Shawn A. Pruchnicki, PhD, FRAeS, RPh, CSPI

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Statement of Research Focus and Expertise:

My research interest lies in the area of resilience engineering and how it can be operationalized in safety sensitive domains when confronted with an accident investigation. That is, how resilience engineering could be utilized to help understand causation and develop a more proactive approach to preventing accidents. In an effort to understand why it happen and who was involved and how were they involved?

This type of research and its application through my investigations across many types of industries has shown significant success in understand accident causation. This enables other investigators to make meaningful recommendations for change. My additional expertise is that of Safety and Just Culture. As such, for over 20 years I have helped airline, pharmaceutical manufacturing, electrical powerplants and fire departments to name a few evaluate and improve their Safety and Just Culture environments all over the world. Additionally, it is important to understand to apply the perspective of complexity theory when combined with resilience engineering methods so that we may gain a better understanding of failure in complex socio-technical systems. Thereby being able to untangle these events and better understand causation.

Professional Education:

October 2018	PhD program. Integrated Systems Engineering. Cognitive Engineering - Human Factors. Academic Advisor Dr. David Woods. The Ohio State University. Columbus, Ohio. Dissertation – "Improving facilitated debriefings – How are barriers to learning recognized by instructors and mitigated during post-simulator debriefings?"
May 2006	Masters of Aeronautical Science Program; Human Factors. Embry-Riddle Aeronautical University. Daytona Beach, Florida.
June 1990	Paramedic Training. Nationally Registered. Grant Medical Center Life Flight Paramedic Program. Columbus, Ohio.
January 1990	Professional Firefighting Training. Ohio Fire Academy. Reynoldsburg, Ohio.
July 1989	Bachelor of Science in Pharmacy, Ohio State University. Columbus, Ohio.

Current Positions and Responsibilities

Jan. 2020-Present Assistant Professor. The Ohio State University, Columbus Ohio. Center

for Aviation Studies (CAS) and Integrated Systems Engineering (ISE).

These are dual appointments within the College of Engineering.

August 2013-Present Academic Research Coordinator & Chief Flight Test Pilot: The Ohio

State University, Columbus, Ohio. Center for Aviation Studies. Responsible for participating in and monitoring various research

programs. Including flight test work as required.

January 2018-Present Site Director of FAA Center of Excellence (PEGASAS) at

Ohio State University. Ohio State is a core school in this research

Consortium. Washington, DC.

October 2021-Present Site Director of FAA Center of Excellence (TTHP) at

Ohio State University. Ohio State is a core school in this research

Consortium. Washington, DC.

April 2021-Present Advisor/Consultant on ERC. The Ohio State University Aviation Safety

Action Program (ASAP). Ohio State Airport, Columbus, Ohio.

Jun 2009-Present Owner and Chief Researcher; Human Factors Investigation & Education.

www.HFIE.org Columbus, Ohio

 Human Factors expertise specializing in human behavior in accident causation, accident investigations and safety/just cultures.
 We have also worked with the following as a sample:

- Numerous airlines both foreign & domestic
 - Health care
 - Power plant operations
 - Pharmaceutical manufacturing
 - Emergency Medical Services (EMS) & Fire ground operations (Fire Departments)
 - Aerospace (i.e., NASA, Civil Aerospace Medical Institute, FAA, NTSB, etc.)
 - Extensive experience (Eight cases) with legal work in numerous fields such as medical, aviation and two very high-profile police officer criminal cases later listed.

March 2022-Present Aerospace consultant for MITRE in McLean, Virginia.

Sept. 2018-Present Adjunct Professor: Durban University of Technology, Durban South

Africa. Center for Space Science Centre (SSC).

Professional Experience:

July '20-March '22 Ask the Captain - monthly radio show. First Monday of the month at 10:00AM Eastern. WWPR 1490AM. Tampa Bay, Florida

Aug. 2016-Oct. 2018 Aerospace consultant for MITRE in McLean, Virginia.

Aug 2013-Jan 2018 Associate Site Director of FAA Center of Excellence (PEGASAS) at Ohio State University. Ohio State is a core school in this research Consortium. Washington, DC.

July 2012-Dec. 2019 Faculty (Full-time Lecturer): The Ohio State University, Columbus Ohio. Center for Aviation Studies and Integrated Systems Engineering (ISE).

Integrated Systems Engineering

Introduction to Cognitive Engineering 3700 Automation and Control 5740

Center for Aviation Studies

Aviation safety/human factors 3300 Advanced aircraft systems, multiengine & turbine 4300 Aviation weather & aircraft performance 2300 Accident investigation 3194

Independent Study (18 student/semesters) – Topics include: ATC, accident investigation, advanced accident causation, CRM, Angle-of-attack equipment in GA A/C, safety culture.

Dec 2009- May 2015 Senior Research Engineer - Fulltime employee (6/10 to 6/12) & Independent contractor. San Jose State University in collaboration with the National Aeronautics and Space Administration (NASA) AMES Research Center Moffett Field, CA.

- Current research into the human factors issues regarding NextGen development. Including the following.
 - ➤ Aircraft alerting in non-normal events on the flight deck across numerous commercial aircraft
 - ➤ Single pilot workload study
 - ➤ Navigational Reference System (NRS) waypoint analysis

FAA research contract n	umt	pers:
□ 09-AJP61FGI-0101	&	09-AJP61FGI-0102

Jan 2009-June 2012 Adjunct Faculty: The Ohio State University, Columbus Ohio

College of Engineering, Department of Aviation.
 Courses taught in undergraduate program – over 600 hours of undergraduate instruction given:

Aviation Safety (560) Human Factors (540) Accident Investigation (493)

Aviation History (322)

Advanced Human Factors & Accident Causation (493)

College of Pharmacy.

Courses created and taught in Doctor of Pharmacy

Program: Group Studies-Clinical Toxicology (694)

Mar 1999-Apr 2009

Pilot, Captain CL-65. Comair. d.b.a. Delta Connection. Erlanger, KY

- Scheduled Part 121 airline
- Cat II Oualified.
- Line Check-Airmen invitation
- Operations throughout United States, Mexico, Bahamas and Canada.

Aug 1989-Aug 2021 Poison Information Specialist. Pharmacist. The Central Ohio Poison Center. Columbus, Ohio.

- Responsible for telephone consultation for general public and health care professionals.
- Clinical instructor for Doctor of Pharmacy students, Emergency Medicine physicians and Paramedics.
- Over 75,000 calls managed.

Jun 1988-Sept 1997

Firefighter/Paramedic. Jackson Township Fire Department. Grove City, Ohio.

- Large three station suburban fire department.
- Functioned on medic unit, engine company, ladder company and heavy rescue vehicles as assigned.
- Functioned as medic in charge of EMS runs as assigned.

Additional Teaching Positions:

Aug 2014-Dec. 2014 Graduate Teaching Assistant. Bachelor Program in Industrial Systems Engineering. ISE 5740 Automation and Human Design. The Ohio State University, Columbus, Ohio.

- Supervisor Dr. David Woods.
- Responsible for coordination with other GRAs on course material, grading and student evaluation.
- Covering classes when Dr. Woods was unavailable.

Sept 2009-Mar 2012 Graduate Teaching Assistant. Master of Science Program in Human Factors and System Safety. The Leonardo da Vinci Laboratory for Complexity and Systems thinking. Lund University, Lund Sweden.

- Supervisor Dr. Sidney Dekker.
- Academic supervisor for all year one tutors.
- Responsible for assisting Dr. Dekker with all Masters Students (including reviewing and grading assignments, thesis review).

May 2004-Oct 2008 Instructor: ALPA accident investigation course.

- Course is required for all new ALPA accident investigators.
- Modules taught were human factors and survival factors.

Nov 1997-Feb 1999

Instructor: Hazardous Materials. First Responder Awareness & Operations level. HAZ/MAT DQE. Carmel, Indiana.

 Provided hazardous material victim training and management to emergency room staff throughout United States

Nov 1997-Feb 1999

Instructor: Weapons of mass destruction. Disaster Planning International (DPI). TriMed Inc. Washington D.C.

- Provided weapons of mass destruction training for EMS personnel throughout United States.
- My primary teaching focus and assignments were related to management of chemical weapons of mass destruction.
- This was a military trained program as part of a Congressional Act to prepare the first responders for managing a large-scale weapons of mass destruction event.

Oct 1996-Feb 1999

Flight Instructor, Airnet Systems. KCMH Columbus, Ohio.

- FAR Part 141 Multi-engine Commercial program.
- Conducted both flight and ground instruction.
- Primary aircraft was BE-58. Known icing, Argus 5000 moving map, weather radar.
- FAA Gold Seal Instructor.

Oct 1996- Feb 1999

Flight Instructor, Academy for instrument ratings. KCMH Columbus Ohio

- FAR Part 91 Single-engine training.
- Conducted both flight and ground instruction.
- Aircraft utilized were C-152, PA-28-181, PA-28R-180.
- FAA Gold Seal Instructor.

Apr1990-Apr 1996

Clinical Instructor. Grant Medical Center LifeFlight Paramedic Program. Columbus, Ohio.

 Taught all course work in the fields of pharmacology and toxicology to new paramedic students.

Jun 1992-Nov 1995

Instructor: American Red Cross. Columbus, Ohio.

Taught CPR and first aid to general public.

Jun 1992-Feb 1999

Course Creator Coordinator/Instructor: Toxitricks Program. Children's Hospital. Columbus, Ohio.

 Toxitricks is a practical "hands-on" program designed to assist prehospital and hospital personnel with common pediatric toxicological emergencies. Mar1991-Nov 1995 Instructor: Pediatricks Program, Children's Hospital. Columbus, Ohio.

- Pediatricks is a practical "hands-on" program designed to assist pre- hospital and hospital personnel with common pediatric medical emergencies.
- Specialization cardiac emergencies

Certificate and Training Programs:

May 2012 FEMA Hospital Incident Command Training Course. Course 100, 200 and

700.

