SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Launch Services, Missions, Operations, and Facilities (2)

Author: Ms. Melissa Wuerl Spaceflight Inc., United States

Mr. Daniel Gillies Spaceflight Inc., United States Mr. Philip Brzytwa Spaceflight Inc., United States

ESTABLISHING ROUTINE DEDICATED RIDESHARE MISSIONS FOR SMALL SATELLITES

Abstract

For 99 percent of the organizations seeking access to space, price is an issue. And as spacecraft size, and consequently, cost of launch increases, having some say on launch timing becomes more important. Being able to offer both routine access and an affordable price point is critical in making space accessible for more organizations. Dedicated rideshare is a new launch alternative that lowers launch prices for organizations seeking access to space, maximizes utilization of the launch vehicle, and apportions cost based on schedule control and other service features. Co-lead customers pay for schedule control and other services traditionally reserved for a "primary" customer, but see their overall launch price reduced by including rideshare customers on the launch. Likewise, the traditional rideshare customers typically experience increased savings because our co-lead customers pay a disproportionate amount of the entire launch vehicle cost in order to retain schedule control.

Until now rideshare customers had no other option but to wait until excess capacity became available on a launch scheduled by a primary payload. With dedicated rideshare, we establish co-lead customers well in advance to synch to our launch schedule to anticipated customer demand. Dedicated rideshare missions enable customers with spacecraft that range in mass from 5 to 2500 kg to create long-range mission plans to sun-synch and GTO with more dependable launch dates. The notion of having a routine, annual ride to a sun-synchronous orbit is compelling to our customers for long-term business planning, fundraising, and launch price stability. Anytime we can offer more options around schedule control, pricing, and increased frequency in access to space, it benefits everyone involved in space launch, and the industry as a whole.

Our first dedicated rideshare mission is currently contracted for a launch window beginning at the end of 2017 on a SpaceX Falcon 9. Routine dedicated rideshare missions to LEO sun-synchronous orbits are scheduled annually thereafter.