NEWS RELEASE
Aug. 7, 2025

LLNL and Starris sign CRADA to support tactically responsive space missions

Starris and LLNL leaders to present UV SmallSat panel talk Aug. 13

Ontario, N.Y. / Livermore, Calif. — Lawrence Livermore National Laboratory (LLNL) and Starris: Optimax Space Systems and have signed a Cooperative Research and Development Agreement (CRADA), expanding production of LLNL's next-generation space domain awareness technology — with Starris as the manufacturing partner that can scale to meet the needs for proliferated constellations.

The first collaborative effort of the CRADA is an ultraviolet (UV)-infrared space-domain awareness system, based on LLNL's monolithic telescope technology, which will be the focus of a panel talk featuring Starris and LLNL leadership at the Small Satellite conference in Salt Lake City on Aug. 13.

The talk, "Ultraviolet Small Sat Opportunities for Space Domain Awareness and Monitoring," will explore how a UV wavelength band reveals phenomena that can be monitored for science and defense, plus share mission results from NASA's Deep Purple PTD-R, a 100-millimeter aperture satellite developed by LLNL to observe ultraviolet and short-wave infrared light. Also on the panel will be experts from Teledyne Space Imaging, Eoptic, and Optimax.

"Starris brings to the partnership the ability to scale production in support of an array of evolving small-satellite mission needs, with three decades of space-proven heritage," said Kevin Kearney, Starris Space Strategy Lead. "Optimax has been privileged to work with LLNL to develop and refine the monolithic telescope technology and is excited to extend the collaboration to encompass scalable payload solutions for responsive space."

The Starris and LLNL CRADA, facilitated by the Laboratory's Innovation and Partnerships Office (IPO), comes on the heels of a commercial licensing agreement announced in December 2024 for LLNL's patented monolithic telescope technology — which accelerates rapid deployment of modular optical designs for high-resolution or high sensitivity space imagery.

Starris has collaborated over the last decade with LLNL's Space Program to develop the monolithic telescope technology and is manufacturing the precision-fabricated optical lens that forms the image in the telescope.

“We are excited to broaden our work with long-time manufacturing partner Optimax to transition our space telescope technology to industrial production,” said Ben Bahney, LLNL Space Program leader. “This collaboration will take proven technologies and apply them at production scale to meet new mission needs and new markets. This will help us realize our long-term vision to commercialize space telescopes the way the rest of the space industry has commercialized off-the-shelf satellites.”

Through this CRADA, Starris is commercializing the production of LLNL’s proven flight technologies for space domain awareness to detect, track, and identify artificial objects. The monolithic telescopes have been proven in several space missions and were chosen to fly on the upcoming U.S. Space Force’s Victus Haze mission in early 2026, which will test military capabilities to rapidly deploy satellites in response to threats in orbit.

Collaborations such as this one illustrate the impact of technology transfer through public-private partnerships utilizing LLNL intellectual property. IPO is the Laboratory’s focal point for industry engagement and facilities partnerships to deliver mission-driven solutions that support national security and grow the U.S. economy.

About the CRADA

The CRADA allows the U.S. government, through its laboratories and partners, to optimize resources, share technical expertise in a protected environment, access intellectual property emerging from the effort, and advance the commercialization of federally developed technologies.

About Starris

Starris: Optimax Space Systems is powered by three decades of space-qualified innovation on civil, commercial, and defense space missions, as a business unit of precision-optics leader Optimax. Starris is focused on production-scale EO/IR infrastructure for responsive space, based on the disruptive, patented monolithic telescope technology developed by Lawrence Livermore National Lab. The monolithic telescope technology enables deployment of proliferated small satellite constellations that are affordable, reliable, and storage stable. Starris offers a pre-engineered modular approach for space-qualified optical payloads that combines optics, sensors, and electronics. Starris optical payloads are tailored for aggressive design cycles and rapid deployment, supported by a robust testing and manufacturing ecosystem. Learn more at Starris.com.

About LLNL

Lawrence Livermore National Laboratory, located in the San Francisco Bay Area, is a premier applied science laboratory that is part of the National Nuclear Security Administration within the Department of Energy. LLNL's mission is strengthening national security by developing integrity, and technical excellence to scientific issues of national importance. The Laboratory's science and engineering are being applied to achieve breakthroughs for counterterrorism and nonproliferation, defense and intelligence, energy and environmental security. Learn more at LLNL.gov.

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High-resolution images are online at https://tinyurl.com/StarrisLLNL

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