

Testimony of
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NGA
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY



Chairman DesJarlais, Ranking Member Moulton, and distinguished members of the subcommittee, thank you for this opportunity to provide an update on the National Geospatial-Intelligence Agency's (NGA) mission and support to our national security space programs. I am honored to be here.

As a Combat Support Agency (CSA) and member of the Intelligence Community (IC), NGA is committed to delivering timely, accurate, relevant, and actionable geospatial intelligence (GEOINT) to warfighters, policymakers, intelligence professionals, first responders, and allies and partners. Our mission is to task, exploit, analyze, and disseminate imagery and geospatial information collected from national and commercial systems to describe, assess, and visually depict features and geographically referenced activities on or about the earth.

NGA is a data-driven agency that leverages a multi-INT approach to provide GEOINT at speed and scale. Additionally, we are increasingly integrating Artificial Intelligence into our workflows to enable decision advantage, provide insights into national security threats, strengthen defense of the homeland, secure U.S. interests abroad, and collectively achieve peace through strength.

As Deputy Director, I am proud of the work NGA does, and I am committed to working tirelessly to further strengthen how we execute our mission and provision GEOINT to our partners.

As an all-domain GEOINT agency, NGA utilizes imagery and geolocational metadata from air, sea, and land sources; however, space-based systems are central to fulfilling our responsibilities as both a CSA and member of the IC.

Unfortunately, the domain in which those systems operate is increasingly congested, contested, and competitive. Our adversaries' space and counterspace programs reflect a commitment to deny the U.S. strategic advantage in space.

Both Russia and China have engaged in robust counterspace development efforts, including ground-based and on-orbit systems. They have accelerated their investments in electronic warfare systems, antisatellite missiles, and directed energy weapons. These systems could enable our adversaries to more aggressively contest or deny another nation's access to and operations in the space domain.

GEOINT has proven essential in characterizing these threats and providing insight to decision-makers and warfighters. NGA-developed tools such as ION TRAIL, a program which allows users to perform structured observation management on space objects, allows the GEOINT community to analyze the full spectrum of adversarial space programs. GEOINT of adversary terrestrial operations, like space lift capabilities and weapons development, to command-and-control nodes and advanced manufacturing

operations, provides critical insights into subsequent on-orbit activities, enabling decision-makers and warfighters to develop effective strategies and countermeasures that protect vital U.S. and allies' space assets.

At NGA, we are keenly aware of the importance of delivering data and intelligence analysis such as this to our warfighters, and NGA's leadership team has made it a priority to ensure that our combatant commanders and services receive the imagery and intelligence analysis they need - when and where they need it.

While NGA has made significant progress toward this goal in recent years, we will be unrelenting in our pursuit for improvement. Last fall, NGA brought together combatant commands at a "Collection Summit" to streamline the imagery collection process, assess satisfaction levels, and identify capability gaps to improve the delivery of GEOINT to warfighters around the world. We carried that commitment into 2026, and in January, we led a follow-on summit at USINDOPACOM to further strengthen our support to exercise planning and to increase integration between NGA, National Reconnaissance Office (NRO), and the command.

Meanwhile, NGA continues to place our personnel wherever the mission demands. Our over 15,000 GEOINT professionals are spread across more than 200 sites in 20 countries, ensuring that our products and services are aligned with our customers' GEOINT needs. We maintain embedded personnel at every combatant command, most warfighting headquarters, many government agencies, service centers, and intelligence agencies.

This forward-deployed approach enables rapid intelligence support to time-sensitive operations and seamless GEOINT integration into mission planning that is customized to directly address commanders' information requirements. Just last month, NGA personnel provided direct GEOINT support during KEEN EDGE 2026, a biennial military exercise led by USINDOPACOM, and allies and partners from Japan's Joint Staff, and Australia's Joint Operations Command. NGA's embedded analysts within USINDOPACOM's Joint Intelligence Fusion Cell tested AI tools, interoperability, and analytic agility during simulated crisis and conflict scenarios.

Today, NGA officers work in lockstep with mission partners at United States Space Force, United States Space Command, and the NRO, to provide on-site tailored GEOINT solutions and a full range of NGA expertise to support planning and joint requirements.

We have also made significant strides with our Combined Joint Mission Management Center (CJMMC), a collaborative center at NGA headquarters that consolidates real-time GEOINT collection efforts across the Department of War (DoW) and IC. We have

fully integrated Space Force Guardians into the CJMMC, reflecting our commitment to supporting the warfighter and satisfying combatant command operational requirements.

Through what we call “informed collection orchestration,” NGA’s experts and our mission partners are – today – sitting side-by-side, balancing collection requirements, ensuring alignment with national priorities, optimizing collection strategies, and choreographing a complex constellation of space-based GEOINT assets.

Of course, the CJMMC-orchestrated imagery collection and subsequent GEOINT analysis must also be accessible by combatant commands to fulfill their intelligence requirements and support operational planning and execution.

NGA is continuing to invest in tools such as the Global Enhanced GEOINT Delivery (G-EGD) program, which provides more than 400,000 users web-based access to commercial imagery and analytics, delivering more than 325 million unclassified images to users in 2025 alone.

