CENTRE FOR PLANETARY AND SPACE STUDIES: BUILDING A RESEARCH AND EDUCATION FACILITY IN A PRIVATE SECONDARY SCHOOL ENVIRONMENT.

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The Centre for Planetary and Space Studies (CPSS) is a joint-venture between Trinity College, East Perth and the Mars Society Australia (MSA) to provide a unique enhancement to the science and technology education program at Trinity College and establish Australia's first research institute within a secondary school.

The CPSS will forge better links between community and Trinity College through a common interest in space and space exploration, provide a physical base of operations for the MSA's Starchaser Rover vehicle and develop a practical educational centre for astronomy, astronautics and space simulation.

MSA's association with Trinity College commenced with the MSA display at the annual Astrofest day in early 2003. Trinity College already had a fairly comprehensive deep space exploration program at the school, supplemented by the College's automated Ritchey-Chretien Cassegrain 31.5 cm (12.5") telescope built by Star Instruments of the USA.

In August 2003, the MSA held the 3rd Australian Mars Exploration Conference at Trinity further cementing the relationship. Following discussions during the conference with the Head of Science, Ray Priskich, the founding of the CPSS came about with the College's desire to host the MSA in the form of a garage/laboratory to become a home for the Starchaser analog rover. This building is now under construction. In exchange, the MSA would further support the College's outreach programs to the students and general public. This will be done by creating a specific space flight curriculum, the provision of a six-seat spacecraft simulator which could be used to model Mars ascent/descent, space camps and field operations. Efforts will be made to involve non-space areas of the College such as their manual trades area and arts departments.

During 2004 and continuing through 2005, the Centre has provided series of lectures by scientists and engineers from both the local and interstate professional and amateur ranks. The subject matter included meteorite impacts, life on Mars, the planet Pluto, the space elevator, Stirling engines, the Cassini/Huygens mission to Saturn, medical experiments on aircraft simulating microgravity, volcanoes and robotic Mars exploration. More of these lectures are to come.

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