



Press Release

24th May 2006

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GIOVE-A reaches new milestone

On 11th May 2006, the SGR-GEO GPS experiment on SSTL's GIOVE-A navigation satellite was powered up for the first time.

The main purpose of this operation was to commission the 24 channel C/A code GPS receiver, to ensure commanding, functioning and data-logging are working as expected.

During the 90 minutes of operation, the GPS receiver successfully tracked 4 GPS satellite signals for most of the time, briefly reaching 5 satellites, and collected a complete set of GPS Almanac data. The GPS signals tracked appeared to be considerably stronger than expected and it is believed that some signals from sidelobes of the GPS satellite antennas were tracked, although analysis of the data is ongoing.

Only a handful of satellite experiments have ever tracked GPS signals above the GPS constellation, and this is the first such experiment in a Medium Earth Orbit. To date there has been no report of a GPS experiment achieving a position fix above the GPS constellation.

The next phase of the SGR-GEO experiment is to upload optimised software into the receiver that will permit improved operation and data-logging, and the ability to achieve a position fix. Ultimately improved software that tracks weak GPS sidelobe signals and estimates the orbit will be used with a view towards the goal of 100% accurate positioning around the orbit.

The SGR-GEO is a new GPS receiver intended for use on geostationary satellites for providing position, velocity and time, and is initially being demonstrated on the MEO GIOVE-A satellite. Funding for the SGR-GEO development came from SSTL, BNSC and ESA. GIOVE-A is Europe's first Galileo demonstrator satellite, built by SSTL for ESA. GIOVE-A

was launched on 28th December 2005 to broadcast Galileo signals, and has recently enabled the successful application for frequency filing of Galileo to the ITU.

Notes to editor:

This press release can be downloaded as a Word document and printable pdf at the URL below:

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About Surrey Satellite Technology Ltd

Surrey Satellite Technology Limited is an enterprise company formed in 1985 by the University of Surrey to commercialise the results of its innovative small satellite engineering research. SSTL was the first professional organisation to offer low-cost small satellites with rapid response employing advanced terrestrial technologies. Over two decades, we have built a profitable business around our unique approach to space.

Today, SSTL employs over 200 staff and has been involved in 23 small satellite missions, making it the most successful and experienced small satellite supplier in the world.

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