measuring system. After two days tests we gained much experience and after talks with the circuit, the sound level was set at 94 dB. This was acceptable for the circuit and feasible for all drivers. As a result of the midweek tests, no teams/drivers were excluded from the training or races on 13th – 15th August.

It is not possible to give measurements or describe every change per kart because there were 5 to 10 karts on the track the whole time.



Position of the sound measuring pole.

The sound measuring pole stands 24 meters distance from the racing line and approximately 5 meters higher than the track.

Circuit request.

At passing the sound measuring pole the measured value must be a maximum of 92 dB.

Engine revs.

The engines made 12000 to 13000 revs at the performance indicator.

- **Experiences:**
 - During the days (11th – 15th August) the sound levels varied approximately 2 dB as a result of changing wind direction and speed.
 - Superkarts which produced a sound of 97-99 dB with the standard setting during the first tests, after the changes measured 92 dB- 94 dB.
 - The Karts used in the tests: ANDERSON, M, PVP, APG.
 - The engines used in the tests: FPE, VM, BRC, ROTAX, DEA, PVP.
 - The best result was achieved by MORE SEVERE RACING with the superkart of Lee harpham (ANDERSON/FPE) 91 dB.
 - Jurgen Reinke (ANDERSON/BRC) had a striking result of 92.5 dB. This result was reached by the silencers of USP.
- **Good results were achieved by:**
 - The use of the good silencers (USP, MORE SEVERE RACING, REDSPEED.) (sound reduction approximately 2 dB to 4 dB)



- The use of normal airfilters and holding the side pod with sound absorbing material. (Provided by BARKER RACING.) (sound reduction approximately 2 dB)
- While building up the kart, pay good attention in order to prevent parts from shaking and vibrating as much as possible.



- **Bad results were achieved by:**
 - Holding the inlet filters with sound absorbing material.
 - Direct screening the inlet filters with an extra cap.
- **With thanks to:**
 - The circuit park Zandvoort for their free accommodation for the week for 20 drivers and 10 hours track time. The positive attitude of all employees to turn these tests into a success.
 - All teams/drivers who took part in these tests.



INTERNATIONAL SUPERKART SERIES
 Met dank aan: CIRCUIT PARK ZANDVOORT
 Opsteller: Henk Hali Translatation:Robert Chilcott