Sept 2007 Learning Laboratory for Human Factors Investigators. Dr. Sidney Dekker.

Lund University. Lund, Sweden.

Mar 2006 Human Factors in Aviation Safety Course. University of Southern

California (USC). Viterbi School of Engineering. Los Angeles, California.

Apr 2005-Dec 2007 National Transportation Safety Board Academy, Ashburn, VA

Courses taken:

- Advanced Cognitive Interviewing for Accident Investigators
- Survival Factors in Aviation Accidents
- o Biomechanics of High-Impact Injuries
- o Cognitive Interviewing for Accident Investigators
- Investigating Human Fatigue Factors

Aug 1989-Mar 2000 Provider American Heart Association

- Trained in Advanced Cardiac Life Support (ACLS).
- Trained in Pediatric Advanced Life Support (PALS).

Oct 2001-Feb 2005 Air Line Pilots Association (ALPA). Herndon, VA

- Courses taken
 - Basic Safety Course
 - o Bloodborne Pathogen Training
 - o Safety-Two School
 - o Basic Accident Investigation
 - Advanced Accident Investigation
 - Aircraft Survival Factors Training

Licensure:

Jul 1991-Present Certified Specialist in Poison Information. American Association of

Poison Control Centers.

Jul 1990-Jul 2000 Emergency Medical Technician – Paramedic. The Ohio Department of

Public Safety. Division of EMS. Columbus, Ohio.

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Aviation Certificates:

Airline Transport Pilot: Airplane Multi-Engine Land

Type rating CL-65 turbojet

Commercial pilot: Airplane Single-Engine Land

Flight Instructor: Airplane Single-Engine & Multi-Engine Land, Instrument

Ground Instructor: Basic, Instrument, Advanced

Flight Time Accumulated:

Total	4300	Turbojet PIC	974
PIC	1940	Instrument	320
SIC	2029	Simulator	200
Turbojet	2928	Flight Instructor	618

Other Professional Activities:

Flight Test Research Work (Both aircraft and simulator):

Jan. & June 2017	In Cessna 172	. Flight test profiles t	o generate data	for estimation of flap

position by post-processing G1000 flight data records. Extensive flight test work to validate algorithms for flap displacement. Ohio State University

Flight Research Lab

May 2016 In simulator, derived Angle-of-Attack (AOA) algorithm validation.

Developed inflight validation for non-linear flight regimes prior to in-flight installation and flight test development. Texas A&M Vehicle Systems &

Control Laboratory

May 2015 In Cessna 172. In-flight work to test advanced weather detection avionics

against severe weather (thunderstorms/rain showers) from close proximity and visual representation. Tested systems when functioning as pilot in command and principle investigator. Ohio State University Flight Research

Lab

August 2013 Oversight of Angle-of-Attack (AOA) installation on PA-28-200R aircraft (2)

including in-flight calibration and troubleshooting for FAA funded project by the small aircraft directorate via PEGASAS. Ohio State University Flight

Research Lab

Industry Work:

September 2017	GAJSC Working Group – CFIT. Associate Site Director representing the
September 2019	PEGASAS consortium. Federal Aviation Administration, Washington D.C
August 2016 to	GAJSC Working Group 2.0 – Safety Enhancement (SE-33) Safety Culture.

June 2017

Federal Aviation Administration, Washington D.C.

Oct 2001-Oct 2008 Air Line Pilots Association (ALPA) Activities & responsibilities.

Air Transport Association's Data Communications Task Force Human Factors Subgroup. Washington D.C.

Member: May 2008 to October 2008

FAA's Performance Based Aviation Rulemaking Committee (PARC) Subcommittee Pilot Controller Procedures and Systems Integration Working Group, Washington D.C.

Co-Chairman: September 2006 to August 2008

Member: May 2005 – September 2006

National Human Factors Working Group

Director May 2005 – October 2008 Member February 2004 – May 2005

Master Executive Council-Central Air Safety Comm. Council 37

Chief Accident Investigator October 2007 – October 2008

November 2004 – December 2005

Vice-Chairman June 2007 – October 2008 Assistant Chief Accident Investigator June 2003 – October 2004

Member October 2001 – June 2003

Master Executive Council - Aviation Safety Action Program(ASAP)
ASAP Coordinator/ERC
ASAP ERC Member
January 2008 – August 2008
August 2006 – January 2008

Other Major activities and responsibilities.

Faculty Service:

October 2021 – Present Human Factors Ergonomics Society (HFES) OSU student chapter

faculty advisor

Aug. 2018 – Present University Undergraduate Honors Committee

Student Supervision:

University of North Dakota, United States:

PhD committee member-at-large for entire process;

James Norman - Aerospace Sciences.

Ohio State University, Columbus Ohio:

Supervision for graduate students on various FAA awarded PEGASAS projects;

Eun Sun Ryu – College of Civil Engineering

Una Blanusa – College of Civil Engineering

Josh Schimmel – College of Engineering

Yanimi Gowda - College of Civil Engineering.

Marshall Pomeroy - College of Civil Engineering.

Natchi Despande - College of Engineering.

Supervision for undergraduate graduate students on various FAA awarded PEGASAS projects;

Hannah Gleckler - College of Engineering

Justin Abrams - College of Engineering, Honor Student

Kierra Mercure - College of Engineering Phillip Wilson - College of Engineering Wilson Flores - College of Engineering Brandon Lundeer - College of Engineering Aubrey O'Connell - College of Engineering

Lund University, Lund Sweden:

Supervision for graduate students on their thesis activities and course work; Patrik Nyström. College of Engineering.

Participation in Aviation Accident Investigations:

August 2007	Pinnacle Airlines (d.b.a. Northwest Airlink) Flight 4712 non-fatal
	accident, CRJ-200. April 15, 2007. Human Factors analysis for the
	ALPA investigation team in conjunction with the National Transportation

Safety Board's investigation (NTSB) DCA07FA037.

August 2006 Comair Airlines (d.b.a. Delta Connection) Flight 5191 fatal accident (49), CRJ-100. August 27, 2006. Member of the Operations/Human Factors working group. Also one of three persons that provided management of the total investigative effort. Investigator in support of the National Transportation Safety Board's investigation (NTSB)

DCA06MA064.

December 2004 Pinnacle Airlines (d.b.a. Northwest Airlink) Flight 3701 fatal accident

(2), CRJ-100. October 14, 2004. Human Factors support for the ALPA investigation team in conjunction with the National Transportation Safety

Board's investigation (NTSB) DCA05MA003.

July 2004 Comair Airlines (d.b.a. Delta Connection) Flight 5445 non-fatal

accident, CRJ-100. Severely injured flight attendant during a TCAS maneuver near Snow Hill, Virginia on July 21, 2004. Accident investigator for ALPA working in conjunction with the National Transportation Safety Board's investigation (NTSB) NYC04LA174.

May 2004 Air Transat Flight 236 non-fatal accident, Airbus A330-243 All Engine-

Out Landing Occurrence at Lajes, Azores 24, August 2001. Member of the committee that prepared the "Human Factors Assessment of Flight

Crew Performance" for ALPA at Air Transat.

Participation in Lawsuits as Expert Witness:

July 2022	United States of America vs. Alexander Kueng. United States District Court District of Minnesota. Civil case in the death of George Floyd. Charge of second-degree manslaughter. Expert witness with a background in human factors, safety and crew resource management. Defense counsel Thomas Plunkett.
April 2022	United States of America vs. Thomas Kiernan Lane. United States District Court District of Minnesota. Civil case in the death of George Floyd. Charge of second-degree manslaughter. Expert witness with a background in human factors, safety and crew resource management. Defense counsel Earl Grey.
July 2021	State of Indiana Circuit Court in the matter of <i>Patrick Kelly and Kesha Kelly vs Glenndale Airport, Glenndale LLC, Flight Training Centers LLC, Dale Etherington, Steve Stants and Duke Energy Indiana LLC.</i> Wrongful Death. Aviation consultant for plaintiffs. Jared Harts lead counsel.
October 2020	State of North Carolina Superior Court Division, County of Mecklenburg, in the matter of <i>Hudson and Vernon vs. The City of Charlotte and American Airlines</i> . Wrongful Death. Will testify for the plaintiffs on the safety culture of these organizations and the role that this played in this untimely death of their employee. Joel Rhine lead counsel.
May 2019	State of Illinois Circuit Court of the 17 th Judicial Circuit, Winnebago County in the matter of <i>Brown vs. Rockford Health Systems/ Dr. Joe Manaligod MD</i> . Wrongful injury suit. Will testify for the defense on outcome and hindsight bias and how these affect investigator reliability in determining causation. Settled out of court. David Faulkner lead counsel.
March 2019	The United States District Court for the Middle District of Pennsylvania in the matter of <i>Apfelbaum vs United States of America</i> . Will testify for the plaintiff as to the effects of spatial disorientation in an aircraft accident. Lane Jubb lead counsel.
August 2018	State of Illinois Circuit Court of the 17 th Judicial Circuit, Winnebago County in the matter of <i>Mendez vs. Rockford Health Systems/ Dr. Jose Luis Gonzalez MD</i> . Wrongful death suit. Will testify for the defense on outcome and hindsight bias and how these affect investigator reliability in determining causation. Defense. David Faulkner lead counsel.

January 2016

State of Illinois Circuit Court of the 17th Judicial Circuit, Winnebago County in the matter of *Slaven vs. Swedish American Hospital/ Dr. Eric John Hess MD*. Wrongful death suit. Will testify for the defense on outcome and hindsight bias and how these affect investigator reliability in determining causation. Settled out of court. David Faulkner lead counsel.

