

AiRANACULUS® Awarded Second NASA Contract for Advanced Space Communications System

Solution Will Unify Management of Space and Terrestrial Networks

CHELMSFORD, Mass. ([PRWEB](#)) June 24, 2021 -- AiRANACULUS®, a private, Massachusetts-based technology company providing early stage research, development, prototyping and consulting services, announced it has been awarded a second NASA Small Business Innovation Research contract for development of an advanced space communications system to support upcoming missions to the Moon and Mars.

Under the new contract, AiRANACULUS will develop a first-of-its-kind Intelligent Network Slicing and Policy-based Routing Engine solution (INSPIRE) to manage diverse traffic across shared satellite networks. The project leverages Network Slicing features in 5G networks to logically partition and securely manage multiple application services. In addition, INSPIRE will enable new levels of policy control. Given the long transmission distances for moon and interplanetary satellite missions, communication functions and operations currently have to be planned well in advance. The AiRANACULUS solution will use continuous assessment of the ambient RF environment to feed machine learning and artificial intelligence algorithms to make routing decisions without having to wait for ground-based assessment and control of anomalous situations.

“The project will provide NASA a unified traffic management architecture for both space and ground communications, dramatically simplifying control of these complex networks,” said Dr. Apurva N. Mody, Founder and CEO of AiRANACULUS. “The self-adjusting communications network will introduce new levels of ultra-high availability and efficiency with significant benefit for commercial and military terrestrial networks in the future.”

AiRANACULUS was previously awarded a NASA contract for development of a next-generation, cognitive communications network called CLAIRE. The CLAIRE system incorporates innovative network sensing and machine learning mechanisms to autonomously detect, learn from and adapt to changes in transmission spectrum utilization to optimize mission communications.

For more information, please visit www.airanaculus.com.

About AiRANACULUS

AiRANACULUS (www.airanaculus.com) is at the forefront in Intelligent RF and Networking Solutions for applications ranging from Space communications to Smart Cities. The company has assembled the world’s leading experts to provide algorithms, reference architectures and products in signal processing, cross-layer analysis, cybersecurity and networking to create spectrum aware technologies capable of re-configuring radio and sensor systems for optimal performance in congested and contested environments.



Contact Information

Bill Mello

Airanaculus

<http://www.airnaculus.com>

9788770051

Online Web 2.0 Version

You can read the online version of this press release [here](#).