



The National Reconnaissance Office (NRO) is launching new constellations to enhance its current National Overhead Systems, aiming to create a data ecosystem with user-facing tools that utilize automation, Artificial Intelligence/Machine Learning (AI/ML), and data analytics. This will provide near real-time global situational awareness for both the Intelligence Community (IC) and Department of Defense (DoD).

The Ground Enterprise Directorate (GED) and specifically the Integrated Intelligence System Program Office (I2SPO) are key players in delivering advanced technologies to warfighters and national decision-makers. The I2SPO focuses on responding to customer requirements and uses AI/ML to speed up data delivery for intelligence missions like Disposition of Forces and Common Intelligence Picture.

To achieve this, the I2SPO invests in automation and AI/ML to handle increasing amounts of data quickly and allows users to visualize the results spatially and temporally. Moreover, to be more responsive to user needs, the I2SPO created the Cosmic Horizon team. An in-house government innovation cell that provides rapid solutions and prototypes for mission-relevant problems. The Cosmic Horizon team collaborates closely with IC and DoD users worldwide, automating workflows, prototyping AI/ML capabilities, and improving the integration of NRO tools and data to address operational issues across the IC and DoD enterprise.

Biography: Colonel Thomas P. Gabriele is the Director of the Integrated Intelligence System Program Office (I2SPO) at the NRO Ground Enterprise Directorate (GED). Prior to his assignment at the NRO, Colonel Gabriele was the Senior Executive Officer to the Vice Chief of Space Operations (VCSO), United States Space Force. Supporting the VCSO, he assisted the Chief of Space Operations in organizing, training, and equipping space forces in the United States and overseas, integrating space policy and guidance, and coordinating space-related activities for the United States Space Force and Department of the Air Force.

Colonel Gabriele was commissioned from the United States Air Force Academy in 2002. He has worked as an engineer, program manager, staff officer, and deployed to Afghanistan in support of Operation Enduring Freedom. His experience spans the space acquisition life cycle supporting Air Force, National, and Space Force programs. He is a Materiel Leader and has served the Chief of Space Operations, Strategy, Plans, Programs, and Requirements where he was responsible for the integration of collateral & special access program funding for the United States Space Force. Directing assessments of the \$30B classified Program Objective Memorandum options to ensure consistency with USSF roles and missions to support the National Defense Strategy.