Publications (Peer-reviewed):

Manuscripts

Valasek, J., Harris, J., **Pruchnicki, S.**, McCrink, M., Gregory, J. & Sizoo, D. (2020). Derived Angle-of-Attack and Sideslip Angle Characterization for General Aviation. *Journal of Guidance, Control, and Dynamics*, 43(6), 1039-1055.

McCall, J. & **Pruchnicki**, **S**. (2017). Just Culture: A Case Study of Accountability Relationship Boundaries Influence on Safety in High-Consequence Industries. *Safety Science*. 94 (2). 143-151.

Smith, P., Johnson, D., **Pruchnicki, S.**, Schimmel, J., & Spencer, A. (2017). Cognitive Engineering Considerations in the Development of an Information Retrieval System: Avoiding Fixation on Technological Substitutes. *The Journal of Cognitive Engineering and Decision Making*. (10) 2, 126-130.

Burns, G., Spiller, H., **Pruchnicki, S.,** Siegel, E. & Casavant, MJ. (2016) Acute Renal Failure and Death after Misuse of Concentrated Anhydrous Caffeine as a Pre-Work Out Supplement By Athletes. *J Clinical Case Stu* 1(3): doi http://dx.doi.org/10.16966/2471-4925.114

Christopher, B., **Pruchnicki, S.**, Burian, B., Cotton, S. Enhancing NextGen RNAV Capabilities: Human performance Evaluation of NRS Waypoint Nomenclatures. *The International Journal of Aviation Psychology*. 24 (3), 155-17. 2014.

Dekker, S., **Pruchnicki**, **S.** "Drifting into failure: Theorizing the dynamics of disaster incubation". *Theoretical Issues in Ergonomic Science*. Nov. 2013. DOI: 10.1080/1463922X.2013.856495

Pruchnicki, S., Wu, L, Belenky, G. An Exploration of the Utility of Mathematical Modeling Predicting Fatigue from Sleep/Wake History and Circadian Phase Applied in Accident Analysis and Prevention: The Crash of Comair Flight 5191. *Accident Analysis and Prevention* 43: 1056-1061. 2011.

Pruchnicki, S. The Serpent and the Responder; Treating Snakebites. *Journal of Emergency Medical Services* 18: (4) 43-42, 1993.

Pruchnicki, S. Just Say Know; Recognizing the Dangers of Commonplace drugs. *Journal of Emergency Medical Services* 16: (2) 26–38, 1991.

Conference Proceedings

- Gruber, M. E., Cruit, J., Kochan, J. A., Arias, H., Diaz, Y., **Pruchnicki, S.**, & Hancock, P. A. (2021, October). Identifying and Categorizing Positive Behaviors in Unexpected, Good Outcome Events in Aviation. *Human Factors and Ergonomics Society 65th International Annual Meeting*, October, 2021. Baltimore, MD, United States.
- **Pruchnicki, S.** & Woods, D. "Inadequate Post Simulation Debriefings in Air Traffic Control and Pilot Training" *Proceedings from the 8th International Conference in Air Transportation*. June, 2018. Barcelona, Spain.
- Valasek, J., Harris, J., **Pruchnicki, S.,** & McCrink, M, Gregory, J. & Sizoo, D. "Characterization of Derived Angle-of-Attack and Side Slip Angle Algorithms Using Monte Carlo and Pilot Simulation". *Proceedings from The American Institute of Aeronautics and Astronautics*. June 2017. Denver, Colorado.
- Dillman, B., Wilt, D., **Pruchnicki, S.,** & Hall, T. "Effect of Angle of Attack Displays on Approach Stability". *Proceedings from The American Institute of Aeronautics and Astronautics*. June 2017. Denver, Colorado.
- McCrink, M., Gregory, J., & **Pruchnicki, S.,** "Derived Angle of Attack Algorithm Characterization through Flight Test of UASs". *Proceedings from The American Institute of Aeronautics and Astronautics.* June 2017. Denver, Colorado.
- Rao, A., **Pruchnicki, S.,** & Young, S. "A Survey to Understand the Use of In-flight Weather Information Products and Services". *Proceedings from The American Institute of Aeronautics and Astronautics*. June 2017. Denver, Colorado.
- **Pruchnicki, S.** "The Perfect Storm" Lexington, KY & Comair Flight 5191." *Proceedings from the International Symposium on Aviation Psychology*. May 2017. Dayton, Ohio.
- **Pruchnicki, S.** "Exploring Facilitation Debriefing Techniques Using a Diary Study." *Proceedings from the International Symposium on Aviation Psychology.* May 2017. Dayton, Ohio.
- Schimmel, J., **Pruchnicki, S.,** Smith, P. & Young, S. "SAGA Safety Analysis in General Aviation Leveraging Digital Flight Data Towards the Development of a Flight Performance Database Tool to Improve General Aviation Safety" *Proceedings from the 7th International Conference in Air Transportation.* June, 2016. Philadelphia, PA.
- Lundeen, B., **Pruchnicki, S.,** & Young, S. "Weather Technology in the Cockpit: Analysis of Pilot Decision Making" *Proceedings from the 7th International Conference in Air Transportation.* June, 2016. Philadelphia, PA.

- Blanusa, U., Young, S., **Pruchnicki, S.,** & Strzempkowski, B. "An Evaluation of Linear Length LED Centerline Taxiway Exit Light Systems" *Proceedings from the 7th International Conference in Air Transportation.* June, 2016. Philadelphia, PA.
- Dillman, B., Wilt, D., **Pruchnicki, S.,** Rudari, L., Ball, M., & Pomeroy, M. "Flight Operational Quality Assurance (FOQA) Do Exceedances Tell the Story? *Proceedings from the 18th International Symposium on Aviation Psychology*. May, 2015. Dayton, Ohio.
- **Pruchnicki, S.**, Woods, D. "Surprise on the Flight Deck A Full Motion Simulator Study" *Proceedings from the 67th International Safety Summit (IASS) Flight Safety Foundation.* 2014. Abu Dhabi, United Arab Emirates.
- **Pruchnicki S**. and Woods, D. D. (2013). Cognitive Demands of Staying in Control on Highly Automated Aircraft When Faced with Surprise. In Proceedings Fifth Symposium on Resilience Engineering: Managing trade-offs, 24-27, June 2013, Soesterberg, Netherlands. Download from Knowledge Bank at OSU http://hdl.handle.net/1811/60454 or search at http://kb.osu.edu
- Burian, B., **Pruchnicki, S.,** Christopher, B., Silverman, E., Hackworth, C., Rogers, J., Williams, K., Drechsler, G., Runnels, B., Mead, A. Single Pilot Workload Management During Cruise in Entry Level Jets. *Proceedings from the 17th International Symposium on Aviation Psychology.* May, 2013. Dayton, Ohio.
- **Pruchnicki, S.,** Burian, B., Christopher, B. Designing Realistic Full-Mission Human-in-the-loop Aviation Simulation Studies: Lessons Learned. *Proceedings from the 55th Annual Human Factors and Ergonomics Society (HFES)*. September, 2011. Las Vegas, Nevada.
- **Pruchnicki, S.,** Christopher, B., Burian, B. Human Factors Issues of Navigation Reference System (NRS) Waypoints. *Proceedings from the 16th International Symposium on Aviation Psychology*. May, 2011. Dayton, Ohio.
- Fennell, K., **Pruchnicki, S.,** McKenney, D., Reidemar, H., Comstock, K. Aviation Automation Design and Implementation –The Need for Human Factors Considerations. *Proceedings from the 15th International Symposium on Aviation Psychology*. April, 2009. Dayton, Ohio.
- Hollnagel, E., **Pruchnicki, S.**, Woltjer, R., Etcher, S. A Functional Resonance Accident Analysis of Comair 5191. *Proceedings from the 8th International Symposium of the Australian Aviation Psychology Association*. April, 2008. Sydney, Australia.

Abstracts/Posters

Diaz, Y., Cruit, J., Kaplan, A., Kochan, J., Gruber, M., **Pruchnicki, S.,** and Hancock, P. A. (2021). *Training Resilience in Aviation Systems: A Literature Review*. [Conference presentation]. 2021 International Symposium on Aviation Psychology, Virtual.

- Bloomster, B., **Pruchnicki, S.**, Varga, B., Mulchaey, M., Young, S., Morrison, S., and Strzempkowski, B. Facing Takeoff: A First Step Approach to Overcoming Flight Anxiety. Community Engagement Conference. Columbus, Ohio. January, 2018
- **Pruchnicki, S.** & Rao, A. Resilience in the Face of Unexpected Flight Deck Events. The 7th REA Symposium. Poised to adapt: Enacting Resilience Potential Through Design, Governance and Organizations. Liege, Belgium. June, 2017
- Rao, A. & **Pruchnicki**, **S.** Resilience in the Face of Unexpected Flight Deck Events. The International Symposium on Aviation Psychology. Dayton, Ohio. May, 2017.
- **Pruchnicki, S.** Complexity Science and the Investigation Community. Chartered Institute of Ergonomics & Human Factors. Human Factors in Aviation Safety. East Midlands, England. November, 2015.
- Abrams, J., **Pruchnicki, S.**, Pomeroy, M., Young, S. Angle of Attack Equipment in General Aviation Aircraft. Presented at the 1st AIR Embry-Riddle Conference. Phoenix, Arizona, January 2014.
- Rogers, J., Williams, K., Hackworth, C., Burian, B., **Pruchnicki, S.,** Christopher, B., Drechsler, G., Silverman, E., Runnels, B., Mead, A. Single-Pilot Workload Management. Presentation at the 84th Aerospace Medical Association Annual Meeting. Chicago, Illinois, May 2013.
- **Pruchnicki, S.,** Does Postmortem Toxicological Analyses of Tetrahydrocannabinol (THC) in Aviation Accidents Accurately Identify Its Physiological Impairment at the Time of Accident. *Journal of Toxicology; Clinical Toxicology* 2009 47: (7) 738. Poster presentation at the North American Congress of Clinical Toxicology Annual Meeting. San Antonio, Texas, September 2009.
- **Pruchnicki, S.**, Baker, S.D. The Use of Modern Photographic Technology for Animal Identification. *Journal of Toxicology; Clinical Toxicology* 2009 47: (7) 709. Poster presentation at the North American Congress of Clinical Toxicology Annual Meeting. San Antonio, Texas, September 2009.
- **Pruchnicki, S.,** Good TF, Walson PD. Severe Hydroxychloroquine Poisoning Reversed With Diazepam. *Journal of Toxicology; Clinical Toxicology* 1996 34: (5) 582. Poster presentation: North American Congress of Clinical Toxicology Annual Meeting, Portland, Oregon, September 1996.
- Haley, K., Greene, S., **Pruchnicki, S.,** Poison Center Training of Emergency Medical Services Personnel. *Proceedings of the AAPCC/AACT/ABMT annual meeting. October 1990, Tucson, Arizona.* Poster presentation. North American Congress of Clinical Toxicology Annual Meeting. Tucson, Arizona. Oct 1990.