We are also ensuring GEOINT delivery to warfighters wherever they are by deploying our Joint Regional Edge Node capabilities. These regionally distributed, data processing hubs are positioned closer to the fight, and offer the ability to speed the process from collection to analysis, while enabling real-time collaboration between different intelligence teams. We have integrated workflow-enhancing tools like automated change detection, feature extraction, and pattern recognition tools, which accomplish about 30 percent of basic analytic work. This frees up users to tackle ever more complex intelligence challenges.

Pursuant to the National Defense Strategy, the U.S. Government’s investments into space-based commercial sensors and GEOINT analytics industries are supercharging those elements of the Defense Industrial Base. NGA is accelerating and integrating new technologies and capabilities at the pace of industry’s innovation. For example, NGA is already preparing for next generation commercial constellations with enhanced resolution that will further our GEOINT capabilities, increase the data volume available to analysts, complement government-owned and operated satellite systems, and improve our ability to fulfil combatant command collection requirements.

As a multi-INT, data-driven agency, we believe these capability investments must also include GEOINT analytics, which also leverage space-based imagery. NGA’s innovative commercial acquisition strategies, including our Luno contracts, allow us to deliver products, services, and capabilities in support of missions ranging from commercial space domain awareness, to vessel detection, to persistent change detection for humanitarian aid and disaster response. This integration of new force-multiplying

commercial capabilities with government systems has created a more robust, resilient GEOINT architecture that leverages the strengths of both sectors.

Next-generation commercial capabilities are unlocking unique collection opportunities to enhance space domain awareness and enable greater information sharing than ever before. For example, NGA's Final Frontier contract has provided a five-fold increase in our timely access to commercial non-Earth imagery-derived analytic products to characterize foreign space systems in low earth orbit. Last October, in response to reports of a possible space debris strike on a Chinese astronaut return capsule, NGA tasked commercial imaging of the in-orbit Tianhe-1 space station. Using those images, NGA was then able to procure a widely shareable analytic product.

With the surge in data available from commercial providers, combined with data from proliferated national systems, international partners, and other sources, we are also seeing a significant demand signal from our partners at combatant commands for tools to rapidly triage, exploit, and disseminate GEOINT at speed and scale.

Accordingly, NGA is investing in Artificial Intelligence and Machine Learning (AI/ML) capabilities, including computer vision, to speed the delivery of critical GEOINT analysis and data to warfighters and other users. The NGA Maven program – a cloud-based platform delivering advanced AI/ML capabilities, including automatic object detection, data analytics, and data visualization tools – produces millions of detections, and the program has expanded to over 30,000 active users, incorporating more than 40 service and combatant command tools. By optimizing warfighter workflows, combatant commands report that NGA Maven has decreased object of interest detection time by as much as 80 percent in some cases. We are also working closely with NRO to simplify these tools and maximize their integration into combatant command workflows to assist with collection and Automatic Target Recognition.

Data from space-based systems is also critical to NGA's statutory responsibility to provide maps, charts, and other Safety of Navigation data and products for military and broader government use. In fact, commercial space-based imagery provides the foundation for 99% of NGA's 19,000 domestic aeronautical products and provides ge-positioning accuracy and validation for over 70 million features in maritime products.

In addition to these products, NGA is integral in maintaining the accuracy of the nation's global positioning system – or GPS. Unfortunately, several nations are now developing indigenous capabilities to jam, spoof, or otherwise interfere with satellite communications and GPS signals that are critical to both military and civilian applications.

To prepare for such threats, NGA maintains specialized foundational datasets of magnetic, gravity, remote sensing, and elevation information, and works across the DoW to pursue capabilities for warfighters and weapons systems to reliably navigate in GPS degraded or denied environments.

In the spirit of incorporating innovation into our foundation GEOINT mission and promoting collaboration across government, academia, and industry, NGA has sponsored the “MagQuest challenge.” As the six-year challenge enters its final phase, companies have competed to build, test, and launch cubesats to collect high-quality geomagnetic data that NGA will evaluate and use to inform our acquisition strategy to support World Magnetic Model 2030. Alongside partners at NASA and NOAA, NGA has supported this competition to ensure the U.S. has resilient, modern, and efficient methods to collect geomagnetic data.

Using space-based GEOINT sources, NGA is also able to provide GEOINT support to federal, state, local, and tribal organizations during disaster response and recovery efforts at home and abroad.

In October, when remnants of Typhoon Halong devastated portions of western Alaska, we mobilized personnel to support the relief efforts. In close collaboration with FEMA and the U.S. Coast Guard, we led GEOINT collection operations, delivered flood damage assessments, and supported complex search and rescue operations in remote regions. Members of the joint response team used AI/ML technologies fueled by NGA Maven, to develop a common operating picture and mobilize support at the speed of need.

We also routinely partner with federal agencies such as the Department of Homeland Security’s Customs and Border Protection to provide GEOINT that informs and enables effective border security, counternarcotics operations, and counterterrorism efforts. Our GEOINT has proven critical in identifying smuggling routes and characterizing trafficking patterns to ensure partners receive GEOINT support for interdiction operations.

In closing, NGA is committed to delivering the timely, actionable GEOINT necessary to empower our warfighters and policymakers, and secure our nation. We will continue to remain laser focused on mission execution, developing our workforce, strengthening our partnerships, and evolving our capabilities to deliver GEOINT at the speed and scale that an increasingly dangerous world demands.

Thank you and I look forward to answering your questions.