

**Press Release**

17<sup>th</sup> January 2007

## **Classroom scientists shoot for space**

*Classroom experiments will be put to the test in space*

British space engineering trailblazer Surrey Satellite Technology Limited (SSTL) and the British National Space Centre (BNSC) are challenging teams of 14-18 year olds to fly a lunch-box-sized experiment on a future space mission, supported by expert scientists and engineers.



**Engineers prepare GIOVE-A satellite for launch**

SSTL builds small but powerful satellites using component technologies found in laptops, digital cameras and mobile phones. Traditional space missions can take many years to materialise, but by combining more than 20 years experience and commercially available technology SSTL is changing the economics of space - to the winner this means that their experiment could be designed, built and launched into space as early as 2010.

Entrants will be judged on a 5-page mission experiment proposal. The experiment could measure some aspect of the space environment, monitor the Earth in a novel way, or test out new satellite technology.

The winning experimental package should measure no more than 10x10x10cm, weigh no more than 1kg and consume no more than 1W of average power per orbit. There's no scrimping with the experiment though - it will be given a developmental budget of up to £100,000. Budding young scientists need to jump to it, the deadline for receiving initial proposals is 28<sup>th</sup> February 2008.

The Space Experiment competition promises some fun and enthusiasm for space, but satellites play an important role in our daily lives that is often overlooked. Competition co-ordinator, SSTL's Dr Stuart Eves explains, "It's hard to underestimate the importance of space technology. Satellites affect everyone on the planet – they deliver telephone communications and TV programmes across the globe; enable the safe navigation of ships and aircraft; and provide the timing signals that are used to coordinate the national power grid and mobile phone calls.

"They also supply weather forecasts; imagery of the Earth to assist with relief efforts when natural disasters strike; and monitoring of the Earth's resources and climate. That's why we think it's so important to get young people involved in space technology, and why we're so pleased to be working with the BNSC who are funding this experiment."

The semi-final will be staged at the prestigious UK Space Conference at Charterhouse School, Godalming, Surrey in March 2008. Here, celebrity judges will select the final six teams who will be helped to provide a more detailed experiment proposal.

The successful team will be awarded in a special ceremony at the International Astronautical Federation Congress in Glasgow, September 2008 where winners will have an opportunity to meet British born astronaut Piers Sellers, and British entrepreneur and SSTL Group Chairman, Professor Sir Martin Sweeting.

Professor Sweeting started SSTL over 25 years ago whilst he was a student, with backing from the University of Surrey. The company is now a British success story employing 270 staff in cutting edge international space missions for satellite navigation, interplanetary exploration and Earth observation. Professor Sweeting remains actively involved in educating the space engineers of tomorrow through his continuing work with the University.

The winning team will visit SSTL and work directly with the team who will build and fly the experiment. Launch is scheduled for 2010 and the experiment could provide results for up to 3 years after launch.

Details of the competition and an overview of satellite technologies are at:

[www.spaceexperiment.info](http://www.spaceexperiment.info) and at [www.makeyourmark.org/space](http://www.makeyourmark.org/space)

### **Notes to editor**

Supporting graphics for this press release can be downloaded from the online press room.

These can be previewed in the printable pdf version of this press release, that can be downloaded from the [SSTL online press room](http://www.sstl.co.uk/online-press-room) :

<http://www.ballard.co.uk/sstl/>

Please contact Dr. Stuart Eves for high resolution photography (details below)

### **Notes on UK Space**

- Space adds £7 billion to the British economy each year and supports 70,000 jobs.
- Space is one of the highest skilled workforces in the Britain.
- Britain leads the world in global mobile satellite communications, earth observation, space enabled creative industries and in planetary science.
- Space is key to sustainable development – mapping sea temperature changes, providing communications in the case of disaster relief, and opening up new opportunities to teaching and healthcare and in new energy sources.

### **Notes on space education**

There has been a worrying decline in the number of students studying mathematics, science, engineering and technology subjects. The proof is evidenced by a 30% decrease in physics, a 25% decrease in mathematics, and a 19% decrease in chemistry entries at A level between 1991 and 2003. These are some of the most practical and strategically important subjects and could lead to skills gaps in industry, the risks to Britain's economic success and a threat to Britain's international reputation as a leader in science research. Source: Lord May, President of the Royal Society testimony to the Parliamentary Scientific Committee in May 2004.

School children find science and mathematics dull and difficult and do not see its relevance in their lives. Source; SET for Success Report for Sir Gareth Roberts Review for HM Treasury.

## **About SSTL**

Surrey Satellite Technology Ltd (SSTL) develops innovative technologies to change the economics of space, delivering cost effective satellite missions within rapid timescales. The Company is a world leader in the design, manufacture and operation of high performance small satellites with experience gained over more than 25 years and 27 missions launched.

SSTL employs 270 staff working on LEO, GEO and interplanetary missions, turnkey satellite platforms and space-proven satellite subsystems and optical systems. The Company also provides know-how transfer and training programmes and consultancy services, and performs studies for ESA, NASA and commercial customers related to platform design, mission analysis and planning.

Based in Guildford, UK, SSTL is owned by the University of Surrey (85%), SSTL staff (5%), and SpaceX of the USA (10%).

## **About the BNSC**

The British National Space Centre (BNSC) is a partnership of ten Government Departments, research councils and the Met Office, and is at the heart of UK efforts to explore and exploit space.

BNSC co-ordinates UK civil space policy to benefit science, enterprise and the environment.

- co-ordinates UK civil space activity;
- supports academic research;
- nurtures the UK space industry; and
- works to increase understanding of space science and its practical benefits.

## **SSTL Contact:**

Audrey Nice, Surrey Satellite Technology Limited  
Tel: +44 (0)1483 804200 Email: [a.nice@sstl.co.uk](mailto:a.nice@sstl.co.uk)

Dr Stuart Eves, Surrey Satellite Technology Limited  
Tel: +44 (0)1483 803803 Email: [S.Eves@sstl.co.uk](mailto:S.Eves@sstl.co.uk)

## **Press Contact:**

Robin Wolstenholme, Ballard Communications Management (BCM)  
Tel: +44 (0)1306 882288 Email: [r.wolstenholme@ballard.co.uk](mailto:r.wolstenholme@ballard.co.uk)