ÅAC Microtec delivers IOD-1 GEMS, the first satellite in the Catapult IOD Programme

2019-03-08 ÅAC Microtec AB

ÅAC Microtec AB's subsidiary, Clyde Space, has delivered the first Satellite Applications Catapult in-orbit demonstration (IOD) satellite to the launch provider, Nanoracks, as part of the In-Orbit Demonstration (IOD) Program, funded by Innovate UK and the UKSA and led by the Catapult.

The 3U satellite, named IOD-1 GEMS (Global Environmental Monitoring Satellite), is scheduled for launch onboard a Cygnus uncrewed resupply spacecraft and will be delivered to the International Space Station (ISS) by an Antares rocket. The launch window at NASA Wallops (Virginia, USA) opens on 17 April 2019.

Assembled in under six months, Clyde Space has provided the satellite platform, payload integration, and testing of the IOD-1 GEMS spacecraft. The flight-proven Clyde Space platform utilizes the company's next generation power subsystems, high-speed s-band transmitter and high-performance onboard computer that support the customer's payload requirements.

The mission will demonstrate Orbital Micro Systems (OMS) miniaturized weather observation technology and is expected to deliver detailed weather information complementing data already available from large institutional satellites.

"We're delighted to provide our technical solution in support of this collaborative mission, which is a massive milestone for both the Catapult and OMS programmes. IOD-1 GEMS is a pioneering mission proving that detailed Earth science can be achieved on a much smaller and lower cost spacecraft. Our flight-proven spacecraft and advanced hardware are enabling a new wave of innovative space technologies, demonstrating both proof of mission concept and the nanosatellite's role in the 'New Space' space-based service market," says Craig Clark MBE, Clyde Space Founder and CSO.

OMS plan to deploy a constellation of small satellites post IOD-1 GEMS success as part of its Global Environmental Monitoring Satellite (GEMS) program which would provide temperature, humidity and precipitation readings at different levels throughout the atmosphere, with a 15-minute refresh rate for any global position. OMS anticipate delivering weather data to insurance, aerospace, maritime, energy and agriculture markets. Through this data, businesses that rely on accurate and timely weather information would be able to substantially improve operational efficiencies.

William Hosack, CEO of Orbital Micro Systems said *"The teamwork, innovative design, and integration processes of our engineers and the Clyde Space team kept this program on the necessary aggressive timeline that assured the on-schedule flight readiness of the satellite. The IOD-1 GEMS satellite is the first commercially-operated microwave radiometric weather observation instrument, and it's worth noting that OMS developed GEMS for the express purpose of serving commercial market needs. This project is the beginning of a new generation of market-driven weather data access and analytics which will directly empower business decisions across multiple markets and improve safety, security, and prosperity for everyone."*

The Satellite Applications Catapult, which was set up by the government to foster New Space enterprises, is providing six satellites on which companies can prove their technologies work on orbit. Five of these satellites will be manufactured by Clyde Space.

Chris Brunskill, the Head of Access to Space at the Catapult said *"We're really excited to see the delivery of the first mission in the IOD Programme. Our aim is to support new businesses in the space sector by providing low-cost, fast access to space. Through our partnership with Clyde Space, Nanoracks and OMS, the IOD-1 GEMS mission has shown how the Catapult enables responsive opportunities that have a tangible impact on the success of our partners in the UK space sector."*

FOR MORE INFORMATION:
Please visit: www.aacmicrotec.com or contact:

Acting CEO Mats Thideman , investor@aacmicrotec.com
Chairman of the board Rolf Hallencreutz, investor@aacmicrotec.com

ABOUT ÅAC MICROTEC
ÅAC Microtec and its subsidiary Clyde Space offer a full turnkey mission service from design to on-orbit operations including reliable platforms in the range of 1 to 50 Kg; customizable to suit our customers' requirements. Our end-to-end service package enables our customers to reach their mission goals with a single, trusted point of contact. In addition, we supply a full range of subsystems for cube satellites and small satellites.

ÅAC Microtec's shares are traded on Nasdaq First North Stockholm. G&W Fondkommission,, e-mail ca@gwkapital.se, telephone +46 8 503 000 50, is the Certified Adviser.

Further Sources:
https://sa.catapult.org.uk/news/uk-to-send-new-paradigm-in-weather-forecasting-into-space/