NASA & FAA Technical Memorandums/Reports

- Hancock, P., Cruit, J., Kochan, J., **Pruchnicki, S**. Air Carrier Training Recommendations to Address Limitations of Pilot Procedures During Unexpected Events in NextGen Operations. Federal Aviation Administration (FAA) NextGen Human Factors Division ANG-C1. February 2021. May 2021.
- Handcock, P., Cruit, J., Kaplan, Y., Diaz, Y., Kochan, J., **Pruchnicki S.** Relevant Research Assessment Concerning Pilot Response to Unexpected Events. Federal Aviation Administration (FAA) NextGen Human Factors Division ANG-C1. February 2021.
- **Pruchnicki, S.,** Key, K., Rao, A. Problem Solving/Decision Making and Procedures for Unexpected Events: A Literature Review. Office of Aerospace Medicine DOT/FAA/AM-20/01. Pp. 1-43. January 2019.
- Berman, B.A., Kochan, J.A., Burian, B.B., **Pruchnicki,S.,** Christopher, B., Silverman, E. Alerts and Cues on the Flight Deck: Analysis and Applications. NASA Technical Memorandum TM-2017-219720. Pp. 1-57. September. 2017.
- Herndon, A., Jarrott, W., Lyall-Wilson, E., McKnight, C., Miller, S., **Pruchnicki, S.**, Rao, A., Reed, C. Standard Operating Procedures: Flight Path Management (FPM) Air Carrier Operations. MITRE Technical Report 170412. Funded through FAA Project number 0216RF04-FP. Pp 1-32. December, 2017.
- Valasek, J., Harris, J., Young, S., **Pruchnicki, S**., McCrink, M., and Gregory, J. Characterization of Derived Angle-of-Attack and Flight Path Angle Algorithms. William J. Hughes Technical Center Research Division DOT/FAA/AR-XXX. Atlantic City, NJ. December 2016.
- Fanyjoy, R., Dillman, B., Johnson, M., Podhipak, N., Winter, S., Rice, S., Rosser, T., Maharaj, I., **Pruchnicki, S.** Acquisition Distance of LED-based Runway Closure Lighting. The Federal Aviation Administration Aviation William J. Hughes Technical Center Research Division DOT/FAA/AR-XXX (In press). Atlantic City, NJ. May 2016.
- Dillman, B., **Pruchnicki, S.,** Wilt, D., Pomeroy, M., Johnson, M., Abrams, J., Fanjoy, R., Rudari, L., Ball, M., Young, S. Angle of attack equipment in general aviation operations. The Federal Aviation Administration Aviation William J. Hughes Technical Center Research Division DOT/FAA/AR-XXX (In press). Atlantic City, NJ. December 2014.
- Williams, K., Christopher, B., Drechsler, G., **Pruchnicki, S.**, Rogers, J., Silverman, E., Gildea, K., Burian, B. K., Cotton, S. Aviation human-in-the-loop simulation studies: Experimental Planning, Design and Data management. FAA Office of Aerospace Medicine DOT/FAA/AM-14/1. Washington DC, January 2014.
- Burian, B., **Pruchnicki, S.,** Rogers, J., Christopher, B., Williams, K., Silverman, E., Drechsler, G., Mead, A., Hackworth, C., Runnels, B. Single pilot workload management in entry level jets. NASA Technical Memorandum TM-2013-216557 & FAA Office of Aerospace Medicine DOT/FAA/AM-13/17. NASA study 09-AJP61FGI-0048 and funded through FAA ANG-C1. Pp. 1-135. Aug. 2013

Burian, B., Christopher, B., Fry, D., **Pruchnicki, S.** Silverman, E. Single jet pilot simulation Study Scenarios Overviews: Task analysis and concurrent task maps. NASA Technical Memorandum TM-2013-216608. NASA study 09-AJP61FGI-0048 and funded through FAA ANG-C1. Pp. 1-164. Oct. 2013.

Burian, B., **Pruchnicki, S.**, Fry, D. Entry-level jet single-pilot human-in-the-loop simulation research: Study scripts and radio background chatter dialogue. NASA Technical Memorandum TM-2013-216575. NASA study 09-AJP61FGI-0048 and funded through FAA ANG-C1. Pp. 1-135. Aug. 2013.

Book Chapters

Pruchnicki, S. & Dekker, S. (2017). *Resilience Engineering in EMS*. In "The Human Factors & Ergonomics of Prehospital Medicine". CRC Press.

Technical Reports/Professional Papers

McCrink, M., Gregory, J., **Pruchnicki, S.**, Strzempkowski, B. & Young, S. "Derived Angle of Attack (AoA) Flight Testing". Unpublished white paper for FAA PEGASAS COE. Pp. 1-3. June, 2016.

Tekaucic, K. & **Pruchnicki**, S. "An Electronic Survey and Subsequent Analysis of a Pilot Population Concerning Class 1 EFB Deployment. Embry Riddle Aeronautical University Scholar Commons for AIR Con 2016, Phoenix, AZ. January 2016.

Wierzbanowski, J., Slifer, D., Smith, R., **Pruchnicki, S.**, Meir, N., Young, S. "Unmanned Aircraft Systems in the National Airspace System Pathfinder Program Proposal". Air Force Research Laboratory. Wright-Patterson Air Force Base, Dayton, Ohio. August, 2015.

Berman, B., Kochan, J., Burian, B., **Pruchnicki, S.**, Silverman, E., & Christopher, B. Alerts and Cues for Specific Conditions: Analysis and Application in Training FAA funded project through ANG-C1. Pp. 1-372. March, 2015.

Pruchnicki, S., Young, S., Green, J., & Wagner, C. "A Call For Supporting a Next Generation Airspace System for the State of Ohio." Distributed via numerous outlets and supplied to state legislators. The John Glenn School of Public Affairs. The Ohio State University, Columbus, Ohio. November 13, 2014.

Berman, B., Kochan, J., Burian, B., **Pruchnicki, S.**, Silverman, E., & Christopher, B. Flight deck alerting: Functions, Characteristics, and implications for NextGen. FAA funded project through ANG-C1. Pp. 1-120. November, 2014.

Pruchnicki, S., Woods, D.D., Deshpande, N. Managing Surprise: Resilience and Control on the Flight Deck. A simulator observation study for NetJets final report. Internal paper only. Columbus, Ohio. March 1st, 2014.

Pruchnicki, S. Plane crash probes should cast a wider net. A special opinion article in relation to the release of Sole Survivor film on CNN.com. January 9, 2014. http://www.cnn.com/2014/01/09/opinion/sole-survivor-shawn-pruchnicki/index.html#cnn-disqus-area

Pruchnicki, S., Williams, K., Christopher, B., Gildea, K., Rogers, J., Cotton, S., Drechsler, G., Mead, A., Runnels, B., Burian, B., Hackworth, C. Energy management, and stabilized approach and landing performance of single pilots flying entry level jets: Study design and method. NASA study 09-AJP61FGI-0048 and funded through FAA ANG-C1. Pp. 1-135. March, 2012.

Burian, B, Christopher, B., **Pruchnicki, S.,** Cotton, S., Human factors evaluation of the implementation of the navigation reference system (NRS) Phase 2 report. NASA study 09-AJP61FGI-0101 and funded through FAA AJP-61. Pp. 1-155. August, 2011.

Burian, B, **Pruchnicki, S.,** Christopher, B., Human factors evaluation of the implementation of the navigation reference system (NRS) Phase 1 report. NASA study 09-AJP61FGI-0101 and funded through FAA AJP-61. Pp. 1-57. March, 2010.

Fennel, K., **Pruchnicki, S.,** McKenney, D., Reidemar, H. Comstock, K. Human Factors in Aviation Automation. ALPA statement of position white paper. Unpublished. Pp. 1-21. October, 2008.

Pruchnicki, S. Master's Degree Program Graduate Research Project. Does postmortem toxicological drug analysis accurately identify a medication's pharmacological influence at the time of accident? Unpublished paper. Pp.1-98. April 2006. Embry-Riddle Aeronautical University. Daytona Beach, Florida.

Pruchnicki, S., LaRoche G., Corrie, S. The use of color in aircraft flight deck displays: ALPA statement of position white paper. Unpublished. Pp. 1-31. December, 2005.

Magazine

Pruchnicki, S. Understanding human error - How to develop a just culture at your fire department. *Fire Rescue Magazine 2017*. 140 (1) 26-36.

Pruchnicki, S. NRS Waypoint Structure. Professional Pilot Magazine 2010. 44 (7) 102-105.

Pruchnicki, S. Anatomy of a System Failure. *Flight Safety Foundation Aero Safety World*. April, 2010 26-29.

Pruchnicki, S. Remembering to Remember. *Professional Pilot Magazine* 2008. 42 (12) 120.

