



## Momentum' New Spacecraft Engine Continues Successful In-Space Testing

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Sustainable Engine Uses Water as Propellant

SAN JOSE, Calif.--(BUSINESS WIRE)--Apr. 17, 2023-- Momentum Inc. (NASDAQ: MNTS) ("Momentum" or the "Company"), a U.S. commercial space company that offers orbital transportation and in-space infrastructure services, continues to advance through its Microwave Electrothermal Thruster (MET) in-space testing campaign, completing more than a dozen test firings ranging from 30 seconds up to five minutes – the expected range for Momentum standard missions.

The MET is the Vigoride Orbital Service Vehicle's (OSV) primary propulsion method that relies on solar power and uses distilled water as a propellant. It produces thrust by expelling extremely hot gases through a rocket nozzle. Unlike a conventional chemical rocket engine, which heats propellant through a chemical reaction, the MET uses a solar powered, microwave energy source to generate a hot plasma at its core that heats the propellant to generate thrust. The use of non-toxic water propellant ultimately enables simpler, safer, and more cost-efficient operations both on Earth and in space.

"We have been doing multiple burns that raise the orbit of the spacecraft. Without propulsion, the spacecraft's altitude decreases by about 50 meters per day. Now that we have been performing these burns, the spacecraft's altitude has increased by nearly a kilometer and is growing," said Momentum Chief Executive Officer John Rood. "We have been increasing the frequency of these burns and we are raising the orbit to a target value of 538 km circular altitude. We will use this orbit to release the Zeus satellite for our Qosmosys customer – marking the first time Momentum will achieve a custom orbital delivery service."

Momentum has incrementally been increasing the duration of each MET firing and has reached its goal of 5-minute firings. The electrical power system, including batteries and solar arrays have been supporting the high power (1000+ Watts) operation of the MET. The spacecraft's heat management system has operated effectively, keeping all critical component temperatures well below their maximum thresholds.

"The MET technology, which we are pioneers in commercializing, has key safety, efficiency, and sustainability advantages with the performance to make extraordinary missions happen for our customers," said Momentum Chief Technology Officer Rob Schwarz. "We're already achieving burn times that are consistent with the operational times required for our missions and we anticipate significant opportunities for this technology in commercial and national security applications. From the near-term demand of low-Earth orbit transportation missions to support for military applications, to future satellite servicing in GEO, to one day refueling with water sourced from the Moon and beyond – the Momentum MET is designed to be a mainstay of new ways of operating in space."

The Vigoride OSV's Attitude Control and Reaction Control Systems also use water as a propellant and were [recently tested and fully commissioned](#). With its water-based propulsion systems, Momentum aims to offer cost-effective, efficient, safe, and environmentally friendly propulsion to meet the demands for in-space transportation and infrastructure services.

### 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.

### 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 or its management team's expectations, hopes, beliefs, intentions or strategies regarding the future, projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, 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 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 7, 2023, 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](http://www.sec.gov) and the Investor Relations section of our website at [investors.momentum.space](http://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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