15th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT (D3)
Space Technology and System Management Practices and Tools (4)

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THE AUSTRALIAN DEFENCE SCIENCE & TECHNOLOGY SPACE PROGRAM

Abstract

The Defence Science and Technology (DST) group leads research and development for the Australian Department of Defence. The DST Space Program is an area of strategic research that is developing advance concepts and exemplars of capabilities focused on assuring knowledge of, access to and use of the space domain in support of Defence requirements. There are three core themes associated with understanding the space environment through space situational awareness; developing and operating small satellite systems; and exploiting capabilities and data from space-based systems. The Defence White Paper 2016 highlights the need for Australia to expand in this area and provides sources of funding for game-changing and innovation activities aligned with the Australian government's innovation agenda.

This paper will describe the current activities and future plans for the DST led Space Program in support of Defence needs. Current activities include the Buccaneer mission which is the first sovereignly developed, Defence science CubeSAT (reported in detail in an paper to B4) and space situational awareness research using distributed and novel sensors. The future plans are described in a roadmap of technologies and missions that support exemplar capability demonstration and develop research, development and operations expertise in universities and industry that can potentially support future Australian Defence needs.