SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
CALLING PLANET EARTH - SPACE OUTREACH TO THE GENERAL PUBLIC (3)

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THE POTENTIAL OF INNOVATIVE OUTREACH FROM CUBE-SAT PROGRAMMES

Abstract

This paper reflects the heritage, progress and ambitions of LunchSat, a graduate training programme of EADS Astrium, in its capacity to serve as a valuable demonstrator of ongoing Cube-Sat projects for the benefit of outreach and public awareness of space.

LunchSat provides graduate training through a nano-satellite project, allowing its members to gain experience in how satellites are developed. Appreciation of a whole satellite project is possible due to the scaled down development associated with nano-satellites in terms of reduced size, costs and overhead.

The deployment of LunchSat outreach strategies is resulting in tangible benefits for both the project and the public. For example, visibility of the LunchSat project through websites and social networking on the Internet is allowing a propagation of information to external communities through intermediaries and enthusiasts. This has strengthened relationships with online suppliers, reconnected previous project members and is working to connect project expertise and inspire the interested public.

The UK Science, Technology, Engineering and Mathematics Network (STEMNET) is a key asset to LunchSat outreach. Astrium has a strong community of STEM ambassadors distributed across its pan-European workforce, enabling the company to effectively promote the need for space exploration and communicate down-to-Earth advantages of space for the benefit of society, in establishments across borders. Through this scheme LunchSat has received the praise of politicians and representatives from across industry, including UKspace, the trade association for the British space sector. Recognition at these levels is critical if such space projects are to benefit from future budget allocations.

Project members have completed training in amateur radio to link with the nano-satellite in orbit from ground stations post-launch; such communication could well extend outreach to the International Space Station. Schoolchildren would be able to interview the astronauts on-board the ISS via LunchSat infrastructure, as part of a possible outreach initiative with ARISS. Future outreach envisages school visits and workshop tours, university talks to connect the project with the campus outreach initiatives of Astrium, and exposure through TV, radio and printed media.

The importance of outreach is being recognised. Projects such as LunchSat, and the outreach initiatives that follow, could therefore prove a valuable catalyst in the realisation of this future vision to promote space for human benefit and exploration.