

Provider Information

Name (point of contact): Tom Lacey
Organization/Company: Surrey Satellite Technology Limited (SSTL)
Address: 20 Stephenson Road, Guildford, Surrey, GU2 7YE, UK
Email: t.lacey@sstl.co.uk
Website (URL): www.sstl.co.uk



Resources that you can provide



SSTL is a pioneering space company and world leader in designing, manufacturing and operating high performance spacecraft. The company has been at the forefront of the small satellite industry for over 30 years, and has a successful record in changing the economics of space in-order to make it more accessible to all nations. SSTL prides itself on providing satellite [Science, Earth observation, Telecommunications and Navigation] missions from first concept through to on-orbit operation.

Since its incorporation in 1985 Surrey Satellite Technology Ltd (SSTL) has designed and put into operation 43 satellites including two satellite constellations. It is under contract as prime for a further 11 satellites, including a 6- satellite constellation. It is also providing major optical and navigation payloads for a further 24 spacecraft, including Europe's global navigation satellite system. The majority of these are export contracts, making SSTL a recognised world-leading small satellite systems provider.

SSTL has all the facilities necessary for the company's vertically integrated operation, from satellite platform and payload design, through to manufacturing, test and post-launch operations with associated office space and IT equipment to support all these areas. In-orbit operations are performed by SSTL from its Mission Control Centre at Tycho House. The automated Centre is linked by high-speed connections to the internet enabling the control of its spacecraft from other SSTL-equipped ground stations across the world.

Long term and close partnerships, through SSTL's Space Mission and Training Development programmes, have been key to the establishment of flourishing, sustainable space programmes for SSTL customers. SSTL has more than 25 years' experience in delivering training and collaborative programmes to space nations across the world. SSTL's space mission training and development programmes are tailored-made to provide outstanding training in specific skills to meet our customers' defined objectives.

SSTL proposes to leverage its vast mission programme expertise and resources to assist MIC participant through:

- Mentoring & consultation – mission concept study support
- Work-shop participation – exploring the various mission trades

- Training & Development – providing design, development, manufacture & operational support
- Provision of low-cost heritage platform and subsystems – enabling MIC participant to focus their resources on the mission concept and payload development
- Access to SSTL testing facilities and SSTL’s ground station for LEOP and operational support
- Access to SSTL launch service team



Nano / Microsatellite Platforms



Platform	Cube-X	Nano-X	SSTL-X50	SSTL-400	SSTL-150
Payload					
Mass (kg)	<2 or <5	<4 or <9	<45	<50	<60
Power OAP (W)	<6W or <12W	<3.6W or <15W	35W 85W peak	17-24W 85W peak	<50
Volume	2U or 5U (L shaped)	12x19x19 20x20x23	53x40x43	314x257x240	Int. 25x28x23 Ext. 77x73x25
Spacecraft					
Total mass (Kg)	<7 or <11(dry)	<16 or <36(dry)	50 - 150	75- 125(dry)	<180 (dry)
Volume (cm ³)	3U or 6U	12U or 27U	53x43x40	84x68x95	124x133x130
Design Lifetime	1-2 years	1-2 years	5 year	5 year	7 year

Only main platform



Subsystems from SSTL



Complete data handling, storage and down-link solution over X-band



A range of GPS receivers to suit all budgets



S-band TM/TC Platform Suite

SGR-ReSI is a remote sensing instrument design for use with:
a) Multi constellation
b) Multi frequency
Flying on TDS-1 and to fly on Cygnus



A range of reaction wheels with oil or dry lube for fine pointing and rapid manoeuvring



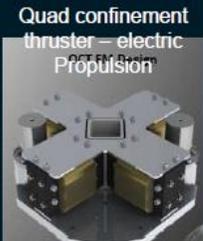
Hold down and release mechanism



Procyon and Rigel-L Star Trackers offering 5 & 3arcsec accuracy, 4Hz and 16Hz up-date rate



Bi-Axis SADM



Quad confinement thruster – electric Propulsion



Electric thrusters