DENNIS ANDRUCYK: Facilitating success by viewing his laboratory through a technology transfer lens

National Aeronautics and Space Administration, Goddard Space Flight Center

Dennis Andrucyk

Since becoming director of the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center in 2019, Dennis Andrucyk has steadfastly supported the center's technology transfer efforts on multiple levels—from small-business partnerships to high-profile collaborative strategies for new commercial markets.

"Tech transfer only ever works if it's incentivized from the top down, and that's exactly what Dennis has done," said Kerry Leonard, Deputy Chief of Goddard's Strategic Partnerships Office (SPO). "He's great at seeing Goddard through a tech transfer lens. His proactivity has definitely helped our office generate some success stories over the past few years."

The office relies on the participation and collaboration of several groups across Goddard to complete technology transfer objectives, and with Andrucyk's support, this participation has increased across multiple sectors. By ensuring better accountability and transparency across divisions, Andrucyk directly improved communications and functionality, familiarizing himself with technologies, licenses and metrics for quality and quantity.

Additionally, Andrucyk has cultivated an environment supportive of the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) program. When NASA leadership visited Goddard in early 2020, center management, scientists, engineers, and program participants were encouraged to speak about their experiences and give facility tours to the visitors at the event.

"Events like these help Goddard's SBIR/STTR program participants and program leadership meet and put faces to email addresses," said Joe Famiglietti, Goddard SBIR/STTR lead. "Without support from upper management, the program would not be able to ask Goddard employees to take time out of the workday for these events."

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One specific example of Andrucyk's support for technology transfer is his direct involvement in licensing software for the NASA Autonomous Flight Termination Unit (NAFTU), a system that can independently determine if an unmanned rocket is off course and terminate the flight by self-destructing. NAFTU eliminates the need for ground personnel, transmitters, telemetry receivers, and radars historically used for the same purpose.

Originally developed at NASA's Kennedy Space Center, the program's development and certification activities transferred to Goddard's Wallops Flight Facility in 2020. From that moment onward, Andrucyk supported efforts across Goddard to validate and certify the software package.

Realizing that this game-changing technology required a copyright and promised to have profound implications for commercial markets as well as government entities, Andrucyk was instrumental in making the software available. Subsequently, eight companies have signed copyright licenses for the technology so far, with continued industry interest in NAFTU's unique capabilities.