

Helmuth Fischer smashes world 1000km record at Gariep

Date:	5th Jan 1995
Distance:	1007km
Elapsed Time:	5hr 56min
Glider:	Ventus A
Speed:	169.7 kph

This is truly one of the greatest world records flown in recent times. Hans Werner Grosse set the previous record back in 1979. Helmuth's 169.7kph was an improvement of 14%, equaling many 300km and 500km triangles speeds of that time. He has again shown that Gariep Dam, South Africa has the finest soaring conditions in the world.

Helmuth said that he had woken that morning with the intention of going out to break the world 1000km triangle record. The day before, he had flown a national record in the 'free distance category' with a flight of over 1111km. The first turnpoint (TP) of this flight was identical to that of the record flight. The second TP was close enough to that of the second TP of the record flight to allow him to assess the weather situation in that area. At 18000ft (5400m) he had noticed that some of the clouds started to precipitate and this was a clear sign of the deepening of the trough over the interior of the country. This trough is a regular feature of the weather cycle in summer and had produced many spectacular flights. The next morning many of his thoughts were confirmed and backed up by the tephigrams from the South African Weather Bureau.

Helmuth had worked out that a trigger temperature of 36 deg C was needed and that by 10:30 am this would happen. However it wasn't until after 11 am that the first wisps of clouds started forming. He launched soon after that and called for a start and went through the gate at 11:22 am. He ran more than 15km before he hit his first real lift and centered with the averager on 4 m/s. Climbing as high as it would take him, he was now firmly on his way, only stopping at 4 m/s. Two more 4 m/s thermals and he was at the first TP, Rouxville.

Other pilots were now also reporting 5 to 6 m/s averages. Shortly after the first TP, he picked up a cloud street at 17000ft and ran under it for more than 100km. After crossing the Vaal river, the thermal strengths were peaking at around 7m/s, with the best he saw for the day at 8.4 m/s; and the base moved up to 18000ft.

Although the thermals were very strong, he very rarely exceeded 220kph and flew mostly between 180 and 200 kph. The first short leg, his average speed was only 140kph. However, the second moved up to over 164kph. At the halfway mark he had averaged 157kph.

Staying high was very important as to accommodate the long runs looking for the 5m/s+ thermals. In fact when the lift dropped below 5.5 m/s he moved on. One must also bear in mind that there is a big speed advantage at the higher altitudes and he was extremely conscious of this fact.

After turning at Britstown at 3000m agl Helmuth's speed for the second leg was 174kph giving him an average speed of 160.1kph. The last leg was only 193km and he knew that this was going to be even faster. He set off on the final leg and approximately 140km away he started final glide. Most of the way he ended up doing Vne and still had 700m agl when he crossed the finish line. It took 51 minutes to complete the last leg, an average speed of 227kph.