

10 TIMES AROUND; AURORA RETURNS TO THE 2009 GLOBAL GREEN CHALLENGE

Australia's leading solar car development team, the Aurora Vehicle Association is returning to the solar race from Darwin to Adelaide for the 10th time. It is the only solar team in the world to do so.

Aurora's record in the event since its beginning in 1987 includes a win and 4 seconds. 2009 will bring to 15 the number of entries Aurora has fielded.

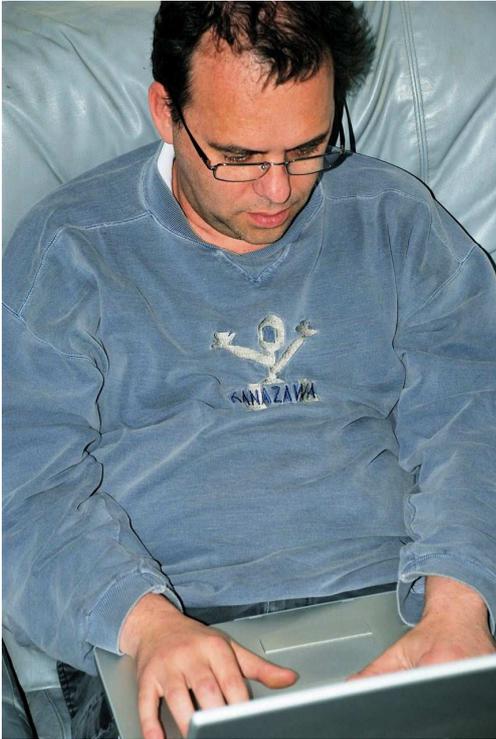
Aurora has two entries in 2009. The famous 'Aurora 101' solar car is seen as the world's fastest silicon solar cell equipped car. It has been lightened, has a new battery system, revamped electricals and a deeper seating position since its debut in the 2007 World Solar Challenge. It is entered in the Challenge Silicon category.



Aurora 101 and Southern Aurora

Aurora's second entry for 2009 is 'Southern Aurora' which averaged over 90 km/h in finishing second to Nuna in 2001. Since then it has raced with a Hamilton, Victoria team on three other occasions. For 2009 it has been lightened and had the entire electrical system renewed. 'Southern Aurora' is entered in the Adventure category.

The Aurora teams mix great experience with many first timers. Each team has just 9 members. Of the 18 personnel, 11 will be contesting this event for the first time. Aurora has kept the teams smaller than ever before in order to reduce the support vehicle convoy numbers to just 3 per team. Foundation Sponsor Mazda has made available high efficiency Mazda 3 vehicles for the teams. Compared to previous events Aurora is reducing the fuel usage in the support vehicles markedly.



Peter Pudney and Jack McArthur

The 'Aurora 101' team will be led by South Australian strategy specialist Peter Pudney. This will be Peter's eighth World Solar Challenge event and his strategy skills have enabled Aurora to set a number of solar car world records including a circumnavigation of Australia, a sprint from Perth to Sydney and the longest distance covered in one day on solar energy alone; 780 kilometers. So apart from being known for his red socks Peter has become one of Australia's experts in depicting a future world of electric cars.

The 'Aurora 101' car has been built to be as small as possible yet still carrying the allowable 6 square meters of active solar panel. It is just 4.1 meters long and weighs just 150 kg before the driver jumps in. Its aerodynamic signature was developed by Shaun Johnson who is presently employed by Tesla in the US after several years with the Ferrari Formula 1 team in Italy. The car has a stunningly low Cd of just 0.08 and has no downforce or lift at 100 km/h. Just 1500 watts is needed to maintain 100 km/h down the Stuart Highway. The car has a unique three wheel layout with the single front wheel providing the steering and the drive.

The drive is by the highly efficient CSIRO type wheel motor, a basic design Aurora co developed with the CSIRO in 1996. In 2009 we will see most of the top teams using a derivative of this motor as many have had the Aurora layout made available to them. Other Australian technologies used by Aurora include the Tritium 'Wave Sculptor' motor controller and the AERL power point trackers. Again most of the leading entrants will incorporate these developments.

The 'Southern Aurora' team will be led by solar car veteran Jack McArthur. For Jack it will be his third World Solar Challenge amongst many other solar car events in Japan and Greece. Jack is the 'can do' man of the Aurora group and founder of the Hamilton branch of Aurora. It is expected that 'Southern Aurora' can match its best ever performance from 2001.

The group of six drivers is led by Andris Samsons, Aurora's most experienced. Andris started with the famous University of Michigan team driving in 1993 and 2001. He has driven for Aurora since moving to Australia and this will be his fifth World Solar Challenge. He has also driven in two of the American solar races.



Andris Samsons

Along with Foundation Sponsor Mazda, Aurora is backed by CSIRO, Australia's leading scientific organization, by Sumitomo Corporation, one of Japan's major trading companies and Minter Ellison, Australia's largest law firm. These Foundation Sponsors have supported Aurora long term and have encouraged Aurora to gain an international profile and encourage the development of Australian technology. We are privileged to have the support of another 26 companies as well..Already plans are being made for 3 international appearances in 2010.

Aurora is looking forward to being a strong participant in the 2009 Global Green Challenge. We will do our best in the two categories entered, might even shake up several of the much more powerful teams equipped with gallium arsenide space program solar cells and re acquaint ourselves with many of the overseas teams we have met before.

Look for the Aurora daily activity reports at this site commencing Sunday 18 October and throughout the race through the TC Communications satellite BGAN unit we will be using.



The Aurora canopy