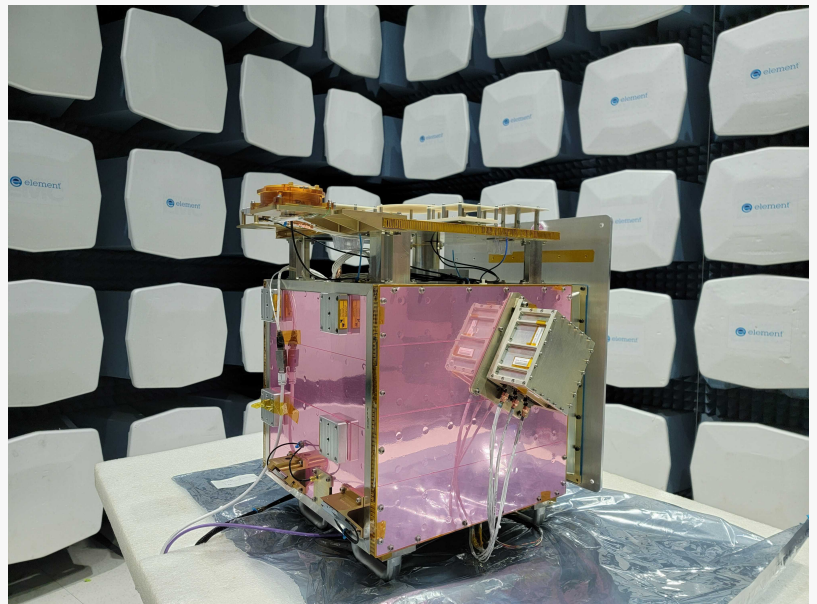


Loft Orbital to Work with US Space Force to Develop Satellite Onboard Edge Computing Capability

SAN FRANCISCO, CA, UNITED STATES, May 5, 2021 /EINPresswire.com/ -- Loft Orbital, a Space Infrastructure-as-a-Service company, has been awarded a Phase II Small Business Innovation Research (SBIR) contract by AFWERX and sponsored by the U.S. Space Force Space and Missile Systems Center's Portfolio Architect office. The contract will provide funding to support Loft Orbital's development of a high-performance, reprogrammable onboard edge computing environment and associated applications.

This will address a major government and commercial operator need for large constellations of satellites to

execute autonomous decision-making and mission tasks. Under this contract, Loft Orbital will develop its next-generation onboard processor to support customer and third party "massless payloads" onboard. This onboard processor will function as a "brain" on Loft Orbital spacecraft, providing an environment to host applications for sensor data processing, mission autonomy, satellite self-protection, or any other application requiring advanced computing at the edge. Other potential applications of the edge processor include payload and telemetry data processing, as well as the ingestion of other space assets' data through intersatellite links. This space edge processor allows individual satellites to act as computing nodes within a mesh-connected network of other satellites, ground stations, and cloud datacenters, yet capable of advanced processing in isolation in denied or congested communications environments. In addition, Loft will develop a machine learning software package to autonomously detect, identify and mitigate cyber threats onboard the spacecraft, an important capability for government missions.



Loft Orbital's YAM-3 Payload Hub for Launch in June 2021

"There is an unprecedented convergence occurring between commercial and government space

infrastructure. Capabilities, threats, and vulnerabilities are now increasingly shared between these communities,” said Andrew Berg, Loft Orbital’s VP of Business Development. “We’re pleased that SMC is placing its confidence in Loft Orbital to advance its innovative onboard processing architecture. This commercially-derived enhanced capability will offer a leap ahead in the pursuit of seamless Joint All-Domain Command and Control in support of national security space objectives, and we are excited to be selected as a partner to SMC in defining that way ahead.”

Loft Orbital was previously awarded an AFWERX SBIR Phase I contract. In combination with private capital investment, this SBIR Phase II award will allow Loft Orbital to enhance this processor based on US Space Force feedback from Phase I. Loft Orbital is targeting a future mission as the first flight of this second-generation processor, with the goal of making it as a standard offering for US Government satellite programs.

About Loft Orbital

Loft Orbital deploys and operates space infrastructure as a service, providing rapid, reliable, and simplified access to orbit for customer missions. The company has developed modular hardware and software technologies that enable any payload to fly on any standard, commodity satellite bus. By remaining payload agnostic and holding these satellite buses in inventory, Loft Orbital is able to deliver

unprecedented speed-to-orbit without compromising reliability or schedule for even the most demanding customer payloads. For Payload-as-a-Service missions, Loft Orbital offers quarterly launches to ensure maximum schedule flexibility.

AFRL and AFWERX have partnered to streamline the Small Business Innovation Research process in an attempt to speed up the experience, broaden the pool of potential applicants and decrease bureaucratic overhead. Beginning in SBIR 18.2, and now in 20.R, the Air Force has begun offering 'Special' SBIR topics that are faster, leaner and open to a broader range of innovations.

For more information about Loft Orbital or how to book a mission, please visit www.loftorbital.com or contact us at info@loftorbital.com.

For press inquiries, please contact press@loftorbital.com.

Mitchell Scher
Loft Orbital Solutions Inc.
+1 201-956-5392
mitchell@loftorbital.com
Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/540277514>

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.

© 1995-2021 IPD Group, Inc. All Right Reserved.