

JESSE WALES

Lieutenant Colonel, United States Air Force

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OBJECTIVE

Earn a PhD in Operations Research to further my education and research skills in order to teach at the graduate level and conduct energy system optimization.

PROFESSIONAL EXPERIENCE

COLORADO SCHOOL OF MINES

Golden, Colorado

Teaching Assistant

Aug 2017 – present

- ◆ Lectures one hour a week, presenting new material; tutors students and grades weekly assignments
- ◆ Courses: Applications of Operations Research and Stochastic Modeling

AIR FORCE INSPECTION AGENCY

Kirtland Air Force Base, New Mexico

Senior Operations Research Analyst, Analysis Division

Apr 2014 – Jul 2017

- ◆ Provided Air Force senior leaders with detailed inspection analyses of wing effectiveness and assessment of the Nuclear Enterprise; developed trending and analysis tools for inspectors general
- ◆ Led the integration of Inspector General analytic solutions across inspection data sources to distill results into actionable insight; automated data collection and visualization

COMBINED AIR OPERATIONS CENTER (Deployment)

Al Udeid Air Base, Qatar

Operations Analyst, Strategy Division

Jul 2015 – Jan 2016

- ◆ Provided combat effectiveness, metrics, and assessment for Air Force Central Command area of operations by ensuring effects-based methodologies were used in planning and operations
- ◆ Developed plans to assess air operations in support of Operations Resolute Support and Inherent Resolve and integrated assessment plans with Central Command headquarters

AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER

Peterson Air Force Base, Colorado

Test Director, Special Access Programs

Feb 2012 – Aug 2012

- ◆ Led a seven-person team conducting operational test and evaluation on special access programs including defining test concepts, plans, funding, manpower, and test resources
- ◆ Coordinated test issues with system program offices, major commands, air staff, other services, and the Office of the Secretary of Defense

Lead Operational Test Analyst, Test Support Division

Oct 2009 – Feb 2012

- ◆ Led multiple teams ranging from five to fifty people in the planning and execution of data collection, analysis, and reporting of operational tests
- ◆ Planned and executed space system operational test and evaluations; defined test methodologies, evaluation criteria, and missions, ensuring systems met user requirements

OFFICER TRAINING SCHOOL

Maxwell Air Force Base, Alabama

Assistant Director of Operations, 24th Training Squadron

Apr 2009 – Oct 2009

- ◆ Assisted in directing all training and operations for the basic officer training and commissioning program for 600 trainees annually
- ◆ Enforced standardization amongst staff and trainees to ensure compliance with operating instructions and squadron policies; conducted annual flight room instructor evaluations

Training Support Flight Commander, 22nd Training Support Squadron **May 2008 – Apr 2009**

- ◆ Led team of 11 Physical Conditioning and Military Training Instructors instructing 2,900+ trainees a year; developed operating instructions to implement physical fitness and military indoctrination
- ◆ Implemented the Air Force Combatives Program at Officer Training School through auditorium and field instruction; authored lesson plans and trained instructors

Instructor/Flight Commander, 24th Training Squadron

Sep 2006 – May 2008

- ◆ Commanded five flights of 14-16 officer trainees through a demanding 60 training-day commission program, conducted trainee leadership mentoring, feedback, and character development
- ◆ Instructed classroom and field leadership curriculum to prepare future Air Force officers for leadership positions; led event debriefs to ensure learning objectives were accomplished

AIR FORCE RESEARCH LABORATORY

Wright-Patterson Air Force Base, Ohio

Research Scientist, Human Effectiveness Directorate

Jun 2003 – Sep 2006

- ◆ Planned, managed, designed, conducted research, and data analyses on advanced displays and night vision technologies for the warfighter
- ◆ Evaluated proposals, managed contracts, and ensured quality of small business research programs

EDUCATION

COLORADO SCHOOL OF MINES

Golden, Colorado

PhD Student in Operations Research with Engineering, 2017 - present

Research Area: Energy system optimization

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

Master of Science in Operations Research, 2014

Thesis: "Analysis of a Supervisory Control and Data Acquisition (SCADA) System Anomaly Detection Model Based on Information Entropy"

UNIVERSITY OF COLORADO AT COLORADO SPRINGS

Colorado Springs, Colorado

Graduate Certificate in Space Systems Management, 2012

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

Graduate Certificate in Operational Technology, 2006

UNIVERSITY OF TEXAS AT AUSTIN

Austin, Texas

Bachelor of Science in Physics, 2002

AWARDS

Field Grade Officer of the Year, Air Force Inspection Agency, 2014
Operations Research Honor Graduate, Air Force Institute of Technology, 2014
Air Force Company Grade Analyst of the Year Honorable Mention, 2011
Company Grade Officer of the Year, Detachment 4, AF Operational Test and Evaluation Center, 2010
Top Third Graduate, Squadron Officer School, 2008

TECHNICAL PAPERS

Wales, J. G., & Marasco, P. L. (2006). Statistical Assessment of Night Vision Goggle Noise. Paper presented at Helmet- and Head-Mounted Displays XIII: Technologies and Applications, Proceedings of SPIE Vol. 6224. DOI:10.1117/12.664162.

Wales, J. G., & Marasco, P. L. (2005). Assessment of an Optically Stimulated Infrared Emission from Image Intensifier Tube Photocathodes. Paper presented at Helmet- and Head-Mounted Displays X: Technologies and Applications, Proceedings of SPIE Vol. 5800. DOI:10.1117/12.608731.