Radiant Space Systems, Inc. Awarded Competitive Grant from the U.S. National Science Foundation

March 14, 2024

Radiant Space Systems, Inc. is thrilled to announce they are the recipient of a U.S. National Science Foundation (NSF) Phase I Small Business Innovation Research (SBIR) grant for research related to artificial gravity stabilization systems. The performance of this award will take place from March 2024, until approximately September 2024.

Says Lee Wilson, PhD, principal investigator for this award, “We are truly grateful to the NSF for funding this important work. Stabilization systems are critical for any form of artificial gravity in space, and artificial gravity is essential for humanity’s expansion into the solar system. We are proud to be doing our part in moving humanity forward.”

Erwin Gianchandani, NSF Assistant Director for Technology, Innovation and Partnerships said, “NSF accelerates the translation of emerging technologies into transformative new products and services. We take great pride in funding deep-technology startups and small businesses that will shape science and engineering results into meaningful solutions for today and tomorrow.” All proposals submitted to the NSF SBIR/STTR program, also known as America’s Seed Fund powered by NSF, undergo a rigorous merit-based review process.

Radiant Space Systems, Inc. is developing an entirely new class of space habitats which will enable humans to live and work in space without endangering their health. In the near future, improvements in launch capability will radically increase the number of people traveling to space to take advantage of what can only be done in microgravity. These include researchers studying the next lifesaving medicines, workers manufacturing high-purity semiconductors for the next generation of computers, and tourists wanting to experience the freedom of space and the sight of Earth. These individuals share a common need: Easy access to microgravity to fulfill their purpose of being in space while simultaneously avoiding significant health impacts from microgravity exposure. Both microgravity and artificial gravity need to be accessible in the same space habitat. Development of these platforms would help enable an acceleration of in-space R&D, and support a higher throughput of in-space experimentation and R&D. The solution is very large, expandable,

non-rotating space habitats, with an internal rotating centrifuge large enough for astronauts to live and work in when not needing microgravity. These centrifuges need an advanced stabilization system because, as astronauts move around the centrifuge, the center-of-gravity shifts. Because the centrifuge is rotating, these center-of-gravity shifts would induce a wobble—something our system would protect against.

Radiant Space Systems, Inc. is grateful for the support from the Silicon Valley Small Business Development Center, who provided advice in relation to proposal preparation for this award.

About Radiant Space Systems, Inc.:

Radiant Space Systems, Inc. is a U.S.-based space startup developing both manned and robotic space habitats.

About America's Seed Fund by the U.S. National Science Foundation:

America's Seed Fund powered by the National Science Foundation (NSF) awards $200 million annually to startups and small businesses, transforming scientific discovery into products and services with commercial and societal impact. Startups working across almost all areas of science and technology can receive up to $2 million in non-dilutive funds to support research and development (R&D), helping de-risk technology for commercial success. America's Seed Fund is congressionally mandated through the Small Business Innovation Research (SBIR) program. The NSF is an independent federal agency with a budget of about $9.5 billion that supports fundamental research and education across all fields of science and engineering. For more information, visit seedfund.nsf.gov.

About Small Business Development Centers:

Small Business Development Centers provide counseling and training to small businesses including working with SBA to develop and provide informational tools to support business start-ups and existing business expansion. Find an SBDC in your area here: https://www.sba.gov/local-assistance/resource-partners/small-business-development-centers-sbdc