Technology Strategy Board
Driving Innovation

SURREY SATELLITE TECHNOLOGY LTD

Press Release

5th March 2013

UK's TechDemoSat-1 to launch Q3 2013

Surrey Satellite Technology Limited (SSTL) has signed an agreement with Glavkosmos / NPO Lavotchkin for the launch of the UK technology demonstration mission, TechDemoSat-1, by the Soyuz launch vehicle from the Baikonur Cosmodrome, Kazakhstan in Q3 this year.

Part-funded by the Technology Strategy Board and South East England Development Board (SEEDA), TechDemoSat-1 is a collaborative project to bolster the UK's thriving space industry by providing a low-cost opportunity for innovative commercial and research payloads under development in the UK to gain flight heritage.

Upon successful completion of the launch and early operations (LEOP) campaign, mission operations will be handed over to the new Satellite Applications Catapult Centre Harwell, Oxfordshire. It will be the first UK satellite to be operated from this new facility, which is currently part of the International Space Innovation Centre (ISIC) to merge with the Catapult in April of this year.

Tim Just, Head of Space at the Technology Strategy Board, said "TechDemoSat-1 is the first in-orbit satellite project directly funded by the Technology Strategy Board. This hugely exciting and anticipated development will provide true space flight heritage to a number of new ideas and companies. Once in orbit TechDemoSat-1 will be able to test several new satellite based products and services from UK businesses, breaking one of the key barriers to innovation in the space sector by reducing risk in demonstrating new space-based solutions and technologies."

TechDemoSat-1 is based on the SSTL-150 heritage satellite platform but has been modified to carry its cargo of eight experimental payloads, and also test some new SSTL subsystem designs. The payloads onboard the satellite include:

- SSTL's Sea State Payload (SSP) that will demonstrate how GPS signals reflected off the ocean's surface can be used to determine ocean roughness and help maritime shipping plan more efficient routes.
- MuREM, a miniature radiation environment and effects monitor, supplied by the Surrey Space Centre.
- The Charged Particle Spectrometer (ChaPS), a radiation detector that can perform simultaneous electron-ion detection, developed by the Mullard Space Science Laboratory (MSSL),
- The Highly Miniaturised Radiation Monitor (HMRM) from Rutherford Appleton Laboratory and Imperial College..
- The Langton Ultimate Cosmic ray Intensity Detector (LUCID), a detector that can characterise the energy, type, intensity and directionality of high energy particles, developed by the Langton Star Centre, part of a sixth form college, and is an element of a broader outreach activity supported by the industrial partners.
- A Compact Modular Sounder (CMS) system, an infrared remote sensing radiometer unit, provided by Oxford University's Planetary Group and Rutherford Appleton Laboratory..
- SSBV's CubeSAT ACS payload, which will provide 3-axes attitude determination and control.
- The Cranfield de-orbit sail designed by Cranfield University, will be the last payload to be operated on TechDemoSat-1 and will move the satellite to burn up quickly in the Earth's atmosphere at the end of its life.

For more information on TechDemoSat-1 and its payloads, please visit SSTL's website:
http://www.sstl.co.uk/Missions/TechDemoSat-1

About SSTL

Surrey Satellite Technology Limited (SSTL) is the world's leading small satellite company, delivering operational space missions for a range of applications including Earth observation, science and communications. The Company designs, manufactures and operates high performance satellites and ground systems for a fraction of the price normally associated with space missions, with over 500 staff

working on turnkey satellite platforms, space-proven satellite subsystems and optical instruments.

Since 1981 SSTL has built and launched 41 satellites – as well as providing training and development programmes, consultancy services, and mission studies for ESA, NASA, international governments and commercial customers, with its innovative approach that is changing the economics of space.

In 2008 the Company set up a US subsidiary, Surrey Satellite Technology US LLC (SST-US) with facilities in Denver, Colorado to address the United States market and its customers for the provision of small satellite solutions, applications and services. www.sst-us.com

Headquartered in Guildford, UK, SSTL is owned by Astrium BV.
www.sstl.co.uk

About the Technology Strategy Board

The Technology Strategy Board is the UK's innovation agency. Its goal is to accelerate economic growth by stimulating and supporting business-led innovation. Sponsored by the Department for Business, Innovation and Skills (BIS), the Technology Strategy Board brings together business, research and the public sector, supporting and accelerating the development of innovative products and services to meet market needs, tackle major societal challenges and help build the future economy. For more information please visit www.innovateuk.org.

About the Satellite Applications Catapult

The Satellite Applications Catapult is one of a network of UK technology and innovation centres, which aim to drive economic growth through commercialisation of research. The vision of the Satellite Applications Catapult is to support UK industry through the acceleration of the growth of satellite applications and to contribute to capturing of a 10% share of the £400Bn global space market predicted by 2030. It aims to achieve this by exploiting the innovation potential in the UK industrial and academic communities, by being a focal point where small and medium enterprises,

large industry and end-users can work together with researchers to challenge barriers, explore and develop new ideas, and bring these to commercial reality.

Notes to editor:

This press release can be downloaded as a Word or Pdf document at the following url: http://www.sstl.co.uk/news-and-events

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