



## Nanoracks Signs Agreement with Canada's Maritime Launch on Re-Use of C4M Upper Stages for In-Orbit Space Outposts

**October 24, 2019 – Washington, DC** – Nanoracks, the world's leading provider of commercial access to space, is pleased to announce that it has signed an agreement with Canada's Maritime Launch Services to work on re-purposing and re-using spent C4M upper rocket vehicle stages, which would be in-orbit after launch missions from Nova Scotia's Canso Spaceport, Canada's first and only commercial spaceport.

In 2018, Nanoracks was one of the awardees of a study contract by NASA to develop the future of commercial spaceflight in low-Earth orbit. Through that award, Nanoracks has been investigating the commercial case for repurposing in-space hardware, and this agreement with Maritime Launch further establishes the company's commitment to innovating a more affordable and less-risky pathway to establishing in-space habitats ('Outposts') for future crewed missions, instead of fabricating modules on the ground, and subsequently launching them to orbit.

"The proven heritage of the C4M launch family, with over 220 launches to date, will provide Nanoracks with plenty of opportunities to choose the appropriate missions on which to test and develop the proposed upper stage conversions into resilient automated habitats, and one day human habitats," says Steve Matier, Maritime Launch CEO. "Canada has a reputation for providing in-space robotics for the International Space Station, such as the CANADARM and the Dextre programs. With Nanoracks, we hope to see this country's legacy expanding further into economically viable space habitats, and to organize the related launch missions to bring equipment and supplies to these new working structures."

"It's Nanoracks vision to re-purpose upper stages of launch vehicles and convert them into Outposts. We envision populating the solar system with cost-efficient platforms, that can serve as hotels, research parks, fuel depots, storage centers and more," says Nanoracks CEO Jeffrey Manber. "We are proving time and time again that there are new ways to look at how we explore deep space, and that we need to think creatively, but work cost-efficiently. This agreement with Maritime Launch will provide us with the in-orbit test bench second stage articles to do exactly that, and to grow our space industry even further."

For additional updates, follow [@Nanoracks](https://twitter.com/Nanoracks) on Twitter.

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**About Nanoracks**

Nanoracks LLC, an XO Markets company, is the world's first commercial space station company with an existing customer base. Nanoracks believes commercial space utilization will enable innovation through in-space manufacturing of pharmaceuticals, fiber optics – and more, allow for transformational Earth observation, and make space a key player in finding the solution to Earth's problems.

Today, the company offers low-cost, high-quality solutions to the most pressing needs for satellite deployment, basic and educational research, and more –in over 30 nations worldwide. Since 2009, Texas-based Nanoracks has truly created new markets and ushered in a new era of in-space-services, dedicated to making space just another place to do business.

In 2017, the Company announced their long-term plans via the Nanoracks Space Outpost Program. This program is dedicated to the repurposing of the upper stages of launch vehicles in-space and converting these structures into commercial habitats, both humanly and robotically tended, throughout the solar system.

XO Markets, the world's first commercial space holding company, includes Nanoracks, DreamUp, Nanoracks Space Outpost Europe, Nanoracks UAE, and more.

### **About Maritime Launch**

Maritime Launch Services Ltd, with headquarters in Halifax, Nova Scotia brings together the necessary skills, assets, launch vehicle technology, and infrastructure to serve the rapidly growing commercial space launch requirements for satellites, out of Canada's first commercial spaceport located near the city of Canso. First launches are scheduled to begin in 2021.

Leveraging highly reliable and mission-proven launch vehicles designed by Yuzhnoye, Maritime Launch will offer the most efficient lift capacity to address the launch requirements of the fast-growing LEO space industry worldwide. With over 200 successful launches in the Cyclone-4M (C4M) family, this medium-class rocket can carry a capacity of 3350 kg to Low Earth Orbit, or up to 5000 kg to certain lower altitudes and inclinations.