

Orbotic Systems Awarded Phase II Contract from NOAA to Advance Space Weather Forecasting and Space Sustainability.

This critical milestone will enable the development of a fully operational prototype, set to be space-ready within the next 24 months.

THOUSAND OAKS, CA, UNITED STATES, October 23, 2024 /EINPresswire.com/ --Orbotic Systems is proud to announce it has been awarded a Phase II contract from National Oceanic and Atmospheric Administration (NOAA)'s Small Business Innovation Research (SBIR) program to further develop its revolutionary WIND technology, a realtime space weather forecasting system. The company's efforts focus on advancing space sustainability through three key areas: space weather monitoring, satellite deorbiting, and space debris removal. With the increasing number of satellites orbiting Earth, the threat posed by both space debris and space weather is growing rapidly. Orbotic Systems is at the forefront of developing solutions to tackle these hazards from multiple angles:

1. Space Weather Forecasting with WIND Technology



Space Weather and Satellite



Severe space weather, such as geomagnetic storms, can cause significant satellite losses by increasing atmospheric drag and forcing spacecraft to lose altitude. WIND, Orbotic Systems' compact and advanced space weather technology, will provide NOAA's Space Weather Prediction

Center (SWPC) with real-time, high-precision atmospheric data. This will help forecast geomagnetic storms, prevent satellite losses, and enhance space traffic management. WIND will play a pivotal role in space sustainability by safeguarding both satellites and crewed missions.

2. Satellite Deorbiting Solutions

Orbotic Systems is also pioneering solutions to safely deorbit retired or malfunctioning satellites. The company's upcoming deorbiting technologies will allow for precise re-entry of outdated satellites, reducing the accumulation of debris in low Earth orbit (LEO) and minimizing the risk of collisions in increasingly crowded space environments.

3. Space Debris Removal Technology

In addition to satellite deorbiting, Orbotic Systems is actively developing its space debris removal net, designed to capture and safely dispose of small to medium-sized debris. This innovative approach aims to prevent further escalation of the space debris problem and enhance the longterm sustainability of space operations.

Commitment to Space Sustainability

"We are incredibly excited about this Phase II award and what it means for the future of space sustainability," said Erik Long, CEO of Orbotic Systems. "Our efforts to develop the WIND system, alongside our satellite deorbiting and debris removal technologies, position Orbotic Systems as a leader in ensuring a safe and sustainable space environment for the next generation."

The WIND technology, set to be fully developed within the next 24 months, will provide the space industry with critical tools to predict and mitigate the risks of geomagnetic storms. Paired with Orbotic Systems' satellite deorbiting and space debris removal technologies, the company is poised to revolutionize space sustainability efforts and support the safe growth of space-based infrastructure.

"As the successor to WINCS, WIND fulfills its promise by pushing the boundaries even further. While WINCS introduced the groundbreaking Small-Deflection Energy Analyzer (SDEA) for unparalleled ion analysis in the ionosphere, WIND overcame the challenges of ion sources and extended the SDEA's capabilities to neutrals in the thermosphere," said Dr. Fred Herrero, Project Director. "With this NOAA Phase 2 award, our goal is clear: to deliver a fully functional prototype, ready to be launched into space."

Orbotic Systems

Headquartered in Thousand Oaks, California, Orbotic Systems was founded to address the growing threat of space debris and ensure the long-term sustainability of space. By developing advanced technologies for satellite deorbiting, space debris removal, and real-time space weather forecasting, Orbotic Systems is committed to fostering a safer, cleaner, and more sustainable space environment.

For more information, visit OrboticSystems.com or contact info@orboticsystems.com.

National Oceanic and Atmospheric Administration (NOAA) For more information visit <u>https://techpartnerships.noaa.gov/sbir/</u> Jane Ielmini Orbotic Systems +1 805-941-1028 email us here Visit us on social media: Facebook X LinkedIn Instagram YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/744252970

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire[™], tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.