



**WORLD SOLAR
CHALLENGE**

2005 World Solar Challenge

Darwin > Adelaide 25th September - 2 October 2005

Report 6 Friday 23rd September 2005

Remarkably, the whole Aurora team was ready early. We had an appointment to be at scrutineering at 8:30 am. By that time we had the car unloaded, the safety equipment on display, the support cars ready for inspection and the team manager filling out more forms to register our intention to participate. Right behind us was the TIGA team with Kei Nomura, their fastest driver. Signs of tomorrow?





Our drivers Andris Samsons and Kon Kotsonis faced the scales to determine how close to the minimum 80 kg weight they were. Andris was 78 kg while Kon was 72 kg. That meant that we will carry two kg in the car and an additional six kg when Kon is driving. Actually, the six kg bag of gravel is pretty large. So we are looking for somewhere in the car to put it.

The next part affecting the drivers was to find out how fast they could get out of the car, there being a 15 second limit for doing this. Both passed. Then it was into the road safety and electrical checks, which we passed, before the final battery inspection. Here the scrutineers determined that a small auxiliary battery pack which we use to start the car had to be considered part of the 30 kg overall battery limit. This has caused us to change the switching design to eliminate the small battery pack.



The batteries in this event are the only part that cannot be replaced without penalty. For example, every team has an observer traveling with them including the overnight stops. The batteries have to be removed at nightfall and given to the observer for safekeeping until morning. Only sunlight can be used to charge the battery once the race has commenced. At the final inspection station the batteries are sealed so that it is obvious if they have been tampered with during the event.



On display in the scrutineering area was the magnificent World Solar Challenge perpetual trophy. This is the symbol of why we undertake the 3010 km challenge to Adelaide.



At the second inspection station the vehicle measurements were confirmed and we were declared to have 7.87 sq. meters of solar panel. This was just under the 8 sq. meter limit for vehicles built to the original WSC rules. Then the

vehicle weight was determined and Aurora 101 came in at 177.1 kg. This is without adding 80 kg for the driver. Out of interest the lightest five cars are as follows:

TIGA, Japan – 161.3 kg
Apollo V, Taiwan – 165.3 kg
Aurora 101, Australia – 177.1 kg
Nuna, Netherlands – 189.4 kg
MIT, USA – 191.0 kg

Our third driver, Derrick Rodgers, arrived on the 12:15 pm plane from Adelaide, having missed the flight from Melbourne last evening. He spent the night trying to sleep at Tullamarine Airport.

Derrick's job is to achieve the best possible qualifying speed tomorrow. In practice today he achieved lap times as low as 2:03. This is about the same as the University of Michigan and three seconds slower than TIGA. We expect an interesting competition for the honour of pole position tomorrow.

We were pleased to see that the Southern Aurora had both passed scrutineering and have finally got their car running smoothly so they are also ready for tomorrow's event.

The really bad news for the day was from UNSW. They had their car on road test in the afternoon but got out of control in gravel and have broken both front suspension systems. They will not start the 2005 Panasonic World Solar Challenge.

The good news is that the French team Sunspeed Jules Verne has finally arrived in Darwin and will start. They have a unique open cockpit with a windshield.



Finally, the day finished with a Government reception at Darwin's Parliament House. As guests of the Chief Minister, Clare Martin, this was a terrific gathering of all the teams as well as many overseas visitors for the event keen to see the latest solar car teams. For example Andreas Vezzini from Biel, Switzerland, members of the Futura team from Italy, Michal Ruscinski from Czechoslovakia and so on. A very popular visitor was Anne Marie, the media person from the Nuna team. The Aurora solar car boys also thought so. Our friends from Bochum University in Germany, running the Hans Go car were pretty jolly because their car was improving daily.





Chief hunk Daniel Mills was mixing nicely with the girls from Annesley College of Adelaide.



Tomorrow will be most interesting as most every remaining team gets out on the Hidden Valley racetrack to qualify for grid positions. Cars will go onto the track in pairs and have one flying timed lap before completing the stability and braking tests. If they pass, they will be registered by the Northern Territory Government to hit the road with a brand new number plate. We think this beats crocodile tours hands down.



