PARLIAMENTARY FRIENDS OF TECHNOLOGY AND INNOVATION

Statement

HON WILSON TUCKER (Mining and Pastoral) [5.25 pm]: I would like to update the house on a recent trip that I took through the Parliamentary Friends of Technology and Innovation with my co-conveners, Ms Caitlyn Collins, MLA, and Ms Emily Hamilton, MLA, and several other members. Three planes took 18 of us to—I consulted Hon Rosie Sahanna on the pronunciation of this, but I will butcher it nonetheless—Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory. It is located just outside of Geraldton, within a couple of hours as the crow flies.

A government member interjected.

Hon WILSON TUCKER: Four hours.

There the Australian and Western Australian governments have established a radio-quiet zone that stretches for 520 kilometres. In the zone, licensed communication and electronic devices, such as television transmitters, mobile phone base stations and CB radios are controlled. It is fair to say that cat videos are not allowed to be streamed by employees at night. When people land here, they have to turn off their phones. It was a rare privilege to go up there because even the electromagnetic waves from the bus disrupt the instruments. They are extremely sensitive so only a small number of visitors are allowed each year. It was a rare honour to go up there and see firsthand this extraordinary place, which is on Boolardy station.

There are a number of projects within this radio-quiet zone, including the Curtin University–led Murchison Widefield Array, which is operational, and Arizona State University's experiment to detect the global epoch of reionization signature. Do not ask me to explain that; I am not quite sure what it is, but I am sure it is very impressive. The most impressive project that we were privileged to witness was the Square Kilometre Array observatory, which, when it is completed, will be the largest local frequency radio antenna in the world and comprise 131 000 individual antennas. It is part of an intergovernmental project with South Africa, which has the SKAO mid-frequency radio antennas. Australia and WA won the bid for the low-frequency radio antennas. We obviously have exciting and innovative capability here in WA. When it is completed, it will be the largest and one of the most sensitive radio-astronomy instruments in the world. It will further our understanding of the universe and perhaps firm up our understanding of the age of the universe.

<049> B/G

When we were there, we had the privilege of putting together some of the antennas. I think about 200 or so have been completed. There is only about 130 000 to go over a 50 square kilometre radius, so it will take about six to eight years to finish. It is an extremely exciting project. Members can imagine that when talking about 131 000 individual antennas, there will be an absolutely huge amount of data. There is a dedicated fibre connection to Pawsey, which was built as part of the bid to secure the low frequency Square Kilometre Array. All that information will be fed into Pawsey and all the analysis will be done on it. One of the projects that will operate through there will be the Search For Extraterrestrial Intelligence program to detect life and biosignatures from other planets. Very interestingly, WA could be the first place in the world to detect life on other planets. As part of the Indigenous land use agreement with the Wajarri Yamatji people—I thought this was a really fun fact—some of the new observations and discoveries through SKA-low will take on those traditional names.

Hon Kyle McGinn: And they are building the antennas as well.

Hon WILSON TUCKER: Yes. CSIRO is working very closely with the Yamatji people and has a number of Indigenous people working on the project and a number of employment pathways for them. The CSIRO has understood from the get-go that it needs to work hand in hand with the traditional owners, and I applaud the CSIRO for that.

I would like to give special thanks, firstly, to Hon Kyle McGinn and Hon Peter Foster, who helped fund this trip. We had three planes that carried about 18 people. We had a mix of MPs. From this chamber we had Hon Sophia Moermond join us and the Minister for Innovation and the Digital Economy, Hon Stephen Dawson, and a number of lower house members. We also had Hon Darren West. I was going to call him Darren Foster! Hon Darren West joined us as well. I will leave it there.

Hon Kyle McGinn interjected.

Hon WILSON TUCKER: It was, yes. We had a number of lower house MPs with us as well as a mix of a few private industry folks. We had a few professors, some space lobbyist groups and a representative from the Department of Jobs, Tourism, Science and Innovation. I think it was important to not just have MPs but some real and more interesting people with us as well. It was quite difficult to wrangle the schedules. Like I said, it was a

real privilege to be there. I extend my thanks to the CSIRO, and in particular to George Simpson; Amy Ruddock; Rebecca Wheadon, site entity lead; George Heald, science director; Brad Hiscock, operations lead; and Chris Brayton, the deputy site entity lead.

It was a very interesting trip and I think everyone who came along really enjoyed it. We came away having learnt a little more but also being very impressed by the site and by the sovereign capability that we in our backyard, which will only grow as those antennas come up and the capability continues to expand.