Press Release

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SSTL and ASTROSCALE team up for Orbital Debris Removal missions

ASTROSCALE PTE. LTD. (ASTROSCALE) and Surrey Satellite Technology Ltd (SSTL) have signed a Memorandum of Understanding to pursue joint opportunities in areas of innovative on-orbit technologies and missions designed to safeguard the orbital environment for future generations.

ASTROSCALE and SSTL have agreed to long-term strategic cooperation that further positions the companies to compete globally in the growing small satellite and orbital debris removal markets. Together the companies will seek to identify ambitious debris removal projects and joint offerings for competitive small satellite missions in Japan. As a first step, ASTROSCALE has contracted SSTL to supply a "Target" satellite and avionics for its inaugural End-of-Life Service by ASTROSCALE-demonstration (ELSA-d) mission, which will simulate capture of orbital debris and is designed to validate key technologies for end-of-life spacecraft retrieval and disposal services.

ASTROSCALE hopes to establish a long-term presence in the UK, starting with the establishment earlier this year of an office and mission control centre in Harwell. This cooperation will lead to further investment in the UK, including potential establishment of a supply chain.

"We are very excited to welcome SSTL to the ELSA-d mission and to begin this ambitious strategic partnership," said Nobu Okada, Founder and CEO of ASTROSCALE. "SSTL is synonymous with reliable and cost-effective small satellites and we are thrilled that they will provide a key component to ELSA-d. We are confident that this is only the beginning of mutually beneficial long-term relationship."

Sir Martin Sweeting, Executive Chairman of SSTL added, "We are extremely pleased to be working with ASTROSCALE, a like-minded, innovation-driven company seeking

to make space business viable for commercial operators. This practical solution to debris mitigation has the potential to provide a cost-effective approach for ensuring the long-term sustainability of the space environment for all."

The ELSA-d mission comprises of a "Chaser" satellite and the Target satellite, and will demonstrate key technologies necessary for orbital debris removal such as rendezvous & docking and proximity operations. ASTROSCALE will design and manufacture the Chaser at its R&D office in Tokyo, using avionics from SSTL. It will be equipped with optical sensing instruments and a redundant capture mechanism.

The small satellite remote sensing and orbital debris removal markets are predicted to grow significantly in the coming years. By agreeing to long-term strategic cooperation, ASTROSCALE and SSTL are now positioned to take advantage of these opportunities and positively impact future generations.

Images for this press release, can be downloaded at www.sstl.co.uk /Press/SSTL-and-Astroscale-team-up-for-Orbital-Debris-Rem

ELSA-d Chaser satellite. Credit ASTROSCALE

The Target and the Chaser will be attached for launch and deorbit, but while on-orbit, will be deployed in a series of three increasingly complex separation and capture manoeuvres using rendezvous and docking algorithms. A docking plate with optical markers will be attached to the Target, allowing the Chaser to identify and estimate attitude during the docking.

ELSA-d Target satellite. Credit SSTL.

SSTL's Target satellite incorporates S Band communications, GPS positioning, a 3-axis control system and laser retro-reflector. A variant of the SSTL-42 constellation platform family designed for operational missions in the 5kg-100kg range, it will also fly an HD camera and lighting to record the capture sequences during eclipse.

Notes

- The SSTL-42 range is well suited to initial demonstration missions with platforms and technology that can be subsequently scaled up whilst retaining key technology and flight software developments, and mass produced for more sophisticated missions and constellations.
- SSTL has also supplied the platform for RemoveDEBRIS, a technology demonstration mission to test debris mitigation technologies and which is due to launch from the ISS in 2018.
- SSTL has to date launched 50 satellite missions and the ASTROSCALE nanosatellite will be the Company's 67th mission under contract.
- SSTL is a leading supplier of satellite platforms and services for LEO missions to commercial owner operators: previous missions include Beijing-1, the 5 satellite RapidEye constellation, Deimos-1, exactView-1, KazEOSAT-2, and the 3-satellite TripleSat constellation.

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About ASTROSCALE

ASTROSCALE PTE. LTD. (ASTROSCALE) is the first private company with a mission to secure long-term spaceflight safety by developing space debris removal services. Launching its corporate headquarters in Singapore in 2013, R&D office in Japan in 2015 and branch office in the United Kingdom in 2017, ASTROSCALE is spreading its global market. ASTROSCALE's comprehensive approach to orbital services incorporates the business model, technologies, and space regulation and law solutions that contribute to a more sustainable space environment.
For more about ASTROSCALE, visit us at http://astroscale.com/

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, communications, navigation, in-orbit servicing and beyond Earth infrastructure . The Company designs, manufactures and operates high performance satellites and ground systems for a fraction of the price normally associated with space missions, with 500 staff working on turnkey satellite platforms, space-proven satellite subsystems and optical instruments.

Since 1981, SSTL has built and launched 50 satellites for 20 international customers – as well as providing training and development programmes, consultancy services, and mission studies for ESA, NASA , international governments and commercial customers, with an innovative approach that is changing the economics of space.

Headquartered in Guildford, UK, SSTL is part of the Airbus Group.
www.sstl.co.uk