



ÅAC Microtec subsystems successfully commissioned on Japanese missions

2019-04-17 ÅAC Microtec AB

Subsystems supplied by space technology experts, ÅAC Microtec, for the Japanese missions RISESAT and ALE-1 have been successfully deployed in orbit. The spacecraft were integrated on the Japanese Epsilon-4 launcher and successfully deployed on Low Earth Orbit on January 18, 2019 from the Uchinoura Space Center in southwestern Japan. Contact has now been established with RISESAT and ALE-1 and both are performing as planned.

This is the latest launch and operation success for flight hardware from AAC Clyde Space and is testimony to the company's innovative technology, adding to the company's respected track record with flight heritage and success in the Japanese market.

"Missions such as RISESAT and ALE-1 are prime examples of how the Japanese market is pioneering new applications in space. The high-quality spacecraft solutions provided by AAC Clyde Space has led to a strong foothold in this market and our flight-proven solutions are continuing to enjoy a great demand in the Japanese market," says Iraklis Hatziathanasiou, VP of Business Development.

RISESAT (Rapid International Scientific Experiment Satellite) is led by Tohoku University and carries earth observation cameras as well as experiments to investigate new attitude control systems and laser communications technologies.

ALE-1 spacecraft, the first spacecraft of ALE Co., Ltd., will create man-made meteors, that should be visible with the naked eye. "Meteor showers" will be created by releasing half-inch pellets from micro-satellites, that burn through a process known as plasma emission as they re-enter the atmosphere, creating the appearance of meteor shower on the ground. ALE-1 is a precursor to a further launch, ALE-2, expected in 2019.

For RISESAT, AAC Clyde Space supplied high-performance, low-power onboard computers and mass memory, together with custom developed power subsystems. These systems will support several payloads on this a 55 kg class spacecraft. For ALE-1, AAC Clyde Space supplied the Sirius TCM, a mass memory module that incorporates telemetry and telecommand functionality and is designed with focus on high reliability, resiliency and performance. ALE-1 utilizes the TCM as the communication interface with compatible ground station services.

Mr. Toshinori Kuwahara, Ph.D, Associated Professor of Tohoku University and Technical Advisor of ALE said *"After the successful launch and smooth orbit insertion by the Japanese launch vehicle Epsilon #4, RISESAT and ALE-1 are now orbiting in Sun Synchronous Orbits with altitudes of about 500 km, and both are functioning very well. Plug-and-Play on-board computers applied to RISESAT enabled system integration of more than 14 cameras, a radiation sensor, and a laser transmission terminal as its payload. It is now providing valuable mission data to us on an everyday basis. ALE-1 commissioning is now ongoing, and TCM could successfully establish communication links between Tohoku University's operation centre and the ALE-1. We are sure that advanced products of ÅAC Microtec and its subsidiary Clyde Space will become enabling technologies for our future space utilization and exploration."*



FOR MORE INFORMATION:

Please visit: www.aacmicrotec.com and www.clyde.space or contact:

Acting CEO, Mats Thideman investor@aacmicrotec.com

Chairman of the board Rolf Hallencreutz, investor@aacmicrotec.com

ABOUT ÅAC MICROTEC AB

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. Their end-to-end service package enables our customers to reach their mission goals with a single, trusted point of contact. In addition, they supply a full range of subsystems for cube satellites and small satellites. The company has offices in Sweden, the UK and USA.

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

About CubeSats

CubeSats are fully functional satellites. CubeSat have standard dimensions are measured in standard "Units" or "U's" with a 1U CubeSat being 100mm x 100mm x 110mm and about 1.1kg, a 3U CubeSat being 100mm x 100mm x 330mm and about 4kg, and so on. CubeSats typically piggy-back on other launches. The range of applications of CubeSats is increasing rapidly as the technology and capabilities of these tiny spacecraft continue to improve.

Further Sources:

<http://star-ale.com/en/>

<http://star-ale.com/en/news/317/2019/01/04/>

https://space.skyrocket.de/doc_sdat/hodoyoshi-2.htm

https://space.skyrocket.de/doc_sdat/ale-1.htm

http://global.jaxa.jp/press/2018/11/20181130_epsilon4.html

http://global.jaxa.jp/press/2019/01/20190118_epsilon4.html

<https://www.tohoku.ac.jp/japanese/2019/02/press-20190213-01-RISESAT.html> (Japanese)