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Setting the Standard: The GEOINT Professional Certification Program for the Department of Defense

The role of Geospatial Intelligence (GEOINT) professionals within the nation's national security framework rose to public prominence during the Cuban Missile Crisis, and the impact of imagery and mapping data on our nation's safety have continued to increase rapidly over the following 50+ years. As readers of this publication are certainly aware, the technology explosion of that period has given rise to the geospatial capabilities that anyone with a smart phone can access today.

Since 2012, the National Geospatial-Intelligence Agency (NGA) led the Department of Defense (DoD) initiative[1] to professionalize the field of GEOINT analysts within the United States Intelligence Community. In that time, DoD has issued more than 7,000 credentials to analysts from across the breadth of GEOINT occupations as part of the GEOINT Professional Certification (GPC) Program. Opportunities abound for people to build a career in the highly-specialized geospatial information and services field.

Today, DoD offers 11 professional certifications in GEOINT. Ten are for specialized tradecrafts-- Aeronautical Analysis, Applied Science (bathymetry, geodetic earth science, geodetic orbital science, and survey), Cartography, Collection Management, Geospatial Analysis, Geospatial Data Management, Human Geography, Imagery Analysis, Imagery Science, and Maritime Analysis. The 11th is the GEOINT Fundamentals certification which verifies knowledge, skill, and ability across all of the tradecraft areas as well as an understanding of DoD-specific GEOINT concepts, doctrine, policies, and the use of GEOINT products and services by DoD's customers. All professionals must first achieve the fundamental-level certification before proving their tradecraft expertise, a nod to DoD's belief that the power of GEOINT is only achieved through the ability to effectively use all available information to solve complex geospatial challenges.

To date, three GPC programs have earned accreditation from the National Commission for Certifying Agencies (NCCA)[2]; these are GEOINT Fundamentals, Aeronautical Analysis, and Imagery Analysis programs. All GPC certifications incorporate a credential maintenance program that offers certificants the opportunity to "recertify" at the end of the initial three-year certification window by earning Professional Development Units (PDUs). The purpose of the PDUs is to demonstrate the certificant's effort to maintain and enhance their continued competence as a GEOINT professional.

As part of the certification effort, DoD identified the Bodies of Knowledge specific to those who provide highly- sensitive services to warfighters and policymakers to help keep our nation safe. GEOINT Professional Certification ensures that credentialed GEOINT practitioners have proven proficiency in competencies required to carry out their mission. This certification process facilitates professional development, training standards and efficiencies, promotes better synchronization and alignment of individual capabilities with the DoD Intelligence Enterprise's needs through transportable credentials and the further professionalization of the GEOINT workforce across the federal government. The GEOINT Professional Certification program achieves this through recognizable, transportable credentials that attest to an individual's understanding of the facts, concepts, and principles that are the core of their profession.

DoD GEOINT professionals share many skills and work functions with professionals in related occupations across state and local governments as well as across industry and academia, where advances in imaging, processing, and GIS technology and capabilities are being made every day. The government's strategy to advance its GEOINT capabilities includes a heavy emphasis on unity of effort with industry and academic partners, and NGA Director Robert Cardillo has often cited the importance of creating a true professional field that encourages movement across employers and

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1 www.dtic.mil/whs/directives/corres/pdf/330510m.pdf

2 www.credentialingexcellence.org/ncca

facilitates sharing of knowledge gathered from specialized practice. While the DoD GPC program is open only to government personnel, there are a number of certifications offered by other organizations which are available to non-DoD professionals across the geospatial sciences industry. Some of the leading providers include the American Society for Photogrammetry and Remote Sensing (ASPRS)[3], the GIS Certification Institute (GISCI)[4], and the United States Geospatial Intelligence Foundation (USGIF)[5].

NGA views geospatial science-focused credentialing programs as tools that foster innovation by both inculcating and drawing on the diverse experience of professionals who readily move in and out of any number of GEOINT-related jobs across government, industry, and academia. NGA has also established an initiative within their human resources organization to identify and recognize certified professionals who possess valuable skills as part of the hiring process.

Director Cardillo hopes that students and established remote sensing and GIS professionals will view certification as a potential onramp to government service where they have the opportunity to serve their nation while at the same time broadening and deepening their geospatial expertise. The presence of formal bodies of knowledge within DoD that bear strong similarity to those within industry should provide prospective employees confidence that DoD invests in professional development which mirrors the opportunities in the private sector. By investing in professional development and encouraging movement across government, industry, and academia, NGA uses GEOINT Professional Certification to stimulate GEOINT professionals to aspire to advancement along their current career trajectories.

For additional information review the GEOINT Professional Certification program handbook available at NGA's website[6]. This handbook provides geospatial intelligence professionals with information on the objectives, requirements, and benefits of various GEOINT certifications used to promote interoperability across the GEOINT community and enable GEOINT practitioners to demonstrate proficiency in the competencies that are common to their specific geospatial intelligence discipline. Due to the classified nature of DoD GEOINT work, GPC credentials are only available to DoD employees with active government security clearances.

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3 www.asprs.org/general/asprs-certification-program.html

4 www.gisci.org/

5 www.usgif.org/certification

6 www.nga.mil/Careers/Pages/GEOINT-Professional-Certification.aspx

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