Vitae

Lt Col Kiel M. Martin, Ph.D.

Director, VAULT Data Platform Operations
Secretary of the Air Force, Chief Data and AI Office (SAF/CO)
Personal: (931) 200-1413
kiel.martin@us.af.mil

EDUCATION

Ph.D. Operations Research and Industrial Engineering, University of Texas at Austin
Areas of specialization: metaheuristics, tabu search, airlift operations, split loading
Dissertation title: *An Advanced Tabu Search Approach to the Intratheater Airlift Operations Problem with Split Loading*

S.M. Operations Research, Massachusetts Institute of Technology

B.S. Mathematics and Operations Research, United States Air Force Academy
Distinguished Graduate

PROFESSIONAL PROFILE
Leader, team builder, educator; deployed analyst; innovator for CSAF & OSD projects

TEACHING / ASSIGNMENTS

- Director, VAULT Data Platform Operations, Chief Data and AI Office (SAF/CO), Pentagon, VA, 2021-2022
    - Led VAULT data platform team providing cutting edge analytic tools and data services to DAF enterprise as part of the DAF Data Fabric
    - Managed convergence of HAF/A1 myData, Rhombus Guardian application deployments, and a broad host of AF organizations as VAULT tenants
- Associate Dean of Students and Support, Air Command and Staff College (ACSC), Maxwell AFB, 2020-2021
    - Supervised 15 member staff across diverse support functions: registrar, budget, personnel, facilities, technical support, and security program management
    - Led support for 8 academic departments and 4 staff organizations in support of 265 joint/international military & civilian PhD faculty, 484 in-residence students, and 27K+ students worldwide
- Chief, Institutional Effectiveness, Air Command and Staff College (ACSC), Maxwell AFB AL, 2019-2020
- Assistant Professor, Air Command and Staff College (ACSC), Maxwell AFB AL, 2018-2020

- Master's Student, Air Command and Staff College (ACSC), Maxwell AFB AL, 2017-2018
- Assistant Professor, United States Air Force Academy, Colorado Springs CO, 2015-2017
    - Designed, directed, and taught Computer Science and Operations Research courses
    - Member of Operations Research Program Interdepartmental Team
    - Advised multiple Operations Research senior capstone projects
- Program Analyst, HQ/AF Studies, Analysis, & Assessments, Washington DC, 2012-2015
    - Conducted original analyses supporting the Secretary of the AF, Chief of Staff of the AF, the Office of the Secretary of Defense, and Congress resource allocation decisions
    - Informed senior AF leader decisions with quantitative analysis of complex and emerging issues, including strategic budget choices regarding operations & personnel, aircraft fleet availability requirements, and Remotely Piloted Aircraft Enterprise manpower policy
    - Deployed as an analyst within the 609th Air Ops Center Strategy Division in support of ongoing operations in Central Command
- Doctoral Candidate, University of Texas at Austin, 2009-2012
- Lead Weapons Analyst, Air Force Operational Test & Evaluation, Nellis AFB NV, 2007-2009
    - Planned F-22 follow-on operational test and evaluation for new combat capabilities
    - Led analysis for A-10C initial operational test and evaluation validating modernization
- Master's Student, Massachusetts Institute of Technology, Cambridge MA, 2005-2007

PUBLICATIONS

Google Scholar (http://scholar.google.com/citations?user=nvu0qEcAAAAJ&hl=en)

- "A Better Path Forward Concerning North Korea: Align Chinese and U.S. Interests." In Praeger Security International, ABC-CLIO, 2019.
- "Developing Operations Research Practitioners: United States Air Force Academy Operations Research Program." Interfaces 48.6 (2018): 500-509.
- "Sustaining the Drone Enterprise: How Manpower Analysis Engendered Policy Reform in the United States Air Force." with Daniel J. Richmond, and John G. Swisher. Interfaces 47.2 (2017): 137-149.
- "Alternative strategies: A systematic approach to generate strategy options." with Mark A. Gallagher and Anna M. Perrin. Technological Forecasting and Social Change 101 (2015): 328-337.
- "An Advanced Tabu Search Approach to the Intratheater Airlift Operations Problem with Split Loading." PhD Diss. University of Texas at Austin, 2012.
- "Challenges of Operational Testing: the A-10C Initial Operational Test and Evaluation." US Air Force T&E Days 2009. 1713.
- "Dynamic Planning Under Uncertainty for Theater Airlift Operations. Diss. Massachusetts Institute of Technology, 2007.
- "Impacting Airpower Allocation for the Afghanistan Presidential Elections (U)," National Security Operations Research Journal, Aug 2014, SECRET.

HONORS

- INFORMS Smith Prize for USAF Academy Operations Research Program, 2017
    - *https://www.informs.org/About-INFORMS/News-Room/Press-Releases/U.S.-Air-Force-Academy-awarded-the-2017-UPS-George-D.-Smith-Prize* (press release)

- Researcher of the Year, USAFA Dep of Computer Science, 2016
- Field Grade Officer of the Year, USAFA Department of Computer Science, 2016
- Air Force Study Excellence Award – RPA Manpower Policy Study, 2015
- Air Force A9 Team of the Year – RPA Manpower Team, 2015
- Company Grade Officer of the Year, HQ/AF Studies, Analysis, and Assessments, 2014
- Junior Analyst of the Year, HQ/AF Studies, Analysis, and Assessments, 2013
- Company Grade Officer of the Year, HQ/AF Studies, Analysis, and Assessments, 2013
- Company Grade Officer of the Year, AFOTEC Detachment 6, 2008

PRESENTATIONS

- Lecture: Innovation within military strategy, ACSC, Jan 2020.
- "USAF Academy Smith Prize Nominee Presentation," INFORMS Analytics, April 2017.
    - *https://www.youtube.com/watch?v=km6Z-A0Bz18* (award finalist presentation)
- "Sustaining the Drone Enterprise," INFORMS, Nov 2016.
- "Advanced Tabu Search Approach to the Intratheater Airlift Operations Problem," INFORMS, Nov 2012.

ENGAGEMENT

- ACSC Hiring committees (x3), 2020-2021
- ACSC Promotion committee, 2019
- HAF/A9 Advanced Analytics Advisory Group, 2019
- USAF Academy Faculty Senate Executive Committee Member, 2016
- USAF Academy Faculty Senator, 2016
- First year cadet advisor as part of USAF Academy award-winning advising program, 2016
- President, UT Austin INFORMS Student Chapter, 2012