AFSC 15A4, Staff
AFSC 15A3, Qualified
AFSC 15A1, Entry

OPERATIONS ANALYSIS OFFICER
(Changed 30 Apr 23)

1. Specialty Summary. Operations Research Analysis officers broadly apply advanced analytical methods to provide commanders and decision makers with relevant, accurate, and timely decision support. Data Science and Operations Research are similar and complimentary disciplines. Data Science is an inter- disciplinary field (Artificial Intelligence, Machine Learning, Operations Research, Data Analytics, Statistics, Econometrics) that draws insights from structured and unstructured data. Operations Research is an inter-disciplinary field that applies advanced analytical methods and mathematical models to better understand complex systems and situations. Both rely on data that is visible, accessible, understandable, linked, and trusted. The education, training, and experience of Operations Analysis officers uniquely prepare them to apply a variety of advanced analytic techniques to a range of important operational problems across may missions sets and functional areas. Using a structured approach to problem solving, these officers formulate problems in complex environments, evaluate potential solutions, and communicate independent, objective, and data- driven recommendations to commanders and decision-makers in support of current and future operations. Related DoD Occupational Index: 251000.

2. Duties and Responsibilities:

2.1. Applies a structured approach to problem solving. Formulates problems, determines known and unknown parameters/variables, identifies interactions between parameters/variables, and selects the appropriate methodology and models to solve the problem. Evaluates potential solutions by applying appropriate solutions techniques and synthesizes outputs to inform conclusions and recommendations. Performs sensitivity analysis to highlight risk within uncertain environments. Visually displays and communicates complex quantitative and qualitative information. Communicates the conclusions and recommendations within the appropriate operational context, while identifying risks and trade-offs between solutions, and providing data-driven decision support.

2.2. Conducts studies, analyses, and assessments at the strategic, operational, and tactical levels, as well as across multiple functional areas (CAF, MAF, Space, Intel, Cyber, Information Warfare, Manpower/Personnel, Finance, Logistics, Test & Evaluation, etc.). Provides data-driven insights and decision support to commanders and decision makers. Seeks, interacts, and incorporates insights from subject matter experts and stakeholders to ensure conclusions and recommendations are operationally relevant and have the appropriate context.

2.3. Conducts studies to investigate complex systems or situations. Analyzes theories and research findings to determine applications. Constructs experimental/test models, devises methods and techniques to record and collect results, correlates and interprets data, identifies findings, and briefs results. Is cognizant of and applies interdisciplinary scientific knowledge to plan and conduct studies and analyses.

2.4. Conducts analyses to answer specific questions and inform decisions. Conducts quick-turn analyses to inform near-term decisions by drawing on available subject matter expertise and applying appropriate methods, models, and tools to answer questions, solve problems, and inform time-constrained decisions. Develops and conducts in-depth analyses to inform mid- and long-term decisions by applying a more robust and rigorous approach. Pairs quick-turn and in-depth analyses to meet decision timelines without sacrificing analytical rigor.

2.5. Conducts assessments to enhance commander's decision making in order to make current and future operations more effective. Assessments at the theater-strategic and operational levels focus on tasks, effects, objectives, and progress towards a desired end-state. Assessments at the tactical level primarily focus on task accomplishment but also inform high level objectives and end states. Leads and supports the Operations Assessment Team in Air Operations Centers (AOC), as well as assessment teams in joint environments. Applies assessments across the range of military operations and directly supports commander's decision-making by providing a measurable and evidence-based approach to strategy, operations planning, and allocation of resources to missions.

2.6. Leads analytic teams, cross-functional teams, and staffs. Provides staff supervision over activities and programs. Manages scientific programs, projects, and activities. Executes analytic tasks in support of programs, projects, and activities.

2.7. Designs, builds, adapts, and tailors Data Science and Operations Research methods, models, and decision support tools which leverage applied mathematics, statistical analysis, quantitative economics, data analytics, computer science, artificial intelligence, machine learning, decision analysis, optimization, risk assessment, stochastic modeling, and other advanced analytic methods.

3. Specialty Qualifications:

3.1. Knowledge. Knowledge of Air Force operations, doctrine, requirements, and procedures. Knowledge of analytic competencies to include: problem definition, research planning & execution, interpretation of analysis, investigation & testing, communication & delivery, operational assessment, computer programming, data management, advanced analytic techniques, analytic methods, and management practices is mandatory, to include relevant use cases of different techniques and methods.

3.2. Education. For entry education requirements see Appendix A, 15A CIP Education Matrix.

3.3. Training. For award of AFSC 15A3, the following Initial Skills Training (IST) is mandatory as indicated:

3.3.1. For those entering the 15A career field on or after January 1, 2023, completion of Operations Analysis Officer Initial Skills Training within 24 months (exception is 36 months for first assignment AFIT students) of entry into the career field.

3.3.2. Previous Initial Skills Training (IST) requirements:

3.2.2.1. Past AFSC entry during 1 November 2009 – 31 October 2019 - Completion of Operations Research Systems Analysis Military Applications Course (ORSA-MAC) within the 24 months years of entry into the career field or master's degree in a Tier 1 or Tier 2 discipline (see Appendix A, 15A CIP Education Matrix) was mandatory.

3.2.2.2. Past AFSC entry during 1 November 2019 – 31 December 2022 - Completion of a master's degree in a Tier 1 or Tier 2 discipline (see Appendix A, 15A CIP Education Matrix.) or completion of a Career Field Manager approved graduate certificate in Operations Research or Data Science was mandatory.

Note: Officers who completed the prescribed IST courses/requirements at the time of their entry into the career field have satisfied IST requirements. Additionally, the 15A career field manager reserves the right to waive IST for officers whose professional experience demonstrates mastery of a wide breadth of operations research and data science techniques.

3.4. Experience. For award of AFSC 15A3, a minimum of 24 months of experience in a 15A3/4 position is mandatory. A master's degree in one of the specified disciplines in Appendix A, 15A CIP Education Matrix may be substituted for 12 of the required 24 months experience. A Doctor of Philosophy degree in one of the specified disciplines in Appendix A, 15A CIP Education Matrix fulfills the 24-month requirement.