

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Space Culture –Public Engagement in Space through Culture (9)

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MEET THE LOM - A NANOSATELLITE USING SCIENCE FICTION TO INTRODUCE SCIENCE
FACTS TO AUDIENCES

Abstract

Project Lom is a nanosatellite going into Earth orbit as part of British company ThumbSat's inaugural fleet of nanosatellites in Q1 2017. ThumbSat inventor Shaun Whitehead asked me (a graphic designer / illustrator) to design a satellite and gave me a completely open brief.

I decided to use this opportunity to further the cause of education. Using a science fiction story tied to the launching of an actual satellite I will introduce a wide and diverse audience to the science involved in building and deploying objects for use in orbit. The project also gives the audience a way of seeing everyday life from the perspective of an alien species.

In part one of my paper, I will briefly outline the fictional part of the project: Three interstellar travelers from the planet Lom have come to Earth to enjoy the taste of our diverse radiation signatures. In their descent, their craft was damaged. The ThumbSat team and I are "repairing" their ship - "LomStar 1" - and are helping them back into space.

In part two, I will document the process of building a model spaceship on the ThumbSat nanosatellite platform using shape memory foams and metals. The satellite will be launched from an Electron rocket and will transmit images along with an original "sea shanty" for members of the ThumbNet receiver network.

In part three, I will discuss the challenges involved in creating STEAM teaching materials around the project that can be used by K12 schools and community groups (such as 826National). How do we balance telling a fantastical story with introducing serious research on potential first contacts with alien species as exemplified by the Voyager Golden Records and the work of SETI and METI?

I will further outline how we plan to foster community participation through guided science projects and writing exercises, channeling interest in the satellite launch into a back and forth with the audience that will inspire contributions from people who don't usually see an entry point into the world of space exploration.

Finally, I will advocate for setting a new standard of aesthetic and narrative excellence for "art in space" projects by employing high-end talent in all stages of execution. In this, I will use the result of the collaboration and process of LomStar 1 as the basis of this study.