Dean, A., **Pruchnicki**, **S.** Deadly Omissions. Featured cover article. *Flight Safety Foundation Aero Safety World*. December, 2008. 10-16.

Pruchnicki, S. Raising Awareness for All. Professional Pilot Magazine 2008. 42 (4) 72-74

Presentations:

International Forums

April 2022	Invited presentation: "Resilience and operations in complex environments". Presentation for Energy Safety Canada Human and Organizational Performance Community of Practice. Calgary, AB.
March 2022	Invited presentation: "Safety Differently, Pilot Error?" Webinar for the Helicopter Association International (HAI). Monthly safety webinar meeting. Attendees from 30 different countries.
March 2019	Accepted presentation: "Training for Unexpected Events – A Model of Resilient Behaviors" Simulation and training for resilience and safety conference. London, England.
June 2018	Accepted presentation: "Exploring Facilitated Debriefing Techniques Using a Diary Study" Proceedings from the 8 th International Conference in Air Transportation. Barcelona, Spain.
April 2016 - 19	Accepted presentation: "Understanding human error - How to develop a just culture at your fire department. An investigator's perspective. FDIC International Conference. Indianapolis, Indiana.
May 2017	Accepted presentation: "The Perfect Storm" Lexington, KY & Comair Flight 5191". International Symposium on Aviation Psychology. Dayton, Ohio.
May 2017	Accepted presentation: "Exploring Facilitation Debriefing Techniques Using a Diary Study." International Symposium on Aviation Psychology. Dayton, Ohio.
Nov 2015	Accepted presentation: "Resilience Engineering as a Perspective in Understanding Accident Causation." Chartered Institute of Ergonomics & Human Factors. Human Factors in Aviation Safety. East Midlands, England.
May 2015	Accepted presentation: "Top Ten Ways to Destroy Your Safety Culture." International Symposium on Aviation Psychology. Dayton, Ohio.
May 2015	Accepted presentation: "Effects of Angle of Attack Displays on Approach Stability" International Symposium on Aviation Psychology. Dayton, Ohio.
Nov 2014	Accepted presentation: "Surprise on the Flight Deck – A Full Motion Simulator Study. Flight Safety Foundation – IASS. Abu Dhabi, United Arab Emirates.

Aug 2014	Invited Keynote Presentation: "Just Culture – Operations Beyond the Text Book". Also, panel member with Dr. Sidney Dekker and Clark Lin Director of CAA. China Airlines Just Culture conference. Taipei, Taiwan.
Aug 2014	Accepted presentation: "The Perfect Storm" Lexington & Comair 5191. 2014 FAA Worldwide Airport Technology Transfer Conference. Galloway, NJ.
Aug 2014	Accepted presentation: Wrong Runway Departures – How are we doing? 2014 FAA Worldwide Airport Technology Transfer Conference. Galloway, NJ.
June 2013	Accepted presentation: "Cognitive Demands of Staying in Control on Highly Automated Aircraft When Faced with Surprise" The 5 th Resilience Engineering Association (REA) Symposium. Soesterberg, Netherlands.
June 2012	Invited speaker: "Second Victims: One Accident Investigator's Experience". Presented at the Learning Laboratory for Human Factors Investigators. Master's Program. Lund University. Lund, Sweden.
Sept 2011	Accepted presentation: "Designing Realistic Full-Mission Human-in-the-loop Aviation Simulation Studies: Lessons Learned." Human Factors and Ergonomics Society (HFES) Annual meeting. Las Vegas, Nevada.
May 2011	Accepted presentation: "Human Factors Issues of Navigation Reference System Waypoints" International Symposium on Aviation Psychology. Dayton, Ohio.
Nov 2010	Invited speaker. "The Lexington air disaster - analyzing an air accident, step by step". Risky Business Conference. London, England.
Mar 2006	Invited speaker. "The Use of Color in Aircraft Flight Deck Displays" Human Factors in Aviation Safety Course. Instructors Captain Robert Sumwalt and Dr. Najmedin Meshkati. University of Southern California (USC). Viterbi School of Engineering. Los Angeles, CA.
Aug 1991	Invited speaker. "Pre-Hospital Emergency Pharmacology." Presented at the International Fire and Rescue Conference annual meeting. Columbus, Ohio.
	National Forums
May 2019	Invited Keynote Presentation. "Safety Differently". Risk Control conference. Chicago, IL.

April 2019	Invited Speaker. "Unexpected Events and Flight Crew Resilience" Presented at the 2019 Human Systems Integration Summit, CAMI, Oklahoma City, OK.
March 2019	Invited speaker. "Automation's impact on safety and operations". Presented at the 2019 Air Charter Safety Symposium. National Transportation Safety Board Training Academy. Ashburn, Virginia.
October 2018	Invited Keynote Presentation: "Human Performance and Research Opportunities". Also panel member with Dr. David Marx. Electric Power Research Institute (EPRI). Dallas, Texas.
May 2018	Invited panelist. Air Line Pilot's Association. Trained for Life: Human-centered Approach to Safety Conference. Panel "Training for the Unexpected: A Focus on Resilience". Washington, D.C.
October 2016	Accepted presentation: Illuminating Engineering Society of North America – Aviation Lighting Committee. "Linear Airfield Lighting Evaluations: From the Laboratory to the Field." San Diego, CA.
July 2016	Invited Speaker. EAA Air Venture, "General Aviation Research Update." Oshkosh, Wisconsin.
July 2016	Invited panelist. National Fallen Firefighters Foundation Annual Technology conference. Panel "Human Performance Factors Related to the use of Technology". Oakland, CA.
January 2016	Accepted presentation: "Increasing General Aviation Safety through Data Analysis". Presented at ERAU AirCon ³ , Phoenix, AZ.
January 2016	Accepted presentation: "Surprise on the Flight Deck A Full Motion Simulator Study". Presented at ERAU AirCon ³ , Phoenix, AZ.
September 2012	Invited speaker. "Automation Problems and the Need for a New Design Paradigm". Presented at the Human Factors and Wings Seminar. Pensacola, Florida.
March 2011	Invited speaker. "Building a Positive Safety Culture in Your Organization". Presented at the 2011 Air Charter Safety Symposium. National Transportation Safety Board Training Academy. Ashburn, Virginia.
September 2010	Invited panelist. "Safety Culture – Its Not Just an Accident". At the 62nd Annual National Business Aviation Association (NBAA) convention. Presented at the Safety Town Hall Meeting. Atlanta, GA .

June 2010	Accepted presentation: "Human Factors Considerations for Incident Investigations". Presented at FAA Aviation Shared Vision conference. San Diego, CA.
March 2010	Invited speaker. "Creating a Just Culture in Your Organization". Presented at the Human Factors and Wings Seminar. Dallas, Texas.
January 2010	Invited speaker. "System Safety and Crew Resource Management". Presented at the Boeing Executive Flight Operations Safety meeting. Palm Springs, California.
March 2009	Invited speaker. National Transportation Safety Board's Human Error, Just Culture and Resilience Meeting. Presented case report of Libyan Arab Airlines Flight 114 with Sidney Dekker. Washington, D.C.
	Regional/Local Forum
March 2019	Invited speaker. Safety Differently. The Center for Disease Control (CDC)/NIOSH. Cincinnati, Ohio.
September 2016	Invited speaker: Cognitive Engineering – An Overview. Local IISE chapter at The Ohio State University, Columbus, Ohio.
September 2016	Invited speaker: US Airways 1549 - The Role of CRM & Human Factors in a successful accident. Local HFES chapter at The Ohio State University, Columbus, Ohio.
February 2016	Invited speaker: The Comair 5191, Lexington Accident – An Investigator's Perspective. EAA Chapter 9, held at The Ohio State University airport, Columbus, Ohio.
December 2014	Invited Speaker: CRM and the Making of a Resilient Health Care Team. Nationwide Children's Hospital – Education Day, Hospital staff. Nationwide Children's Hospital. Columbus, Ohio.
April 2014	Invited panelist: Battelle Center Tech Talks – International Aviation, Technology and Policy in the 21 st Century. John Glenn School. Ohio State University, Columbus Ohio.
February 2014	Invited speaker: The Role of Human Factors in Flight Safety and Accident Investigation. Local HFES chapter at The Ohio State University, Columbus, Ohio.
July 2012	Invited speaker: CRM and the Making of a Resilient Health Care Team. "Grand Rounds" Trauma Team. Nationwide Children's Hospital. Columbus, Ohio.

July 2012	Invited speaker: OTC Medications and Decision Making Traps. The Scioto Valley Chapter of the Women's Ninety-Nines. Columbus, Ohio.
March 2012	Invited speaker: CRM and the Making of a Resilient Health Care Team. "Grand Rounds" The Ohio State University College of Medicine. Wexner Medical Center. Columbus, Ohio.
January 2011	Invited speaker: Human Error and a Viable Safety Culture in Health Care. Pharmacy 850: Seminar for MS in Health Systems. The Ohio State University College of Pharmacy. Columbus, Ohio.
February 2008	Invited speaker: "Comair 5191, Situational awareness and lessons Learned". Professional Pilot's Association of Central Ohio. Columbus, Ohio.
November 2006	Invited speaker: "Human Factors". Pharmacy 816: Medication Use System Management. Dr. Phil Schneider. Graduate Program in Pharmaceutical Administration. The Ohio State University College of Pharmacy. Columbus, Ohio.
October 2004	Invited speaker. "Toxicology: Clinical Management of the Overdosed Patient" Pharmacy 779D: Advanced Pharmacotherapeutics. The Nontraditional Doctor of Pharmacy Program: The Ohio State University College of Pharmacy. Columbus, Ohio.
August 1996	Invited speaker. "Management of the Overdose Victim". Fairfield- Licking-Perry County Fire School. Lancaster, Ohio.
October 1994	Invited speaker. "Toxicology Update." Presented at the Ohio Association of Emergency Medical Services Annual State Meeting. Columbus, Ohio.
July 1993	Invited speaker. "Revenge of the Toxic Toddler." Presented at the Ohio Association of Emergency Medical Services Annual State Meeting. Columbus, Ohio.
	Workshops and Courses
April 2019	Invited presentation: "Safety Differently" workshop. With Bobby Halton and Mike Teague. FDIC International Conference. Indianapolis, Indiana.
April 2018	Invited Speaker: Oregon state fire officials and investigator. Serious Accident Review Team Training Course & workshop Including investigators and upper rank fire officers. Portland, OR.
June 2017	Invited Speaker: Sacramento Fire Department. Serious Accident Review Team Training Course. Workshop with three local metro fire departments including investigators and upper rank fire officers. Sacramento, CA.

