



UNDERSTANDING FARADAY

WHAT IS FARADAY?

The Faraday missions use cubesat (a type of mini satellite for space research) technology to launch a range of different payloads from different customers on one satellite. The satellite launched then remains in Low Earth Orbit (moving around the earth at a relatively low height) for about 5 years as the payloads are monitored.

WHAT ARE THE PAYLOADS?

The payloads are instruments that customers buy space on the satellite for. They can be used for research, early use of services and development of ideas from countries all over the world. On Faraday-1 there are 7 customers, each with a different payload. Some of these include:

- Passive radiofrequency payloads that detect and receive signals from earth in space.
- Active radiofrequency payloads that use the Internet of Things (a way for devices to “talk” to each other) to receive and send messages to and from earth.
- 2 wide fish eye lenses on either side of the satellite. They have a very high resolution, meaning that the image that is captured by them is high quality.
- An optical retroreflector (a type of device/surface that reflects light) to be used in a project where a laser is used to move the satellite.

WHAT HAPPENS WHEN THE MISSION IS OVER?

When the mission is complete, there is an End

Of Life phase, which has been analysed to show that the

spacecraft will re-enter the Earth’s orbit and burn up completely. This is in compliance with space debris mitigation guidelines which are in place to ensure responsible, sustainable use of space.

