

## **Lunar Mission One**

### **An Introduction for Schools**

Lunar Mission One (LM1) is preparing plans for an international project that would send an unmanned robotic spacecraft to land at the south pole of the Moon. It will drill down to between 20m and 100m to collect and analyse lunar rock dating up to 4.5 billion years in age. While there it will assess the south pole's suitability for a future permanently manned lunar base, and also investigate the Moon's potential for deep space radio astronomy.

When the drilling is complete, it will place an epic record of "Life on Earth" as a digital time capsule in the borehole where it could last for a billion years. Anyone anywhere can pay to include their own personal "digital memory box" alongside the principal archive.

The mission will be managed commercially, under Government authority, and for the benefit of a non-profit Trust that has been created to fund space science and exploration. It will take three years to set up the contractual arrangements before the main development of the mission technology can proceed. The mission is expected to take place around 2024.

LM1 foresees a very large scale global education programme that allows children to benefit from the many opportunities to participate in the project. Most of all, they can freely contribute to the information in the Life on Earth archive, from human civilisation and the history of the World to a database of biological life on Earth. Students can record and learn about their local area – its culture, history, geography and wild-life.

They can also learn, and even contribute to, the science and engineering of the mission itself, such as the technology of the archive, the lunar science and the instruments to be carried, the spacecraft's robotics and drilling, the spaceflight from launch to precision landing, the future of space exploration and the future of humankind and the Earth.

To prepare for the main education programme, LM1 plans a **pilot programme** lasting about three years. It seeks a few pilot schools from each major culture around the World, to test ideas for schools to find out what works best for their local curriculum. The ideas could cover many areas, from culture to science and technology, and for any age and ability.

Each pilot school gets the opportunity to shape LM1's educational programme in its country, and to involve its students from an early stage of the project. With the teachers' agreement, classwork can be recognised within the archive and attributed to the students.

Pilot schools can use their local language, but LM1 would ask for one school in each country to be able to communicate in English with the schools of other countries, and with LM1's project management.

Here is a letter to teachers from the former head of the UN's Office for Outer Space Affairs:-

Dear Teachers,

My name is Mazlan Othman. I used to lead the United Nation's Office for Outer Space Affairs, and now I am supporting the educational ambitions of an extraordinary project.

I hope that you, like me, want to inspire your students by grasping opportunities to excite their imaginations, develop their skills and achieve their aspirations in the future. That is why I am promoting Lunar Mission One (LM1), and that is why I am writing to you to invite you to become one of its Pilot Schools.

LM1 is undoubtedly a most incredible way to connect your pupils directly with humankind's greatest adventure, the exploration of space, through the public creation of a comprehensive description of Life on Earth for education and research, in conjunction with the development of the knowledge and methods required to explore our Moon and the planets beyond. This is not fantasy or science fiction, as LM1 has already raised a considerable sum of money towards this goal and is backed by professional space exploration organisations, universities and public institutions (see <https://lunarmissionone.com/>). The children you teach now may be the space scientists and engineers of the future.

I am a great believer in the way space, as an educational topic, can excite children of all ages to engage in the classroom. I think, as it develops over the next ten years, Lunar Mission One will be one of the most inspiring educational projects that students can get involved in. The practical benefits of being an LM1 Pilot School will really help you and your students to engage with exciting activities from the very start. In particular, the team at LM1 project are already developing several learning activities that they would like Pilot Schools to trial from all around the World like:

- Building a record of society, starting at a community level.
- Building a description of nature and our environment.
- The science and challenges of Solar System exploration.

There will also be opportunities for pupils to create artistic, musical and social contributions to the project in order to celebrate the human race's creativity and inventiveness in all its different aspects, which could also be included in the Life on Earth record.

If this is an opportunity that interests you and your school, and will excite the curiosity of your students, then please sign up now by contacting [schools@lunarmissionone.com](mailto:schools@lunarmissionone.com) to discuss the next steps. We plan to be ready to start the pilot in September 2016.

Thanks for reading this. I hope that we will have the opportunity to work together over the next few years as we take our students to the Moon and beyond.

Yours sincerely,

Mazlan Othman

Member of the International Advisory Board of Lunar Mission One

Kuala Lumpur, Malaysia