May 2017	Invited Speaker: Safe Passage Inc. & Lund University Workshop. <i>Current trends in Resilience Engineering</i> . Workshop with Chris Nemeth, John Allspaw, Anthony Smoker & Kathy Fox. Lund University Learning Lab, Lund University held in Tarrytown, NY.
April 2016	Invited presentation: "Understanding human error - How to develop a just culture at your fire department. An investigator's perspective. FDIC International Conference. Indianapolis, Indiana.
August 2015	Invited Speaker: Theory of flight and airport operations. Presented at the Port Columbus Regional Airport Authority – Fear of flying course for the public. Port Columbus Airport. Columbus, Ohio.
Sept – Nov 2013	Invited speaker. In theater, post-film question and answer sessions with audience. Topics range from investigative methodologies to film production interests. Chicago, Ill & Napa, CA.
Sept 2009 & Sept 2007	Invited speaker: "The New View and Comair 5191". Presented at the Learning Laboratory for Human Factors Investigators. Master's Program. Dr. Sidney Dekker. Lund University. Lund, Sweden.
October 2004 to May 2008	Instructor. "Human Factors in Accident Investigation". The ALPA Basic Accident Investigation Course. Presented twice a year in several locations. Herndon, VA, San Diego, CA, & San Antonio, TX.
March 2006	Instructor. "Survival Factors In Aircraft Accidents". The ALPA Basic Accident Investigation Course. Presented in San Antonio, Texas.
March 2005	Invited Facilitator for on-line workshop. "Toxicology: Clinical Management of the Overdosed Patient" Pharmacy 779D: Advanced Pharmacotherapeutics. The Nontraditional Doctor of Pharmacy Program: The Ohio State University College of Pharmacy. Columbus, Ohio.
October 1998	Instructor. "Weapons of Mass Destruction, Chemical Terrorism" Disaster Planning International. Domestic Preparedness Training. Tucson, Arizona.
November 1997	Instructor. "Hazardous Material Operations". HAZ/MAT DQE. Good Sheppard Hospital. Barrington, Illinois.
September 1997 to February 1996	Invited speaker. "Hazardous Materials in the Emergency Department" Presented to seven different emergency departments throughout Ohio.
June 1996	Course Coordinator & Instructor. "Hazardous Materials Operations and the Poison Center Staff". A four part lecture series. Central Ohio Poison Center, Children's Hospital. Columbus, Ohio.

January 1995	Instructor. "Pediatricks." Presented for the Children's Hospital Emergency Department staff. Columbus, Ohio.
July 1993	Course Coordinator & Instructor. "Toxitricks", Presented for Guernsey Memorial Hospital staff. Cambridge, Ohio.
July 1993	Course Coordinator & Instructor. "Toxitricks." Presented at Emergency Nurses Association Annual Conference. San Antonio, Texas.
January 1992	Instructor. "Pediatricks." Presented at Emergency Nurses Association Annual Conference. Austin, Texas.
September 1991	Instructor. "Pediatricks." Presented for the Ohio State University Emergency Department staff. Columbus, Ohio.
Media	Film/Movie/TV Work
July 2021	TV Series – <i>National Geographic Air Crash Investigators</i> . Subject matter expert on aircraft accidents. Air Illinois 710. Season 21, episode 8. Filmed in Washington, D.C.
February 2020	TV Series – <i>National Geographic Air Crash Investigators</i> . Subject matter expert on aircraft accidents. Comair 5191. Season 20, episode 3. Filmed in Covington, Kentucky
February 2019	TV Series – <i>National Geographic Air Crash Investigators</i> . Subject matter expert on aircraft accidents. Air Sweden 294. Season 19, episode 2. Filmed in Toronto, Canada.
October 2017	TV Series – <i>National Geographic Air Crash Investigators</i> . Subject matter expert on automation type accidents. China Airlines Flight 140. Season 17, episode 9. Filmed in Toronto, Canada.
December 2015	Movie – "Aftermath" – Technical advisor for all aviation scenes. Starring Arnold Schwarzenegger. Specifically reviewing Mr. Schwarzenegger's lines for authenticity plus set and costume designs. Both pre-production and on scene. Film released to limited theater and DVD. Fictional film. Director Elliot Lester. Release in April 2017. Los Angeles, CA.
December 2015	Movie – "Aftermath" – Extra (background) role on memorial/funeral scene with Arnold Schwarzenegger. (Currently in production). To be release in April 2017. Los Angeles, CA.
December 2014	Taped Discussion – For NetJets as SME on the cognitive surprise research that was completed in previous year. To be shown to recurrent ground school classes starting in July, 2015.

May 2014 Movie - "The Tank" Subject matter expert for actor playing role of professional pilot including mannerisms and supplying wardrobe choices. Fictional film. Director Kellie Madison. Released in US 6/1/2014. Los Angeles, CA. July 2012 TV Series. Mayday - Discovery Channel. Science of disaster – Cruel Skies - *Mayday Series* – Season 8, episode 7. February 2012 Movie - "Sole Survivor" On camera subject matter expert and postproduction assistant for documentary film "Sole Survivor". Director Ky Dickens, Produced by Aurinko, S & McIntyre, A. Release date Fall 2013. Yellow Wing Productions. Chicago, Illinois. Movie – "Sole Survivor" Associate Producer - documentary film "Sole February 2012 Survivor". Director Ky Dickens, produced by Aurinko, S & McIntyre, A. Film purchased by CNN Films and released in Jan. 2014 to television and iTunes. Yellow Wing Productions. Chicago, IL. **Television Newscast** March 2022 Taped interview - Subject matter expert interview on Russian invasion in the Ukraine and its implication on Russian and the global aviation system. ➤ Voice of America – Anchor – Karina Bafradzhian (3/2) January 2022 Taped interview - Subject matter expert interview on airline blacklist and disruptive behavior. ➤ Sky News Arabia – Anchor – Omar Ali. (1/28) January 2022 Live on-air - Subject matter expert interview on 5G cell phone roll-out and radio altimeter concerns. ➤ Newsorg Arabic – Anchor – Abudiab Sami M. (1/19) January 2022 Taped interview - Subject matter expert interview on 5G cell phone rollout and radio altimeter concerns. ➤ Voice of America – Anchor – Karina Bafradzhian (1/18) April 2021 Live on-air – US sharing vaccines all over the world and its implications in a full return to global aviation. Shared discussion with Walid Al-Batouti ➤ Asharq News. Middle East.- Anchor Sahar (4/26) April 2021 Live on-air – Resumption of air service after a year of COVID. Safety impacts on re-start of air service. ➤ Asharq News. Middle East - Anchor Sahar (4/3)

February 2021	Live on-air expert – Resumption of air service after a year of COVID impact on the aviation industry. ➤ Asharq News. Middle East - Anchor Sahar (2/9)
January 2021	Live on-air expert - Indonesian transportation lines, Boeing 737-500 after takeoff from Jarkarta Indonesia. ➤ Asharq News. Middle East - Anchor Sahar (1/9)
January 2020	 Taped interview – Ukrainian Airlines shoot down in Iran. ➤ CBC. Canadian Broadcast - Anchor Susan Ormiston (1/10)
March 2019	 Taped interview – Ethiopian Airlines Flight 302 Boeing 737 Max8 crash. ➤ NBC4, 11PM newscast - Anchor Dan Pearlman (3/13)
March 2019	Live on-air expert – Ethiopian Airlines Flight 302 Boeing 737Max8 crash. ➤ CBC. Canadian Broadcast - Anchor Sue Anna (3/11)
October 2018	Taped interview – Accident flight 173, Portland and how it resulted in CRM ➤ KOIN Portland, Oregon. Reporter Justin Burton (10/16)
February 2018	Taped interview – Air Traffic Controller drug testing and airspace safety. ➤ WKYC Cleveland, Ohio. Reporter/Producer Phil Trexler (2/18)
January 2017	On-air expert – Cessna Citation accident at Burke Lakefront. ➤ ABC/Fox 28. Columbus, Ohio. Reporter Rob Wells (1/3) ➤ NBC Channel 4 – Columbus, Ohio. Reporter Harrison Hove (1/4)
August 2016	Live on-air expert – Automation and self-driving cars. ➤ Fox News KTVU Oakland CA - Anchors: Ken Wayne & Ted Rowlands (8/22)
May 2016	Live on-air expert – Loss of Egypt Air Flight 804 ➤ CNN – On panel with Brooke Baldwin as anchor (5/19)(5/19)
November 2015	Live on-air expert – Loss of Metrojet 9268. ➤ Al Jazeera America - Anchor: Del Walters (11/5)
October 2015	Live on-air expert – Aircraft and no-fly considerations. ➤ Channel News Asia – Singapore • Live interview with two anchors. (10/13)
Sept. 2015	On-air expert – British Airways Flight 2276 fire on takeoff at Las Vegas. ➤ CNN Situation room and Headline News – via satellite • Anchors Wolf Blitzer and Racheal Mead

July/Aug 2015

Live on-air expert – The disappearance of Malaysian Flight 370, possible finding.

