Busek Electrospray Thrusters Launch aboard ESA’s LISA Pathfinder

NATICK, MA., DECEMBER 3, 2015 Satellite propulsion firm Busek Co. Inc. confirmed the launch of the world’s first flight-qualified electrospray thrusters on LISA Pathfinder. The micro-newton colloid-style electric thrusters were developed by Busek under contract with NASA’s Jet Propulsion Laboratory (NASA ST-7 Program). The precision electrospray thrusters are part of NASA’s Disturbance Reduction System (DRS) which serves a critical role for LISA Pathfinder’s science mission.

“Busek, with our partners at NASA, developed the micro-newton electrospray propulsion system on LISA Pathfinder from the drawing board to flight qualification… it was challenging yet deeply rewarding work.” said Vlad Hruby, Principal Investigator of the ST-7 thrusters and President of Busek. “The effort laid the foundation and deep fundamental understanding for Busek’s Cubesat and SmallSat electrospray thrusters including our 100 micro-Newton BET-100uN, the one milli-Newton BET-1mN, as well as the high power electrospray thrusters we have in development” added Hruby.

LISA Pathfinder’s DRS will be activated upon the spacecraft’s arrival at Lagrange Point 1, some 1.5 million kilometers from earth. The high precision thruster system is designed to keep the spacecraft flying centered around a gold and platinum mass which floats freely inside the spacecraft. The mission and spacecraft design is an effort to detect the gravitational waves predicted by Albert Einstein’s Theory of General Relativity, which was published in 1915.

About Busek: Busek Co. Inc. is an industry leader in the development and manufacture of high performance space propulsion systems. The firm’s spacecraft products span solar electric propulsion technologies such as Hall, electrospray, radio frequency ion, and pulsed plasma thrusters, in addition to green monopropellant thrusters. Busek’s expertise across multiple space propulsion technologies enables it to provide unbiased solutions to best fit customers’ needs.
Credit: ESA

Media Contact:
W. Dan Williams, PhD.
Busek Co. Inc.
508.655.5565
info@busek.com