

**OPENING OF THE NEW 12 METRE RADIO TELESCOPE
BY
THE HONOURABLE PETER UNDERWOOD AC
GOVERNOR OF TASMANIA
MOUNT PLEASANT OBSERVATORY – TUESDAY 9 FEBRUARY 2010**

Firstly, thank you for inviting my wife and me to attend this gathering this afternoon and for inviting me to officially open this new 12 metre radio telescope. Secondly, as Governor of the State of Tasmania may I extend a very warm welcome to all the national and international visitors to our island State who are here for the 6th IVS General Meeting, which is hosted by our University's School of Maths and Physics. I immediately got an inkling of the complexity of the work of IVS when I logged onto the conference website and there found a Keyhole Markup Language file (something I had never heard of previously) with an invitation for visitors to use it stating, "The file will start Google Earth and "fly" you to specified locations. It provides a general view of the Auscope sites and indicates the conference venue, some of the accommodation, good local restaurants and the like." Who else but a bunch of people who operate or support Very Long Baseline Interferometry (VLBI) components would think of virtually flying conference delegates around the conference city.

As I scoured the Web in preparation this afternoon I concluded, once again, that the longer I live, the more I learn that there is always more to learn!! This afternoon, standing amongst experts, I think that I can confidently say that you have chosen the least geo-scientifically informed person here present to open a radio telescope with a 12 metre radial disc that in conjunction with two other distantly located like telescopes will peer into the Universe and capture the light being emitted by quasars billions of light years away. As a lawyer and then a judge for many years I am very aware that knowledge expands exponentially and

becomes more and more specialised. I frequently had to lead evidence from experts, and cross examine them and when on the Bench, listen to their evidence. Although often very detailed, the evidence was always tightly focussed on the narrow issues raised by the case at hand, each case was quite different, and the trouble was that once the case was over you forgot all that you had learnt and got on with the next case.

Thus, it has been said of experts that they are people who know a great deal about very little, and who go along learning more and more about less and less until they know practically everything about nothing.

Lawyers, on the other hand, are people who know very little about many things, and who keep learning less and less about more and more until they know practically nothing about everything.

But judges are people who start out knowing everything about everything, but end up knowing nothing about anything, due to their constant association with experts and lawyers.

To-day's event is an outcome of an exciting collaboration of 23 participants including the CSIRO, 11 Universities, the State Governments, Geoscience Australia and the Federal Government through its National Collaborative Research Infrastructure Strategy. This collaboration resulted in the incorporation of Auscope, which, in its own words, is a non-profit company "to establish a world class research infrastructure to characterise the structure and evolution of the Australian continent in a global context from surface to core in space and time." Quite an ambition you might think. A part of that research

infrastructure is called “The Structure and Evolution of the Australian Continent” and a part of that project is Auscope Very Long Baseline Interferometry.

I don't pretend to understand all the science of this project. Indeed, I have to confess that until I accepted the invitation to be here this afternoon I did not know that in some locations the Earth moves up and down as much as 40 cm a day, nor did I know that the whole country is moving north at the rate of about 6 cm each year. However, now I know that, I can see why it is very difficult to measure fixed positions with precision because there is no fixed point of reference. So this Auscope project, with its radio telescopes here, in the Northern Territory and in Western Australia, will make Very Long Baseline Interferometry measurements to provide a fundamental reference frame for the whole of the country to an accuracy of one millimetre. Linked to the GPS system, this project will provide extremely accurate positioning information for vehicles and aircraft. It will also provide techniques to help identify regions of seismic risk and very importantly today, make precise measurements of variations in sea levels. The total cost of the whole national geospatial framework project approaches \$50 million, contributed in cash and in kind from the partners in Auscope including of course, the Tasmanian Government and UTAS.

Today's telescope is, if I may say so, light years away from the first active phase of European astronomy in Tasmania which began in 1840 when the Governor of the Day, Sir John Franklin, established the Rossbank Observatory in the grounds of Government House, principally to make geomagnetic measurements and weather observations, and it's pleasing to see that Tasmania is still playing a leading role in the Earth sciences. For the last 24 years the University of Tasmania has played a vital role in maintaining and improving the geographic coordinate system for the Australian continent and I congratulate the

University, and in particular the School of Maths and Physics, on being selected by Auscope to operate from Hobart this Very Long Baseline Interferometry project right across the country.

So, as the Governor of this State it is with great pride that I formally declare this Radio Telescope at Mount Pleasant in Tasmania open.