

Narrative

Momentum Space LLC (“Momentum”) requests a thirty-day extension from August 13, 2022 to September 12, 2022, of its previously granted application for special temporary authority (“STA”),¹ in order to continue to permit communications with the Vigoride-3 spacecraft (“VR-3”) and address spacecraft anomalies. Since the grant of the last STA application, VR-3 has successfully deployed four customer payloads.² Momentum believes that the deployments have resulted from a combination of its communications efforts and the failsafe deployment mechanism onboard VR-3.³ By sending commands to VR-3 to shut down non-critical systems, Momentum believes that VR-3 has been able to use the limited power it has been able to generate to focus on deploying customer payloads and in the future may be able to establish persistent two-way communications links. Accordingly, for these reasons, Momentum requests an extension of authority for an additional 30 days.⁴

¹ See Stamp Grant, Momentum Space LLC, IBFS File No. SAT-STA-20220628-00066 (granted July 13, 2022); Stamp Grant, Momentum Space LLC, IBFS File No. SAT-STA-20220527-00056 (granted June 9, 2022); *see also* Stamp Grant, Momentum Space LLC, IBFS File No. SAT-STA-20211216-00195 (granted April 28, 2022).

² See Momentum Inc., *Momentum First Demonstration Status Update #4*, Business Wire (Aug. 2, 2022), available at <https://www.businesswire.com/news/home/20220801005903/en/>; Momentum Inc., *Momentum Inc. Announces Second Quarter 2022 Financial Results* (Aug. 11, 2022), available at <https://www.businesswire.com/news/home/20220810005843/en/Momentum-Inc.-Announces-Second-Quarter-2022-Financial-Results>. Momentum believes that 3 customer payloads remain onboard VR-3.

³ The failsafe timer system commences upon deployment and begins a countdown that will trigger the release of the deployable customer payloads after seven days elapses on the failsafe timer system, which is intended to ensure deployment in the event that the VR-3 bus experiences a failure and Momentum is unable to command the deployment. Momentum conducted Monte Carlo simulations (varying velocity and attitude) to assess the probability of re-contact under a contingency deployment condition and estimates a probability of re-contact between a deployed payload and VR-3 of less than 0.1%. The failsafe deployment mechanism triggers a payload deployment at most once every 2.5 orbits, ensuring that deployed payloads will not re-contact previously deployed payloads. Accordingly, each deployment can be treated as a separate, independent event. To the extent necessary, Momentum requests authority to modify its concept of operations and orbital debris analysis to include deployment of the customer payloads through the failsafe deployment mechanism.

⁴ Pending FCC action on the instant STA application, Momentum will cease all communications with VR-3 on August 12.