Busek Delivers Propulsion for Air Force Small Satellite



Press Release

Natick, Massachusetts—October 29, 2014—

Busek Co. Inc., a US developer of solar electric propulsion (SEP) for space vehicles, announced the most recent delivery of a BHT-200 Hall Effect Thruster system. The delivery marks the completion of the assembly, integration and testing of a complete BHT-200 system, which includes thruster, power electronics and Xenon propellant management systems integrated onto a single propulsion panel. The Busek BHT-200 thruster was the first U.S. designed, manufactured, and built Hall effect ion thruster in orbit and the model remains state of the art within its power class.

The US Air Force Research Laboratory (AFRL) and US Air Force Academy (USAFA) will integrate the Busek BHT-200 system on the FalconSat-6 (FS6) spacecraft. FS6 is secondary payload on the DoD Space Test Program's STP-2 mission, scheduled for launch on a SpaceX Falcon Heavy in 2016.

Busek's family of SEP systems solve a wide range of spacecraft propulsion needs. Nano-satellites, Small-satellites (e.g. CubeSats) and large Geostationary or Interplanetary satellites can all benefit from the relative high efficiency of SEP. The high efficiency and related propellant-mass savings of SEP can be used to reduce spacecraft mass allowing for less expensive launch versus traditional chemically propelled satellites. The technology is increasingly being leveraged for new LEO, MEO, and GEO missions, as well as interplanetary and asteroid missions.

Busek Co. is an industry leader in developing high performance space propulsion systems including Hall, Electrospray, RF Ion, Pulsed Plasma, and Green Monopropellant thrusters. Busek's family of U.S.-designed and manufactured thrusters span the power spectrum from 2W to 20kW and produce thrust from micro-Newtons up to 5N.



BHT-200 Thruster and Cathode



BHT-200 on Spacecraft Mass Model



BHT-200 Operating on Xenon Propellant