- ➤ CNN Headline News via satellite live
 - Anchors Brooke Baldwin, Richard Quest & Mary Schiavo. (8/5)
- ➤ CNN Headline News via satellite live
 - Anchors Brooke Baldwin & Richard Quest. (7/30)
- Canadian Broadcasting Corporation CBC
 - Anchor Ian Hanomansing (7/30)

July 2015

Interview regarding aircraft diversion to Port Columbus after security scare.

- ➤ ABC/Fox 28. Columbus, Ohio
 - Reporter Rob Wells

May 2015

Live on-air expert – Aircraft in-flight hacking claims from FBI report.

- ➤ Channel News Asia Singapore
 - Live interview with two anchors. (5/17)

May 2015

Live on-air expert – Summer travel safety

- ➤ WBNS 10TV -
 - Reporter Brittany Begley (5/13)

Mar/Apr 2015

Live on-air expert – Loss of Germanwings Flight 9525

- ➤ CNN Headline News
 - Anchor Brooke Baldwin (4/3)
- ➤ ABC/Fox 28. Columbus, Ohio
 - Reporter Rob Wells (3/30)
- Fox Business News. New York
 - Anchor Maria Bartiromo (3/27)
- ➤ NBC4. Columbus, Ohio.
 - Reporter David Mazza (3/27)

March 2015

On-air expert interview – Blackhawk military accident off the coast of Florida.

- ➤ NBC Channel 4 Columbus, Ohio
 - Anchor Harrison Hove

March 2015

Live on-air expert – One year anniversary of the disappearance of Malaysian Flight 370

- > Canadian Broadcasting Corporation CBC
 - Anchor Reshmi Nair (3/7)

February 2015

Live on-air expert - Loss of Trans Asia Flight 235

- ➤ CNN Headline News
 - Anchors: Wolf Blitzer (2/4), Brooke Baldwin (2/4)

Dec/Jan 2014

Live on-air expert – Loss of Air Asia Flight 8501.

- ➤ Al Jazeera America
 - Anchors: Del Walters (1/14), Richelle Carey (1/8), Morgan Radford (1/2)
- ➤ NBC Channel 4 Columbus, Ohio
 - Anchor David Mazza (1/30), (12/30)
- ➤ CNN Headline News & New Day Show
 - Anchors: Kristy Paul & Victor Blackwell (1/3), Ana Cabrera (1/2)(1/2), Michaela Pereira & John Berman (12/29), Carol Costello (12/29)
- ➤ Channel News Asia Singapore
 - Live interview. (12/28)
- Canadian Broadcasting Corporation CBC
 - Anchor Christine Birak (12/28)

October 2014

Fatal accident for Virgin Galactic spacecraft.

- ➤ ABC6/FOX28 -
 - Reporter Ben Garbarek Interview for later news broadcast at 10/11PM shows (10/31)

July/Aug 2014

Live on-air expert – Shoot-down and crash of Malaysian Flight 17 in the Ukraine.

- ➤ Channel News Asia Singapore
 - Live interview with three anchors. (8/4)
- ➤ ABC6/FOX28 -
 - Reporter Tara Morgan Interview for later news broadcast (7/17)
 - Anchors Carolyn Bruck & Pete Scalia Good Morning Columbus Live interview (7/18)
- > Canadian Broadcasting Corporation CBC
 - Anchors: Reshmi Nair (7/17), Christine Murak (7/19)
- ➤ WBNS 10TV Interview for later news broadcast.
 - Reporter Kevin Landers (7/17)

July 2014

Live on-air expert – Near-miss aircraft collisions and released FAA report.

- ➤ Fox Business News
 - Anchor Neil Cavuto (7/23)

July 2014

Live on-air expert – FAA restriction on Tel Aviv US based flights.

- > CNN Headline News
 - Anchor Carol Costello (7/23)

May 2014

Live on-air expert – Story on near mid-air airline collisions in Houston and Newark.

- Canadian Broadcasting Corporation CBC
 - Anchor Carol MacNeil (5/23)

March 2014

Live on-air expert – The disappearance of Malaysian Flight 370.

- ➤ CNN Headline News in Studio, New York City
 - Anchors Chris Cuomo & Kate Bolduan New Day Show (4/29)(4/29)(4/29)
- CNN Headline News via satellite live on 20 occasions.
 - Anchors: Christie Paul (5/2)(5/2), Pamela Brown (5/1), Brianna Keilar (4/7)(4/7), Brooke Baldwin (3/26)(4/1)(4/1)(4/23), Chris Cuomo and Kate Bolduan New Day Show (3/25) (3/26) (4/8) (4/17)(4/17)(4/22)(4/28)(4/28), Anderson Cooper (3/24), Fredricka Whitfield (3/16), Don Lemom. (3/13) (Two hour special on 3/23)
- Fox News. The Kelly Files
 - Anchor Megyn Kelly (One hour show taped 3/20) Aired from 3/21-3/23.
- Canadian Broadcasting Corporation CBC
 - Anchors: Reshmi Nair (3/28), Andrew Nichols (3/25, 3/26)
- Canadian TV
 - Anchor Dan Mathenson (3/28)
- NBC4. Columbus, Ohio.
 - Reporter David Mazza (3/24)

January 2014

Live on-air expert - Aircraft accident victim's recovery in conjunction with the release of CNN's Sole Survivor film.

- ➤ CNN Headline News via satellite live.
 - Anchor Brooke Baldwin (1/9)

November 2013

Taped interview - Buckeye TV regarding the new FAA policy for electronic devices while flying. The Ohio State University, Columbus, Ohio.

July 2013

Press briefing (Pre-film showing) - Sole Survivor premiere in Lexington, Ky. Kentucky Theater. Shown on 11PM evening news July 18 and next day newscasts. Lexington, KY.

September 2009

Background interview - WBNS 10 TV for a story aired on the evening 5:30PM newscast, (9/15). Consulted as aviation expert regarding laser incident with a commercial aircraft at Port Columbus International Airport. WBNS studios, Columbus, Ohio.

January 2009

Live on-air expert - WBNS 10 TV Evening 5:30PM newscast, January 16. Discussion regarding the US Airways Flight 1549 ditching in New York. WBNS studios, Columbus, Ohio.

Radio

March 2022	Subject matter expert interview on the China Eastern Airlines Boeing 737-800 crash ➤ KNX 97.1 News radio – Los Angeles. Anchors – Mike and Charles (3/22)
January 2022	Subject matter expert interview on 5G cell phone roll-out and radio altimeter concerns. ➤ KNX 97.1 News radio – Los Angeles. Anchors – Mike and Charles (1/13)
February 2021	Subject matter expert interview on United 777 engine failures. ➤ KNX 97.1 News radio – Los Angeles. • Anchors – Mike and Charles (2/23)
March 2020	Background interview – Marketplace - NPR – Coronavirus and the global aviation industry. Reporter Jack Stewart (3/2)
Sept. 2019	Live on-air expert − Boeing 737Max and EASA disagreement. ➤ CBS Radio Los Angeles • Anchor − Mike & Bob (9/12)
June 2019	Live on-air expert − Boeing slat recall and the aviation industry ➤ CBS Radio Los Angeles • Anchor − Chris & Bob (6/3)
April 2019	Background interview – Marketplace - NPR – Automation and 737MAX8. • Reporter Jack Stewart (4/4)
April 2019	Background interview – NPR – Automation and 737MAX8. • Reporter David Schaper (4/3)(4/4)
March 2019	Live on-air expert - Interview on the loss of Ethiopian Airlines Flight 302 Boeing 737MAX8.WWL First News. AM/FM. New Orleans. • Anchor Tom Tucker (3/14)(3/19)
March 2019	Live on-air expert - Interview on the loss of Ethiopian Airlines Flight 302 Boeing 737MAX8. Sirius XM. North America • Anchor Emily Jackson – Canada Talks. CH167 (3/14)
January 2019	Live on-air expert – Ten-year anniversary of US Air 1549 ➤ CBS Radio Los Angeles • Anchor – Chris Sedens & Bob Brill (1/15)

April 2018 Live on-air expert – Southwest catastrophic engine failure ➤ CBS Radio Los Angeles • Anchor – Jonathan Serviss (4/17) March 2018 Live on-air expert – The airline reports of a UFO in flight ➤ CBS Radio Los Angeles • Anchor – Jonathan Serviss (3/29) February 2017 Live on-air expert – Twin Engine Crash in Riverside California ➤ CBS Radio Los Angeles • Anchor – Chris Sedens (2/28) September 2016 Live on-air expert for the Peggy Smedley Show. *Next generation air* traffic system. WSradio.com. Anchor – Pegy Smedley. (9/13) August 2016 Live on-air expert for Fire Engineering broadcasts 2 hr. show. "How to think differently about human error and how it can help or hinder a Just Culture". Anchors – Capt. Mike Dugan and Capt. Mike Gagliano. (8/17) May 2016 Live on-air expert – Loss of Egypt Air Flight 804 ➤ CBS Radio Los Angeles • Anchor - Linda Nunez (5/25) • Anchor – Chris Sedens & Bob Brill (5/19) Live on-air expert – The disappearance of Malaysian Flight 370, possible July 2015 finding. ➤ CBS Radio Los Angeles • Anchor – Dick Halton & Jan Stevens (7/30) May 2015 Live on-air expert – Aircraft in-flight hacking claims from FBI report. ➤ CBS Radio Los Angeles • Anchor – Dick Halton & Vivki Moore (5/18) April 2015 Live on-air expert – American Airlines iPad failure and delayed flights ➤ CBS Radio Los Angeles • Anchor – Dick Halton & Vivki Moore (4/29) March 2015 Live on-air expert - Loss of German Wings Flight 9525 ➤ CBS Radio Los Angeles • Anchor – Dick Halton & Vivki Moore (3/27) ➤ Sirius XM. North America • The Arlene Bynon Show – Canada Talks (3/27) December 2014 Live on-air expert – Loss of Air Asia Flight 8501. Radio New Zealand's Morning News Report – Wellington, NZ • Host Ian Telfer (12/30)

- ➤ BBC News London, England
 - Hosts George Riley (12/28)

July 2014

Live on-air expert – Shoot-down of Malaysian Flight 17 (Ukraine).

