Aeronautical Analysis Job Task Analysis Executive Summary

Background

The National Geospatial-Intelligence Agency (NGA) has a responsibility to provide the products and services that decision makers, military service members, and first responders need, when they need it most. As a member of the Intelligence Community and the Department of Defense, NGA supports a unique mission set. We are committed to acquiring, developing and maintaining the proper technology, people, and processes to enable overall mission success.

Geospatial intelligence, or GEOINT, is the exploitation and analysis of imagery and geospatial information to describe, assess and visually depict physical features and geographically referenced activities on or about the Earth. GEOINT consist of imagery, imagery intelligence, and geospatial information.

To ensure a proficient and capable workforce, NGA engaged in a large-scale workforce development effort in 2010, identifying ten GEOINT tradecraft areas, developing competency sets for each tradecraft area, and completing job analyses to identify and validate the tasks performed and the competencies required for each tradecraft area. NGA developed formal certifications for each tradecraft area based on the job analysis results. NGA has continued to regularly update the competencies for each of the ten GEOINT tradecraft areas, and developed a comprehensive competency set in 2023 for the Aeronautical Analysis tradecraft area.

Current Project

The goal of this project was to update the competency sets validated by previous job analysis activities. A structured and repeatable process was employed to capture the work and worker characteristics required to perform successfully in the Aeronautical Analysis tradecraft area. This process included updating job content information used during previous efforts, soliciting Subject Matter Experts (SME) feedback to review and refine job content, as well as collecting and analyzing job analytic data from Aeronautical Analysis candidates.

Process

To begin, the project team made updates to the 2018-validated job content (e.g., Work Activities, Tasks, Knowledge areas, and Skills).

Next, the project team solicited SME input to systematically review and revise the draft job content. The project team distributed a pre-work exercise and solicited SME input to verify the relevance of the draft content and to suggest clarifications. The project team facilitated a structured job content panel to review and finalize the job content.

To validate the job content information, the project team administered a job analysis survey to incumbents within the tradecraft area. Respondents were asked to rate the importance of each task, knowledge area, and skill within the SME-validated competency set. For knowledge areas and skills, respondents were also asked to rate necessity at entry into the job. The project team then analyzed

the data to identify the tasks, skills, and knowledge areas critical to successful performance in the in the Aeronautical Analysis tradecraft area. The final job content derived from this analysis is found in the final job task analysis (JTA).

Outcomes

As a result of the JTA, the team identified the tasks roll-ups, knowledge areas, and skills necessary for successful performance in the Aeronautical Analysis tradecraft area at NGA. Across the overall Aeronautical Analysis workforce, 3 work activities, 136 tasks, 38 knowledge areas, and 37 skills were identified. The project results serve as a foundation for certification efforts and can be used to inform training development activities, other assessment tasks, and work role updates.