

S'pore satellites make contact with researchers

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They may not be in a galaxy far, far away, but the force seems to be with all six made-in-Singapore satellites now orbiting Earth. They have made contact with researchers on the ground, and their missions are under way.

One particularly bold experiment eventually seeks to allow small, low-orbit satellites to relay data or beam back images any time or anywhere from space.

This has not been done by any satellite orbiting at a height of less than 2,000km above ground, said Nanyang Technological University (NTU). Its VELOX-II and VELOX-CI satellites are orbiting Earth a mere 550km above ground.

Professor Low Kay Soon, who heads the university's Satellite Research Centre, said his team is also running tests on the satellites' Global Positioning System to enable researchers to get a group of satellites

to "fly" in formation.

"In formation flying, we have to know the exact position of each satellite to prevent collision and also to perform actions that require co-ordination, such as taking images with different angles simultaneously," said Prof Low, who arrived in Singapore yesterday after witnessing the launch in India.

Besides NTU, defence manufacturer Singapore Technologies Electronics (ST Electronics), space technology firm Microspace Rapid and the National University of Singapore also said they had established contact with their satellites.

Microspace Rapid, which built Athenoxat-1, said the nanosatellite has started beaming back images.

ST Electronics, which joined hands with DSO National Laboratories and NTU to build the TeLEOS-1, said it will conduct tests to ensure the satellite can beam back its first commercial images by the middle of next year. It said TeLEOS-1 provides "vast business opportunities" that can be applied to maritime security and disaster relief operations.

The Office for Space Technology and Industry was set up two years ago to grow Singapore's space industry. Its executive director Beh Kian Teik said the launch had established Singapore's credibility in small-satellite engineering.

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