

51st IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
History of Australia's Contribution to Astronautics (3A)

Author: Ms. Kerrie Dougherty
Australia

Mr. Richard Tonkin
Australia

Dr. Owen Mace
Australia

AUSTRALIS-OSCAR V AND WRESAT: THE POSSIBLE ORIGINS OF AN AUSTRALIAN SPACE
PROGRAM

Abstract

In 1966 and 1967, the first two Australian satellites were built: Australis-OSCAR V, developed by students at the University of Melbourne, was the first to be constructed, although it would be the second to be launched; WRESAT, a joint project of the Weapons Research Establishment (WRE) and the University of Adelaide, was designed, built and launched in 1967. The first amateur radio satellite constructed outside the United States, Australis-OSCAR V was a wholly student project, yet it incorporated a number of important innovations, being the first amateur radio satellite to be command controlled from the ground (like a commercial communications satellite), as well as the first to contain a magnetic self-stabilising system to reduce spin, roll and signal fading. WRESAT, by contrast, was the product of the engineers, technicians and scientists of the WRE and the University of Adelaide, developed as a follow on to the upper atmosphere research work using sounding rockets that they were already undertaking. What these two satellite projects had in common was that they represented important steps in Australian space-capability building and, in conjunction with other space activities occurring in the country at the time, could have formed the nucleus of an Australian space program, such as that actually proposed by the Weapons Research Establishment (WRE) in 1968. It was certainly the hope of both the WRESAT and Australis-OSCAR 5 teams that further satellite projects would result from their successful missions. This paper will examine these two Australian satellite projects and their relationship to the WRE space program proposal. It will also look at the reasons for the rejection of this proposal by the Australian government of the day