DoD Establishes Joint Hypersonics Transition Office Systems Engineering Field Activity at NSWC Crane

A 2016 visit by the then-Chief of Naval Operations to the Naval Surface Warfare Center (NSWC) Crane Division. U.S. Navy photo

NSWC Crane, Ind. – The Department of Defense (DoD) established its Joint Hypersonics Transition Office (JHTO) Systems Engineering Field Activity at the Naval Surface Warfare Center, Crane Division (NSWC Crane) on Oct. 15, the Department said in a release.

Through this partnership, located in Crane, Indiana, the Department can leverage the growing suite of government, industry, and academic leaders associated with NSWC Crane. Acting Deputy Under Secretary of Defense for Research and Engineering, Dr. Mark Lewis, and JHTO Director, Dr. Gillian Bussey, announced the JHTO Systems Engineering Field Activity opening in a virtual ribbon-cutting ceremony on Oct. 15 with Governor Eric Holcomb.

"The JHTO and its Systems Engineering Field Activity present a signature opportunity for the Department. Leveraging the capabilities at NSWC Crane, we can not only develop effective hypersonic technologies, but we can also develop them affordably at the speed of relevance to our warfighters. Proactive engineering for affordable upgrades is critical to the long-term sustainability of these systems," Dr. Lewis said.

NSWC Crane has previously received recent DoD hypersonics awards to advance testing, verification and

validation capabilities. This includes $150 million in unique capabilities such as an underwater launch test complex, a missile technology evaluation facility, an integrated Hardware-in-the-Loop (HWIL) / Software-in-the-Loop (SWIL) test bed, and a Modeling & Simulation lab. More than three hundred people at Crane are working to advance hypersonic technologies and the enabling capabilities to make them possible.

"NSWC Crane has become a critical hub in the hypersonics development ecosystem," says Rick Davidoff, acting director of the JHTO Systems Engineering Field Activity. "This exciting announcement is the culmination of the hard work and dedication of many people. The JHTO Field Activity at Crane will allow OSD [Office of the Secretary of Defense to leverage earlier and ongoing investments at Crane to help all three Services improve their hypersonic weapons with more rapid, adaptable, and modular upgrades. Indiana and the larger Midwest will have a long-term, critical role in this important national security mission."

The JHTO, headquartered at the Pentagon, was established by Congressional direction and its authorities were renewed in the fiscal 2020 National Defense Authorization Act. The JHTO is responsible for creating strategies and roadmaps to develop hypersonic technologies and transition them to operational capabilities, for coordinating with foreign allies and partners, and for bolstering the hypersonics workforce. Additionally, it is establishing a university consortium for applied hypersonics to leverage the nation's academic community towards hypersonics-related research and workforce development.

The JHTO Systems Engineering Field Activity at Crane will perform detailed engineering activities to help execute the JHTO's mandate. The Field Activity will coordinate architectures, interfaces, schedules, and plans to transition a more modular, affordable, and upgradable hypersonics portfolio of capabilities and

technologies. The Systems Engineering Field Activity has four engineering focus areas: System Architectures and Guidelines, Science & Technology Management, Transition Management, and Modeling and Simulation. The Field Activity will also execute some workforce development initiatives, including sponsored research, curriculum development, and engagements with industry to create a growing pipeline of highly technical talent to enter the hypersonics workforce.