

NordSpace Announces New Advanced Manufacturing for Aerospace Lab (AMA Lab), Funding from Ontario Centre of Innovation

Canada's push for sovereign space capabilities gains momentum with NordSpace's new AMA Lab, set to revolutionize rocket engine and pressure vessel production

MARKHAM, ONTARIO, CANADA, October 28, 2025 /EINPresswire.com/ -- Today, [NordSpace](#) announced the establishment of its new Advanced Manufacturing for Aerospace Lab (AMA Lab), alongside receiving funding from the [Ontario Centre of Innovation](#) (OCI) through its Critical Industrial Technologies Initiative.

This marks a significant step toward commercializing NordSpace's proprietary orbital-class Hadfield rocket propulsion engines in 2026, reinforcing Canada's path to sovereign space launch capabilities and opening new markets for export.

"Congratulations to NordSpace on this important milestone for Ontario's aerospace and space sector," said Vic Fedeli, Minister of Economic Development, Job Creation and Trade. "The new Advanced Manufacturing for Aerospace Lab will strengthen

Ontario's capabilities in advanced manufacturing and next-generation propulsion. Ontario's defence industry is a priority pillar of our economy, employing over 13,000 people and



NordSpace - Hadfield Engine 3D Print



Minister Vic Fedeli Visits NordSpace to Sign Rocket

generating \$5.2 billion in annual revenues, and we are proud to advance projects that create good-paying jobs, open new markets, and advance our national space capabilities.”

NordSpace, a leading Canadian space technology company founded in 2022, is investing heavily in its metal additive manufacturing capabilities at its Markham facility. The AMA Lab will leverage novel AI-powered numerical design models to enhance the

efficiency and performance of its in-house 3D-printed Hadfield rocket engines and turbo machinery. Supported by OCI’s Critical Industrial Technologies initiative, which focuses on integrating technologies such as AI, 5G, and robotics into key sectors such as advanced manufacturing, this project will validate new engine configurations at NordSpace’s Canadian Space Research Range in Northeastern Ontario, where the company tests its rocket engines.



NordSpace - Darkhorse First Test

“This investment in AI-driven advanced manufacturing is a game-changer for Canada’s space industry,” said Rahul Goel, CEO and Founder of NordSpace. “By accelerating our Hadfield engine development, we are not only building cutting-edge technology but also creating high-skilled jobs and positioning Canada as a global leader in space innovation. Space is a critical domain for our sovereignty, security, and economy, and NordSpace is committed to ensuring Canada takes a leadership role on the world stage.”

The AMA Lab aims to reduce Hadfield engine development time by 15-20% by adopting AI-driven design models, enabling faster iterations and the discovery of optimal engine operating regimes unattainable through traditional methods. This will enhance engine performance, reduce development costs, and accelerate time to market for NordSpace’s Tundra and Titan orbital launch vehicles, designed to carry up to 500 kg and 5,000 kg to Low Earth Orbit (LEO) respectively. In addition to additive manufacturing, the AMA Lab will also be researching and developing novel materials, advanced composites, and robotic manufacturing techniques ranging from large scale Laser Direct Energy Deposition (DED) and Automated Fiber Placement (AFP).

The project is expected to create 4-5 highly skilled full-time roles within one year of completion, focusing on AI/software engineering and advanced manufacturing technician positions. Within five years, NordSpace anticipates adding up to 20 additional roles to support ongoing AI integration into its engineering design and manufacturing operations, positioning the company at the forefront of advanced manufacturing for precision space hardware in Canada.

“OCI is proud to support NordSpace as they advance Canada’s sovereign space capabilities,” said Claudia Krywiak, President and CEO of the Ontario Centre of Innovation (OCI). “The AMA Lab will help accelerate Hadfield engine commercialization, create high-skilled jobs, and strengthen Ontario’s position in advanced space manufacturing.”

NordSpace has privately funded the Hadfield engine’s development over the past two years, progressing from a clean-sheet design to operational prototypes which are now ready for launch. The company has successfully conducted integrated engine hot fire tests under simulated operational conditions, optimized the engine’s mass, performance, and reliability for integration into its commercial launch vehicle, and is aiming to conduct a historic first commercial launch for Canada from the company’s spaceport in Newfoundland and Labrador (Atlantic Spaceport Complex, ASX) this year.

Canada remains the only G7 and 5 Eyes nation without orbital launch capabilities, making NordSpace’s efforts vital for national sovereignty and security. The AMA Lab will further establish Canada as a hub for space innovation, supporting applications such as wildfire monitoring, connectivity, and defense. NordSpace continues to work closely with the Government of Canada, the Province of Ontario, and industry partners to ensure the success of this initiative.

For more information on NordSpace’s AMA Lab or to explore partnership opportunities, visit www.nordspace.com or contact contact@nordspace.com. NordSpace will also present updates on this initiative at the Canadian Space Launch Conference on May 5 1, 2026, in Ottawa.

About NordSpace

NordSpace, established in 2022, develops vertically integrated solutions for responsive orbital launch vehicles, spaceports, turn-key satellites, and mission-critical software systems. 100% designed, built, and flown in Canada to go from anywhere on Earth to anywhere in space. The company’s mission is to advance life on Earth through space, delivering innovation, jobs, national security, and sovereignty.

About the Ontario Centre of Innovation

The Ontario Centre of Innovation (OCI) brings industry, academic, and government partners together to invest in collaborative R&D, technology development, and commercialization opportunities that generate the highest return on innovation for Ontarians. As an ecosystem connector, OCI initiates unparalleled partnership opportunities, develops and manages successful industry-academic collaborations, supports high-potential SMEs in commercializing ground-breaking research, and provides hands-on training and skills development opportunities for the next generation of highly-skilled talent. OCI drives economic growth and job creation through investments in the development, commercialization, and adoption of advanced technologies. For more information: <https://www.oc-innovation.ca>

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