

National Satellite Test Facility (NSTF)

A world class set of co-located facilities for environmental testing of space payloads and satellites up to 7,000 kg, ensuring your satellites are ready for space.

Clean rooms for large satellite preparation

- ISO 8 cleanroom (200 m² x 13 m high)
- ISO 6 cleanroom (200 m² x 13 m high)
- Electrical ground support equipment area

Large satellite test chamber

- Usable volume of 7 m diameter x 12 m long thermal vacuum chamber
- Temperature range 95 K to 400 K
- ISO 8 preparation area

Acoustic testing

- Direct field acoustic noise - a stack of loudspeakers placed around the satellite to generate the acoustic field
- Typical acoustic noise levels to reach 146 dBA
- Frequency content range from 30 Hz to 10,000 Hz

Centre of gravity and moments of inertia

- Maximum capacity 4.5 tonnes
- Centre of gravity and moments of inertia about 3 orthogonal axes
- Products of Inertia
- Mass measurement scales 7 tonnes capacity

Vibration and pyro-shock

- 3 axis vibration
- Frequency range 5 to 2000 Hz
- Acceleration levels up to 1.5 g (for 7 tonne satellites)
- Shaker thrust 200 kN in the vertical axis
- Shaker thrust 200 kN coupled to a slip table for lateral excitation
- Pyro-shock test capability

Combined electromagnetic compatibility and antenna measurement system

- EMC chamber (17.5 m x 16.5 m x 13.3 m)
- Testing to ECSS-E-ST-20-07C and MIL-STD-461G standards
- 12 m x 12 m vertical planar near field scanner
- Frequency range 500MHz to 75GHz
- Configurable high power wall for satellite end to end testing

Other

- Capacity to unload indoors using 26 tonne crane
- ISO 9 unloading bay (256 m² x 13 m high)
- 2 large customer offices for up to 60 people