



Momentum Vigoride-5 Status Update #4

March 23, 2023

SAN JOSE, Calif.--(BUSINESS WIRE)--Mar. 23, 2023-- Momentum Inc. (NASDAQ: MNTS) ("Momentum" or the "Company"), a U.S. commercial space company that offers transportation and other in-space infrastructure services, today announced that the Vigoride-5 spacecraft is maneuvering under its own power in Earth orbit. The Attitude Control and Reaction Control Systems have been commissioned and are tested and functional, thus paving the way for initiating the testing campaign of the vehicle's Microwave Electrothermal Thruster (MET).

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20230323005766/en/>



Momentum's Microwave Electrothermal Thruster (MET) undergoing ground testing in a vacuum chamber at company headquarters. Photo: Momentum.

"Momentum is now using a water propellant system to control the spacecraft, achieving a key objective of our Vigoride-5 mission," said Momentum Chief Executive Officer John Rood. "This mission marks the first time our Attitude Control and Reaction

Control Systems have been fired in space and their preliminary performance has met our expectations. We are excited to have reached this milestone and are now clear to begin the testing of our primary MET propulsion system."

The Attitude Control System senses the spacecraft's orientation in space using sensors such as star trackers and gyroscopes. The spacecraft can be commanded to maintain any required pointing orientation. The spacecraft is kept in position with thruster firings of its Reaction Control System. The Reaction Control System uses a unique water-based system to provide thrust which controls the vehicle's orientation.

While the primary purpose of the Reaction Control System is to control the vehicle's orientation, this system also has the ability to maneuver the spacecraft, including changing its altitude and inclination in space. This is part of the robust design of the Vigoride spacecraft with redundant systems to enable the spacecraft to perform missions such as deploying customer satellites in unique orbits. The Reaction Control System operates using the same propellant and tank with water as the Vigoride spacecraft's primary MET propulsion system.

The MET is designed to use water as a propellant and produce thrust by expelling extremely hot gases through a rocket nozzle. Unlike a conventional chemical rocket engine, which creates thrust through a chemical reaction, the MET is designed to create a plasma and thrust using microwave energy.

When operational, the MET will be used to raise the orbital altitude and inclination of Vigoride-5. Orbital altitude and inclination changes can enable Momentum to deliver future customers to precise orbits to meet their mission objectives. Using the MET, Momentum aims to offer cost-effective, efficient, safe, and environmentally friendly propulsion to meet the demands for in-space transportation and infrastructure services.

"Momentum is a pioneer in commercializing the MET and we look forward to our planned demonstration in the coming days of this innovative technology with a higher efficiency or specific impulse than conventional chemical propulsion systems that are used in the space industry," said Rood.

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 the aggregate value of Common Shares which may be issued pursuant to the ATM Program and Momentum's expected use of the net proceeds from the ATM Program, if any. 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 Momentum's 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.momentum.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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