extra Preserviews

Jeremy Gratsch

Head of the Office of Technology Transfer and Partnerships in the AFRL Materials & Manufacturing Directorate

Maintaining military aircraft can be a daunting job, whether on a flightline repairing helicopters and bombers, or on an aircraft carrier launching fighter jets and reconnaissance planes. With the varying hours of work each day and the ever-changing list of required tasks, one thing remains constant – the need for reliable materials. If that need is not met, the potential for a decline in national defense increases; therefore, the Air Force Research Laboratory (AFRL) has an organization at Wright-Patterson Air Force Base providing expertise in materials and advanced manufacturing, and inspection methods to solve force wide challenges.

The Materials and Manufacturing Directorate, or AFRL/RX, works to (1) understand the warfighters needs, (2) understand and maintain state of the art technology, and (3) connect, develop, and exploit science and technology to benefit Airmen and Guardians. Leading the charge in collaborating with businesses and universities to develop new technology and transferring those inventions to industry partners for manufacturing in order to meet those three tenets of AFRL/RX's vision is Jeremy Gratsch, the head of the Office of Technology Transfer & Partnerships for the directorate.

Gratsch, a former soldier and helicopter maintainer for the U.S. Army, is well-versed in providing insight into military technology, operations, and defense needs. Since April of 2020, he has been a member of the Office of Research and Technology Applications (ORTA), assisting in bringing new technology to the forefront of the Department of Defense's radar.

"As an ORTA," says Gratsch, "I see myself as an intermediary/ facilitator between our scientists and engineers and organizations outside of the U.S. Air Force, who can help us develop and commercialize our technologies to the benefit of the Department of Defense, as well as our economy."

His ORTA team is focused on structural materials, functional materials, manufacturing technology, and support for operations. Whether it is composites or metals, materials for survivability and protection, or electronics and sensors, the end result is providing materials and manufacturing-based solutions to related challenges within the current U.S. Air Force inventory of aircraft, ground support equipment, and other assets.

AFRL/RX is currently building out a patent license agreement with a new startup company in the flexible battery technology space. "One of the goals of this company is to integrate these batteries into wearables, clothing items, and portable power, which would have a multitude of uses in both the civilian and military markets," Gratsch describes. "We're happy to be a part of getting a new small business up and running while accelerating the commercialization AFRL-developed of technology."

A major part

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the ORTA is engaging and collaborating with innovative, agile companies that are not traditional defense contractors. Having a team of dedicated individuals with unique skillsets to transform the warfighter's needs into a deliverable product is paramount. Gratsch, recognizing this key component, remarks, "The highlight of my job is working with a team of extremely hardworking folks who are dedicated to exploring opportunities to accelerate technology transition and facilitating purposeful agreements that may push our technologies to the next level."

"When I came to AFRL I served on and eventually led the communications team for our directorate for many years," says Gratsch. "This opportunity provided a solid education in AFRL's mission, priorities, strategies, and research and development activities. When you lump my time in AFRL with my military experience, it provides a great foundation to be an ORTA."

ORTAs are responsible for developing collaborative interactions with industry, academia, and other government entities through an Air Force program called Technology Transfer and Transition (T3). There are 39 ORTAs in the United States, located at 18 Air Force bases, the Pentagon, and the United States Air Force Academy.

To learn more about the Air Force Research Laboratory Materials and Manufacturing directorate, please visit <u>https://www.afrl.af.mil/</u> <u>RX/</u>, or e-mail Jeremy Gratsch at jeremy.gratsch@us.af.mil.

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