

NanoRacks Deploys Largest Satellite From International Space Station To Date

RemoveDEBRIS Now in Orbit

Houston, Texas, June 20 2018 – Early this morning, NanoRacks successfully deployed the RemoveDEBRIS (RemDeb) satellite from the International Space Station via the Company's commercially developed Kaber Microsatellite Deployer (Kaber). This is the third major microsatellite deployment for NanoRacks, and the largest satellite to ever be deployed from the International Space Station.

RemoveDEBRIS, one of the world's first attempts to address the build-up of dangerous space debris orbiting Earth, was launched to the Space Station via NanoRacks on the <u>14th SpaceX</u> <u>Commercial Resupply Mission in early April</u>.

The satellite was designed, built and manufactured by a consortium of leading space companies and research institutions, led by the Surrey Space Centre at the University of Surrey and funded in part by the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement #607099. The consortium consists of: Airbus, Ariane Group (France); Surrey Satellite Technology Ltd (United Kingdom); Innovative Solutions In Space (Netherlands); CSEM (Switzerland); Inria (France); and Stellenbosch University (South Africa).

NanoRacks created the Kaber system to accommodate the increasing customer demand for commercial opportunities to deploy MicroSats from the International Space Station. Kaber offers deployments for satellites up to approximately 85 kilograms, and NanoRacks is able to provide Kaber launches on both SpaceX and Northrop Grumman Innovation Systems (previously Orbital ATK) commercial resupply missions.

The RemoveDEBRIS mission will perform four experiments, which will be tested on two CubeSats to-be-deployed from the larger satellite, acting as artificial targets. These experiments include both the first harpoon capture in orbit and a net that will be used on a deployed target. The team will also test a vision-based navigation system that uses cameras and LiDaR technology to observe CubeSats that will be released from the main spacecraft. Finally, the RemoveDEBRIS craft will deploy a large drag sail that will cause the orbit of the spacecraft to rapidly decay until it is destroyed in the Earth's atmosphere.

"It's wonderful to have helped facilitate this ground-breaking mission," says NanoRacks External Payloads Manager, Conor Brown. "RemoveDEBRIS is demonstrating some extremely exciting active debris removal technologies that could have a major impact to how we manage space debris moving forward. This program is an excellent example of how small satellite capabilities have grown and how the Space Station can serve as a platform for missions of this scale. We're all excited to see the results of the experiments and impact this project may have in the coming years."

Thank you to NASA's International Space Station Program Office and JAXA for their continued support of NanoRacks' International Space Station satellite deployment programs.

To learn more about the RemoveDEBRIS satellite, click here.

To learn more about NanoRacks Kaber Deployer, click here.

For continued updates, be sure to follow <u>@NanoRacks</u>on Twitter.

For media inquiries, please email Abby Dickes at adickes@nanoracks.com.

About NanoRacks

NanoRacks is the world's first commercial space station company with an existing customer base. The company offers low-cost, high-quality solutions to the most pressing needs for satellite deployment, basic and educational research and both at home and in 30 nations worldwide for those new to the industry and aerospace veterans. Since 2009, Texas-based NanoRacks has truly created new markets and ushered in a new era of in space-services.

In July 2015, NanoRacks signed a teaming agreement with Blue Origin to offer integration services on their New Shepard space vehicle. NanoRacks, along with partners at ULA and Space Systems Loral was also selected by NASA to participate in the NextSTEP Phase II program to develop commercial habitation systems in low-Earth orbit and beyond.

As of February 2018, over 600 payloads have been launched to the International Space Station via NanoRacks services, and our customer base includes the European Space Agency (ESA) the German Space Agency (DLR,) the American space agency (NASA,) US Government Agencies, Spire, Millennium Space Systems, Space Florida, NCESSE, Virgin Galactic, pharmaceutical companies, and organizations in Vietnam, UK, Romania and Israel. Spire, Millennium Space Systems, Space Florida, NCESSE, Virgin Galactic, and organizations in Vietnam, UK, Romania and Israel. Spire, Millennium Space Systems, Space Florida, NCESSE, Virgin Galactic, pharmaceutical companies, and organizations in Vietnam, UK, Romania and Israel.