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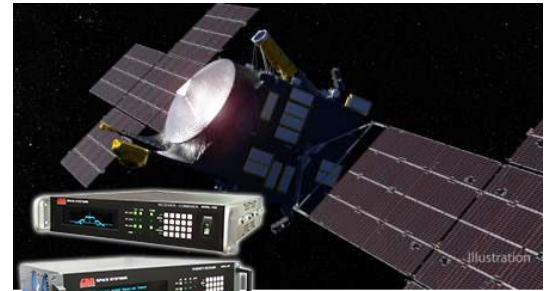
FOR IMMEDIATE RELEASE

GDP Space Systems Provides Telemetry Receivers for Upcoming NASA Jet Propulsion Laboratory Psyche Mission

(Horsham, PA) February 2021 – GDP Space Systems is excited to provide ground equipment to NASA’s Jet Propulsion Laboratory (JPL) in support of the upcoming Psyche mission. Originally purchased to support previous successful Mars programs, GDP’s telemetry receivers have now been repurposed to test the RF transmitter for the Psyche mission; a journey to a unique metal asteroid orbiting the Sun between Mars and Jupiter.

By spring of 2022, the spacecraft will be fully assembled and ready to ship to NASA’s Kennedy Space Center in Cape Canaveral, Florida, where it will launch in August 2022.

Psyche will fly by Mars for a gravity assist in May 2023 and in early 2026, it will slip into orbit around the asteroid, where it will spend 21 months gathering data for analysis. The Psyche spacecraft’s target is a metal-rich asteroid of the same name, which orbits the Sun in the main asteroid belt between Mars and Jupiter. Scientists think that, unlike rocky or icy asteroids, Psyche is largely iron and nickel and could be the heart of an early planet that lost its outer layers. Exploring the asteroid Psyche (about 140 miles, or 226 kilometers, wide) could lend valuable insight into how Earth and other planets formed.



These critical JPL missions presented a unique and difficult task for the Model 4426 Telemetry Receivers; to support extremely low bit rates and poor signal to noise ratio, down to 10 bits per second with convolutional encoding. For testing the Psyche transmitter, the receiver is now processing a QPSK signal at 1.08Mbps and is capable of operation up to 40Mbps. The 3rd generation telemetry receiver design provides comprehensive multi-link support for satellite and flight test ground station applications in a fully integrated package. In addition to the exclusive 4-Input Diversity Combiner Function and our Ethernet Outputs supporting IRIG 218-20, IRIG 106 Chapter 7 / Chapter 10, and IRIG 106-17 Appendix 2G Best Source Selection (DQE), the Model 4426 product line features an internal 70MHz Test Modulator Output function making it ideal for ground telemetry missions.

“Our receiver product line offers unmatched performance, features, and functionality in a cost-effective solution” stated Gary Thom, President of GDP Space Systems. “We are very excited to be a part of this historic mission to understand the origins of our planet.” GDP Space System’s telemetry receivers were also selected for use in the successful mission that landed the Curiosity rover on Mars for remote exploration and for the Perseverance rover, which is scheduled to arrive on Mars in February 2021.

About GDP Space Systems

For over 50 years, Acroamatics, Inc. and GDP Space Systems have been supporting the telemetry community as industry-leading suppliers of high-quality aerospace telemetry products for Flight Test, Missile Test, Range Safety, Launch Support and Satellite Command and Control applications. Our highly complementary product lines offer innovative end-to-end ground station solutions that address the complete product chain from Data Acquisition through Data Conversion and Distribution to Telemetry Processing and Display. Our world-class products, systems, and software offer unparalleled performance and superior functionality, which has been proven repeatedly in real-life testing by our customers.

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