



Momentum' Vigoride Orbital Service Vehicle Completes TVAC Testing Ahead of Launch with SpaceX

October 31, 2022

SAN JOSE, Calif.--(BUSINESS WIRE)--Oct. 31, 2022-- Momentum Inc. (NASDAQ: MNTS) ("Momentum" or the "Company"), a U.S. commercial space company that offers transportation and other in-space infrastructure services, has completed Thermal Vacuum (TVAC) testing of its Vigoride Orbital Service Vehicle scheduled to fly on the SpaceX Transporter-6 mission in December.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20221031005648/en/>



Momentum team with the Vigoride Orbital Service Vehicle undergoing TVAC testing. (Photo: Business Wire)

Thermal vacuum testing allows for the simulation of space conditions, including the temperature and altitude that the Vigoride spacecraft will experience during its mission.

"TVAC marks the final testing milestone for this Vigoride Orbital Service Vehicle (OSV)," said Momentum Chief Technology Officer Rob Schwarz. "In addition to TVAC, Vigoride has undergone successful vibration testing and an array of sub-system tests, including [comprehensive ground test campaigns for the solar arrays](#) and our Microwave Electrothermal Thruster (MET) propulsion system. We're now focused on completing integration of our customer payloads and then preparing the vehicle for shipment to the launch site."

The latest Vigoride vehicle design has been modified from the version that flew earlier this year. The updated design increases payload capacity and reduces launch loads transmitted to Momentum's customers. This version of Vigoride also introduces some modularity – particularly with the propulsion system, which should allow Momentum to more easily tailor the vehicle for each mission's unique transfer profile.

Momentum's second demonstration mission priorities include delivering customer payloads to orbit for Caltech and Qosmosys, and testing Vigoride's performance in space, particularly related to its MET propulsion. The MET uses water as a propellant and produces thrust by expelling very hot gases through a rocket nozzle. However, unlike a conventional chemical rocket engine, which creates heat through a chemical reaction, the MET heats propellant using microwave energy. The non-toxic water propellant enables simpler, safer, and less expensive operations on Earth, and more sustainable in-space services.

"We took a big step forward earlier this year with the first demonstration mission of the Vigoride OSV and deployment of a total of eight satellites in orbit from this vehicle and another deployer," said Momentum Chief Executive Officer John Rood. "With TVAC complete, we're excited to have passed another major milestone on the path to starting our next Vigoride demonstration mission with an improved version of this OSV and the opportunity to demonstrate our innovative green propulsion system that uses water as a propellant. We're also excited about the role our second mission will play in enabling the operation of payloads that aim to push the technology boundaries further for clean, renewable power generation from space and new applications for non-fungible tokens."

About Momentum

Momentum is a U.S. commercial space company that offers in-space infrastructure services, including in-space transportation, hosted payloads and in-orbit services. Momentum believes it can make new ways of operating in space possible with its planned in-space transfer and service vehicles that will be powered by an innovative water plasma-based propulsion system that is under development.

Forward-Looking Statements

This press release contains certain statements which may constitute "forward-looking statements" for purposes of the federal securities laws. Forward-looking statements include, but are not limited to, statements regarding Momentum's or its management team's expectations, hopes, beliefs, intentions or strategies regarding future events or circumstances, and are not guarantees of future performance. Because forward-looking statements relate to

the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of Momentus' control. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including but not limited to risks and uncertainties included under the heading "Risk Factors" in the Annual Report on Form 10-K filed by the Company on March 9, 2022, as such factors may be updated from time to time in our other filings with the Securities and Exchange Commission (the "SEC"), accessible on the SEC's website at www.sec.gov and the Investor Relations section of our website at investors.momentus.space. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and, except as required by law, the Company assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.

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Source: Momentus Inc.