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Access to Space for Small Satellite Missions (5)

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ACCESS TO SPACE ON NASA'S NEW HEAVY LIFT ROCKET

Abstract

NASA's new heavy lift rocket, known alternatively as the Space Launch System or 'SLS', provides unique and compelling opportunities for access to space. With present estimates of 100 or more metric tons of delivery mass capability to low earth orbit (LEO) – allowing for significant delivery mass beyond LEO – the SLS will be capable of not only delivering crewed payloads to space, but potentially many other additional payloads as well, including networks or "constellations" of satellites. We will review recent concept development work which illustrates a variety of potential SLS configurations and processes for how access to LEO and beyond, as well as the associated services, could be provided to a wide variety of potential users – including small and large science, technology, engineering, human exploration, international, and education and public engagement missions.