

Troy E. Techau, Ph.D.

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Embry Riddle Aeronautical University
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EDUCATION

Ph.D. in Aviation, Safety and Human Factors Concentration August, 2018
Embry-Riddle Aeronautical University

Master of Science, International Management June 2002
Troy University

Bachelor of Science, Psychology December, 1986
Iowa State University

RESEARCH EXPERIENCE

Researcher 2018-2020
Pilot Source Study – 2018
Principle Investigator: Dr. Guy Smith, Aviation Accreditation Board, International (AABI)

- Conducted data collection at regional airlines under strict non-disclosure terms
- Co-authored peer-reviewed journal article published in 2020

Doctoral Researcher 2016-2017
College of Aviation, Embry-Riddle Aeronautical University
Advisor: Dr. Steven Hampton

- Conducted data analysis using IBM SPSS to create publishable analytical content
- Contributed research, literature review, and primary editing for publication

TEACHING EXPERIENCE

Instructor 2018 - Present
Middle Georgia State University, Eastman, GA

- Instructor for online courses – Meteorology, Human Factors, and Aviation Law
- Created improved course content and instructional materials

Graduate Dissertation Advisor 2020 - Present
Embry-Riddle Aeronautical University, Daytona Beach, FL

- Dissertation Advisor for Ph.D. Student in Ph.D. in Aviation program

Adjunct Instructor / Course Developer 2018 - 2018
National American University, Rapid City, SD

- Instructed / Redeveloped AM3015 Aviation Safety Programs

Assistant Professor (U.S. Army Major)

1997-1999

Iowa State University, Ames, IA

- Taught two courses in Military Science Department
- Revised and updated Departmental curriculum
- Departmental representative for College of Liberal Arts

PROFESSIONAL PUBLICATIONS / SPEAKING ENGAGEMENTS

Smith, Guy M.; Smith, MaryJo O.; **Techau, Troy E.**; and Hight, Michelle P. (2020) "Pilot Source Study 2018: Five Years after the FOQ Rule—New-Hire First Officer Backgrounds and their Performance in US Regional Airline Training," *Journal of Aviation Technology and Engineering*: Vol. 9: Iss. 1, Article 2. Available at: <https://doi.org/10.7771/2159-6670.1198>

Techau, T. (2018). General aviation pilot acceptance and adoption of electronic flight bag technology (Order No. 10975712). Available from ProQuest Dissertations & Theses Global. (2139763240).

Techau, T. (2017, August). What factors affect general aviation pilot adoption of electronic flight bags? In C. Anderson (Moderator), *Advances in flight training*. Panel conducted at the National Training Aviation Symposium, Daytona, FL.

Hampton, S., Truong, D., Byrnes, K., & **Techau, T.** (2017). Pilot training metrics at a part 141 university training program. In *17th AIAA Aviation Technology, Integration, and Operations Conference, 2017*. Retrieved from <https://doi.org/10.2514/6.2017-3087>

Techau, T. (2015, May). *Understanding the effects of resistance to change on the advent of UAS*. Presentation at AUVSI Unmanned Systems 2015, Atlanta, GA.

Techau, T. (2011). *Aircraft flight / Maintenance status logbook*. Tampa, FL: Windrose Aviation

Techau, T., Strawser, D. (2010, April). The new detectives. *Security Products Magazine*.

Techau, T. (2009, April). *Fully portable screening solution to revolutionize security checkpoints - Brijot's mobilescan*. Presentation at MMwave/THz Security Systems for Government and Commercial Applications Conference, Herndon, VA.

Techau, T. (2008, October). *Passive millimeter wave full body imaging*. Presentation at MMwave/THz Security Systems for Critical Infrastructure & Mass Transport Conference, Tours, France.

Techau, T. (2006). *Concept of operations for identity dominance* (US Department of Defense, US Central Command). Tampa, FL: US Central Command.

Techau, T. (2006, September). *Identity dominance: Enhancing military operations using biometric technologies*. Presentation at Biometrics Consortium Conference, Baltimore, MD.

SERVICE

Volunteer Pilot – Young Eagles 2011 - Present
Experimental Aircraft Association (EAA Chapter 1178)

Charter Board Member 2017 - Present
United Cerebral Palsy of Central Florida

EMPLOYMENT

Principal May 2011 – present
Windrose Aviation, LLC
2766 Andes Way, St Cloud, FL 34769

Founder of a consulting company focused on intelligence operations, aviation safety, human factors analysis, and advanced technology implementation and optimization. Supports projects for the Department of Defense and commercial industry.

