



Archive

November 17, 2000

STRV-1c/d Successful Launch

The Ballistic Missile Defense Organization (BMDO) announced today that the Space Technology Research Vehicles-1c and -1d (STRV-1c/d) microsattellites were successfully launched into Geo-Transfer Orbits (GTO) at 8:07pm, Wednesday, November 15, 2000.

The two microsattellites were assembled by the UK Ministry of Defence, Defence Evaluation and Research Agency (DERA) and launched on an Arianespace Ariane-V rocket from Kourou, French Guiana. The STRV-1c/d satellites were secondary payloads with PanAmSat the primary payload.

Preliminary data from the spacecraft indicate that STRV-1c/d satellites are in the planned orbit and fully operational. The two satellites host a total of 25 hardware and three software experiments provided by multiple sponsors including the BMDO, the United Kingdom Ministry of Defence, the United States Air Force, the United States Navy, the DoD Space Test Program (STP), the National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA).

The BMDO experiments include an advanced quantum-well infrared photometer (QWIP) experiment, an experimental multifunctional structure (MFS), and an Electronics Testbed (ETB). The STP sponsored experiments include the Air Force Research Laboratory (AFRL) Compact Environmental Anomaly Sensor (CEASE) and the Naval Research Laboratory (NRL) Coherent Electromagnetic Radio Tomography/Profiling the Limb with UV Sensors (CERTO/PLUS). The QWIP experiment will quantify the effects of on-orbit radiation on the performance of this advanced sensor concept.

The MFS experiment will demonstrate the integration of thermal control, cables and harnesses, power distribution and storage, and electronics into the load-bearing spacecraft structure. The ETB will obtain data on performance of advanced micro-electronics for DoD and civilian systems in a high radiation environment. CEASE will demonstrate the ability of a small spacecraft-mounted sensor package to warn operators during conditions of potential surface charging, deep dielectric charging and single-event upsets. CERTO PLUS will provide measurements of the integrated electron density of the ionosphere. CERTO/PLUS will also test and validate tomographic algorithms for reconstruction of ionospheric densities and irregularity structures.