

# Momentum Awarded NASA TROPICS Pathfinder Mission

September 4th, 2020 – Santa Clara, CA – Momentum ([www.momentum.space](http://www.momentum.space)), provider of in-space transportation services for satellites, today announced a service agreement with NASA to transport the TROPICS Pathfinder CubeSat to low earth orbit (LEO) no later than June 30 2021. The TROPICS Pathfinder CubeSat in the Planetary System Corporation 3U Canisterized Satellite Dispenser will be integrated onto Momentum's Vigoride transfer vehicle currently scheduled to launch on a SpaceX Falcon-9 dedicated rideshare mission.

NASA selected the Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS) constellation mission as part of its Earth Venture Instrument-3 (EVI-3) element. NASA's Earth System Science Pathfinder (ESSP) Program Office approved the separate TROPICS Pathfinder mission to launch in advance of the TROPICS constellation mission as a technology demonstration and risk reduction effort. The TROPICS Pathfinder mission will permit the checkout and optimization of all mission elements prior to the primary constellation mission.

The TROPICS constellation mission (which consists of six CubeSats) will increase the scientific community's understanding of storm processes. Once in place, the CubeSat constellation will provide rapid-refresh microwave measurements that can be used to determine temperature, pressure, and humidity inside hurricanes as they form and evolve. The TROPICS constellation mission's high-revisit imaging and sounding observations are enabled by microwave technology developed at MIT Lincoln Laboratory by a team led by William J. Blackwell. These observations will profoundly improve scientists' understanding of the thermodynamic and microphysical processes driving high-impact storms.

NASA is supporting the development of a new space ecosystem through programs such as Commercial Lunar Payload Services (CLPS), CubeSat Launch Initiative (CSLI) and others. As part of that new ecosystem, Momentum plans to support NASA in its transportation needs to Earth orbits, to the moon, and beyond. Momentum employs new and proprietary technologies, including water plasma propulsion to enable revolutionary low-cost orbital shuttle and charter services. Momentum has already demonstrated its core technology in space and is currently preparing for its next two customer test missions starting later this year.

## **About Momentum**

Momentum is a Space Transportation and Space Logistics company and a graduate of the prestigious Y Combinator program based in Silicon Valley. Momentum is the first company providing in-space transportation services for satellites. The company was founded in 2017 in Santa Clara, CA. Momentum designs and builds transfer vehicles propelled by proprietary water plasma thrusters. The vehicles ferry satellites to custom orbits after they are delivered by conventional rockets to their initial orbit. Momentum is a 70-person team growing rapidly.