

Orroral Valley & Honeysuckle Creek Space Tracking Stations.

From space research to space archaeology

Peter Dowling

Remember the Cold War? I think most of us do. It was a time when the two great superpowers, USA and the former USSR went head to head trying to prove which one had the best weapons development, industrial advances, and competitive technological development. They spread their engagements all over the world in a number of proxy wars and espionage incidents and readily involved allied countries in order to show which protagonist had the bigger muscle.

A significant part of the Cold War was the 'Space Race' - a competition of space exploration which began in 1957 with the launch of the first satellite, Sputnik 1, by the Soviet Union and, some would argue, has not really finished. It involved a great competition to explore outer space with artificial satellites, sending humans into space and to land them on the moon (and of course, bring them back again).

Australia was allied to the USA and in 1960 both governments signed an "Umbrella Agreement" under which Australia established and operated a number of tracking stations which would form part of a worldwide space monitoring network. These stations were under the control of the US National Aeronautical and Space Agency (NASA).

The first two stations were opened in 1964 at Island Lagoon near Woomera to provide deep space radio and optical tracking for earth orbital satellites and at Carnarvon, WA, for manned flights and scientific satellites. Under the agreement three stations were established in the ACT; the first at Tidbinbilla for deep space monitoring and manned flight support, the second in 1966 at Orroral Valley to monitor scientific and earth orbital satellites and the third in 1967 at Honeysuckle Creek to support moon exploration. A sixth station was opened at Cooby Creek (near Toowoomba QLD) in 1966 for application technology satellites. Today only Tidbinbilla remains active in the ACT.

Honeysuckle Creek, built particularly for the Apollo manned missions to the moon, was opened with great fanfare by Prime Minister Harold Holt on 17 March 1967. The band from the Royal Military College, Duntroon, played for the event. One band member, Derrick Brassington, recalls a very long drive from the Royal Military College, Duntroon, out to the station along winding, narrow and dusty roads dressed in his military crimson. This long drive from Canberra to all the stations was to become a well remembered and often hazardous journey by many of the staff who worked there.

Honeysuckle Creek was to play an integral role in space exploration when, on 21 July, 1969, it provided to the world the first historic pictures of Neil Armstrong walking on the moon. Those famous words, "That's one small step for man, one giant step for mankind" by Armstrong were relayed via Honeysuckle Creek. The station also maintained voice and telemetry communications with the lunar module during the mission. The last major mission supported by Honeysuckle Creek was Skylab. Skylab was the first space station the United States launched into orbit. The space station was in Earth's orbit from 1973 to 1979, and it was visited by crews three times in 1973 and 1974. With the conclusion of the Skylab missions Honeysuckle Creek continued its operations as part of the world-wide deep space research network.

The major role of the Orroral Valley station was to support Earth orbiting satellites. It was part NASA's spacecraft Tracking and Data Acquisition Network (STDAN). By 1975 relations between the two superpowers were beginning to ease and co-operative ventures, particularly in space research began. Orroral Valley played a major role in international co-operation by providing support for the joint Apollo Soyuz Test Project when, as a tentative act of friendship, US astronauts and Soviet cosmonauts linked their specially designed space vehicles and exchanged greetings, gifts and handshakes in space.

Following a major reconsolidation by NASA both Honeysuckle Creek and Orroral Valley were no longer needed and were closed in December 1981 and December 1985 respectively. After removing most of the equipment from both stations NASA handed them back to the Australian Government.¹ An agreement had been struck whereby the structures and the land would return to a 'natural' state after the stations closed.

The Australian Government, however, asked that the remaining buildings be left for future use. The retention of the buildings soon posed a problem for the Government

because by now they were within the boundaries of the Namadgi National Park which was declared in 1984. What to do with the buildings under the terms of the National Park management? No conclusions were reached and the buildings began to deteriorate and suffered from wilful vandalism.

Their very existence and future became troublesome and highly controversial. Administrative control along with the inherent problems of the stations was passed on to the ACT when self-government was declared in 1989. An inquiry was held into their future and the Standing Committee of Conservation Heritage and the Environment recommended that the two stations be removed with a proviso that full documentation of the sites was done prior to demolition and the concrete foundations providing a 'footprint' of the stations were left intact to represent the past presence of the stations.

The *Canberra Times* delivered a lyric admonishment to the ACT Government:

It was announced that the historic but mouldering and vandal-afflicted Honeysuckle Creek and Orroral Valley Tracking Stations were to be demolished very soon and their sites reclaimed by creeping, smothering bush and smug marsupials, leaving one to marvel at how little sentimentality our species shows towards buildings of significance.

Today what is left of the Orroral Valley and Honeysuckle Creek stations is a far cry from the former operational days when the large antennas and clusters of buildings dominated the valley floors and the buzz of activity permeated throughout the operation rooms and corridors. If you were to visit today you would notice the bare concrete slabs and footings of the main buildings and antenna bases; the internal circulation roads, kerbs and gutters; the stone retaining walls and edgings of small gardens once planted to soften the scientific austerity of the buildings but which are now giving way re-colonizing native vegetation.



Orroral Valley Space Tracking Station as it is today (P. Dowling 2009)

If, however, you were an archaeologist, coming across these sites for the first time, you would immediately notice that the remains represented some great activity from past times. Casting your eyes around you would be aware of the remoteness of the sites and you would see that they are situated within high valley floors, surrounded by mountain ranges forming natural amphitheatres. You would soon realise that both these places, situated as they are in proximity and similar in form, were connected in their functions. You would immediately wonder what happened in each place. But would you connect them to the first human to walk on the dusty surface of the moon, to the grand quests for extra-terrestrial knowledge or the frantic and all consuming competition between two superpowers vying with each other for supremacy?

Today, a trickle of visitors make their way along the winding mountain roads (now thankfully sealed) to visit the remnants of Honeysuckle and Orroral. At Honeysuckle they make straight for the two large interpretation bays situated on the concrete slab that was the operations centre. There they learn about the moon landings, but they would struggle to answer probing questions from their children. The interpretation signs do not answer the questions, nor quench young curiosity. At both station sites many of the interpretation panels have long been vandalised or stolen. Those that are still in place are suffering from the ravages of time and weathering. There is much

more to tell about these stations than is currently presented. It is time for our government to make amends for past neglect and re-present and promote these two sites for their important roles in international space research and the heritage of the ACT.

References:

Canberra Times, 21 June 1992

Derrick Brassington, personal communication

National Trust (ACT), Classification Files, NASA Ground Stations.

ⁱ The large 26- metre antenna used at Orroral Valley was relocated to Tidbinbilla where it remains in operation today.