- Led analytical project for client’s video recognition technology; including identifying RFP, preparing response, developing technology integration strategy, and securing demonstration project funding.
- Program Manager for multi-phased classified information technology project to develop open source intelligence collection and analytical process for DoD. Achieved all project objectives resulting in approval of additional phase awards for the Prime contractor.
- Established and led execution of extensive business development plan for technology manufacturing client resulting in exposure of client technology to all targeted DoD agencies, and continued engagement by sales team for ongoing sales cycle.

Vice President Government January 2007 – March 2010
Brijot Imaging, Inc.
1064 Greenwood Blvd, Lake Mary, FL 32746

Led business development and government relations in defense, federal, and state government sector for Brijot, a security systems manufacturer. Supervised cross-functional team to identify, qualify, and pursue sales opportunities the USA as well as in select overseas markets. Supervised product installation and managed sales agents and channel partners for global sales and services.

- Created demonstration showing potential applications of company products to IED detection applications. Initiated and developed unsolicited proposal resulting in \$3.6 million contract award.

- Initiated and led an industry first government-industry working group to develop a testing specification for advanced imaging technology devices, resulting in dramatically improved relations with government customers and significantly increased sales opportunities.

Director, Biometrics Program (Lieutenant Colonel)

June 2004 – January 2007

US Central Command (J2X)

7115 South Boundary Boulevard, MacDill AFB, FL 33621

Recognized as a visionary leader driving transformational changes to DoD intelligence operations and creation of multiple enduring programs with global impact. Developed initial Combatant Command strategy for operationalization of biometric technology to support combat operations, resulting in widespread identification of recidivist insurgents and IED-chain collaborators and spearheading development of DoD policy. Led development of comprehensive DoD biometric intelligence analysis programs and creation of new doctrine.

- Developed comprehensive biometric data collection and analysis strategy, applied to maritime interception, land security, and operational warfare missions.
- Wrote US CENTCOM Concept of Operations for Identity Dominance, the first-ever DoD operational strategy for the use and development of biometric intelligence data systems, published as mandatory guidance for 27 country area of operations.
- Major contributor to coordination of biometric policy across DoD, the Intelligence Community, DHS, and other federal agencies, conducting operational planning meetings at international conferences and symposia, DoD Services, and Defense Secretary level.

Chief, HUMINT Operations Branch (J2X) (Lieutenant Colonel)

June 2003 – May 2004

US Central Command (J2X)

7115 South Boundary Boulevard, MacDill AFB, FL 33621

Led rapid growth and mission focused development of Human Intelligence Branch (HUMINT) at US CENTCOM to support combat operations in Iraq and Afghanistan. Coordinated human intelligence collection policy, managed operations, and implemented hands-on, focused leadership support methodology to manage dispersed operations. Traveled to combat theaters frequently to supervise program implementation, assess challenges, and coordinate directly with supported combat leaders. Identified gaps in DoD human intelligence source management process, created online secure database management system and related doctrinal changes that resulted in global change to DoD and coalition human intelligence operational procedures.

Director of Intelligence (Major)

June 2002 – June 2003

US Southern Command (J2X)

Soto Cano Airbase, Comayagua, Honduras

Senior Intelligence Officer for Joint Task Force Bravo, a deployed task force responsible for operations in Central America. Provided sensitive intelligence support to ongoing and

planned contingency operations. Senior DoD counterintelligence officer for Central America.

Brigade Intelligence Officer (Major)

June 1999 – November 2000

3rd Brigade, 3rd Infantry Division
Fort Benning, GA

Senior intelligence officer for a 6,000 strong combat force responsible for worldwide deployment and combat operations. Collected, analyzed, and distilled information and data into useful intelligence for the units commanders and operational leaders.

Operations Officer (U.S. Army Major)

2000-2002

2nd Battalion, 29th Infantry Regiment, Fort Benning, GA

- Senior operations leader for weapons, explosives, and tactics training operations
- Supervised 550 instructors teaching 3,000 students daily on 24/7 basis
- Led course and doctrinal development, safety management operations, staff enrichment
- Managed operations of U.S. Army Sniper School, U.S. Army Mortar School
- Established and certified Javelin Missile course.

SKILLS / CERTIFICATIONS

Language – Spanish (Basic)
Commercial Pilot Multi Engine Land
Instrument Pilot
Certified Flight Instructor

MILITARY EDUCATION *(abbreviated)*

Command and General Staff Officer Course (CGSC)

May, 2001

US Army Command and General Staff College

Military Operations Training Course (MOTC)

May, 1997

Defense Intelligence Agency, Defense HUMINT Course

Counterintelligence Special Agent Course

August, 1991

US Army Intelligence Center

PROFESSIONAL MEMBERSHIPS

Aviation Accreditation Board, International (AABI)
American Society of Safety Engineers (ASSE)
Institute of Electrical and Electronics Engineers (IEEE)
Experimental Aircraft Association (EAA)
Aircraft Owners and Pilots Association (AOPA)