SMALL SATELLITE MISSIONS SYMPOSIUM (B4)

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DEVELOPING COUNTRY'S SMALL SATELLITES MISSIONS

Abstract

The arising opportunity of getting into space with very low cost projects has given the possibility for many countries to have their own small satellite projects at universities. With the availability of companies that develop and commercialize components for building small satellites the chance for more countries to have the opportunity to get in contact with technology transfer and access to space has materialized. Simple satellites can be developed buying ready parts and the big challenge is to make it work properly to get into space. This process, in universities, requires however qualified staff to guide the students and teach how to reach the objectives and also the required infrastructure. A simple satellite can be developed, like the Brazilian CubeSat Project – The NanoSatC-BR, that should contain a magnetometer and a particle dosimeter as payload. The Project was planned to cost no more than US\$ 280,000.00 including the clean room, tracking station and launching, which is considered a very cheap satellite project and many institutions may afford it. However, ITAR restrictions difficulties and international bids bureaucracy may exist in these countries, which may slow down the development process quite significantly. On the other hand important results can be achieved even with the possibility of this type of delays such as the capacity building, as the students involved will learn a lot and can get really involved with space technology. Partial results of the Brazilian CubeSat Project are presented.