- ➤ BBC News London, England
 - Hosts Steven Knowland (7/18)

March 2014

Live on-air expert – The disappearance of Malaysian Flight 370.

- ➤ Radio New Zealand's Morning News Report Wellington, NZ
 - Host Goyon Espiner (3/29)
- ➤ BBC News London, England
 - Hosts Tony Livesey & Samantha Walker (3/26)
- > WWL First News. AM/FM. New Orleans.
 - Host Tom Tucker (3/19)
- > Sirius XM. North America
 - The Arlene Bynon Show Canada Talks (3/17)
- ➤ 610WTVN Columbus, Ohio
 - The John Corby Radio Show (3/14)

Newsprint/Internet/Magazine

June 2022

New York Times

➤ Interview for article on travel challenges, weather and staffing cancellations. Reporter – Heather Murphy (6/28)

March 2022

New York Times

➤ Interview for article on the China Eastern Airlines Boeing 737-800 crash. Reporter – Niraj Chokshi (3/21)

January 2022

Curt-Lewis Newsletter

➤ "Here we go again, "pilot error", really?" Opinion piece in "Flight Safety Information – January 6th, 2022 No. 4 Edition". Distributed global scale.

June 2021

Miami Herald

Interview for article on an incident of an aborted takeoff due to main cabin door opening indication. Reporter - Allie Pitchon

November 2019

New York Times

➤ Interview for article on the Turkish Airlines accident in 2008 and current problems with Boeing 737 MAX. Reporter – Chris Hamby (11/19)

October 2019

Washington Post

➤ Interview for article on airline safety and pilot training in the US. Reporter – Lori Aratani (10/1)

May 2019 Chicago Tribune

➤ Interview for article on airline safety from the perspective of the manufacture, the FAA and the airlines. Anniversary of American Airlines Flight 191 accident. Reporter – Lauren Zumbach (5/1)

March 2019 Airline Weekly

➤ Interview for article on the loss of Ethiopian Airlines Flight 302 Boeing 737MAX8. Editor - Madhu Unnikrishnan (3/13)

March 2019 Pravda Newspaper - Deputy Head of Foreign Desk. Slovakia

➤ Interview for article on the loss of Ethiopian Airlines Flight 302 Boeing 737MAX8 Reporter – Andrej Matisak (3/10)

January 2019 <u>www.theconversation.com</u>

Article on the anniversary of the loss of Amelia Earhart and modern day aircraft tracking. With Brian Strzempkowski. (1/4)

November 2018 Wired Magazine

➤ Interview for Air Astana in Lisbon near loss of control. Reporter – Alex Davies (11/12)

October 2018 Self Magazine

➤ Interview regarding aircraft safety for passengers. Reporter – Carolyn Todd (10/5)

May 2017 Fortune Magazine

➤ Interview on the recent spike in forced removals from airline cabins. Reporter – Eric Jenkins – (5/5)

March/April 2017 The Dayton Daily News

➤ Interview on Spirit Airlines pilot found at home with wife both dead from possible heroin overdose/fentanyl contamination. Reporter Will Garbe - (3/17)(4/6)

December 2016 www.theverge.com

➤ Interview on Facebook's drone Aquila at the end of its inaugural test flight. Reporter Casey Newton Senior Editor – (12/16)

August 2016 The Atlantic Magazine.

➤ Interview on near-miss reporting and how the airlines can better leverage this for a more proactive safety culture. Reporter Richard Korman – (8/4)

July 2016 Big Ten Network.

➤ Interview on NextGen and how it is transforming the aviation infrastructure. Reporter John Tolley – (7/20)

July 2016 Wall Street Journal – Front page Interview for article on automation and Tessla fatal accident. Reporter Daniel Michaels - (7/14) May 2016 Pravda Newspaper - Deputy Head of Foreign Desk. Slovakia Interview for article on the loss of Egypt Air Flight 804. Reporter Andrej Matisak (5/22) April 2016 Cleveland Plain Dealer Interview for article on business jet crash in Akron last fall. Release of CVR. Reporter Adam Ferrise (4/16)((11/15) July 2015 Toronto Star Interview for article on runway incursion event at Toronto City airport after aircraft damage on runway. Reporter Laurent Bastien Corbeil (7/14) Wall Street Journal - Front page July 2015 Interview for article on voluntary safety reporting programs in the United States. Reporter Daniel Stacey- (5/7) March 2015 Pravda Newspaper - Deputy Head of Foreign Desk. Slovakia ➤ Interview for article on the loss of Germanwings Flight 9525. Reporter – Andrej Matisak (3/25) December 2014 The Bend Bulletin ➤ Interview for article on EMS Aeromedical Flight Safety & Culture. Reporter - Markian Hawryluk (12/8) November 2014 Wall Street Journal ➤ Interview for article on air safety and emergency procedures Reporter - Andy Pasztor (11/13) Cleveland.com and The Plain Dealer August 2014 Interview for article on fatal GA crash (4) in Willoughby, Ohio. Reporter - John Harper (8/26) July 2014 Pravda Newspaper - Deputy Head of Foreign Desk. Slovakia Interview for article on shoot-down and crash of Malaysian Flight 17 in the Ukraine. Reporter - Andrej Matisak (7/19) www.defenseone.com April 2014 ➤ Interview for article on DARPA automation design and adaptive technologies related to pilot workload management. Technology Editor - Patrick Tucker. March 2014 Interviews in relation to the disappearance of Malaysian Flight 370.

• CNBC.com. Nia Hamm. (3/28)

- Newsmax Media. David Patten (3/27)
- USA Today. Front page, above the fold. Gary Strauss. (3/24)
- OSU Lantern. Chahinaz Seghiri. (3/21, 3/25)
- Columbus Dispatch. Dean Narciso. (3/19)
- Bloomberg International News. Kyle O'Donnell (3/17)
- Travel Pulse.com. Rich Thomselli. (3/14)

July 2013 The Courier-Journal (Louisville) newspaper

➤ Interview on the movie Sole Survivor and the investigation of the Comair 5191 accident in Lexington KY.

Other Committee Work:

April 2020	Judge for the ISE Capstone poster sessions. College of Engineering.
April 2020	Judge for the OSU Undergraduate Research Forum. College of Engineering.
Aug. 2019 to April 2021	Mentor for Ohio State STEP Program (Second-year Transformational Experience Program).
Mar 2018 to present	Member Undergraduate Honors Committee. College of Engineering. Ohio State University, Columbus, Ohio.
March 2012	College of Engineering Graduate Student member of selection committee for the following two faculty awards: Harrison Faculty Award for Excellence Clara M. and Peter L. Scott Faculty Award
Mar1990-Apr1993	Member: Education Committee. The Central Ohio Poison Center.

Sept 1986-May 1989 Member: Drug Abuse Education Committee. The Ohio State University. College of Pharmacy. Columbus, Ohio.

Columbus, Ohio.

Grants: Total - \$ 4,373,972

June 2021 to May 2023	Principle Investigator (OSU): COE TTHP. Flight Program Operations into safety culture within the FAA flight operations - \$314,442 research grant.
October 2019 to December 2021	Research Scientist (HFIE): Air Carrier Training Recommendations to Address Limitations of Pilot Procedures during Unexpected Events in NextGen Operations - \$499,709 FAA research grant.

October 2017 to June 2018	Technical Assistant (OSU): PEGASAS - PEGASAS Weather in the Cockpit Study 4. Collaboration with Purdue University and Western Michigan University. \$159,227 research grant.
June 2016 to Nov 2021	Principal Investigator (OSU): PEGASAS - Problem Solving/Decision Making and Procedures for Unexpected Events. \$295,000 research grant.
July 2016 to September 2017	Technical Lead (OSU): PEGASAS - PEGASAS Weather in the Cockpit Study 3. Collaboration with Purdue University and Western Michigan University. \$68,978 research grant.
June 2016 to December 2016	Technical Assistant (OSU): PEGASAS – Aviation Safety Database Collaboration with Iowa State University and Florida Institute of Technology. \$193,000 research grant.
January 2016 to June 2016	Technical Lead (OSU): PEGASAS Acquisition Distance of LED-based Runway Closure Lighting. Collaboration with Purdue University and Florida Institute of Technology. \$95,000 research grant.
September 2015 to April 2016	Technical Lead (OSU): PEGASAS Angle-of-Attack study (Derived) II. Collaboration with Purdue University & Florida Institute of Technology. \$20,000 research grant.
July 2015 to June 2017	Technical Assistant (OSU): PEGASAS LED Hot/Cold Research. Collaboration with Iowa State University and Texas A&M University. \$259,616 research grant.
April 2015 to April 2016	Technical Lead (OSU): PEGASAS National General Aviation Information Database. (NGAFID) II. Collaboration Georgia Tech and Purdue University. \$163,000 research grant.
February 2015 to June 2016	Technical Lead (OSU): PEGASAS Weather in the Cockpit Study II. Collaboration with Southern Illinois University, Kent State University, Purdue University. \$257,000 research grant.
August 2014 to September 2016	Technical Lead (OSU): PEGASAS Airport SMS Software Analysis. Collaboration with Southern Illinois University & Florida Institute of Technology. \$330,000 research grant.
August 2014 to June 2016	Technical Lead (OSU): PEGASAS Linear LED Lighting. Collaboration with Purdue University. \$512,000 research grant.
May 2014 to June 2016	Technical Assistant (OSU): PEGASAS Centerline Deviation Study. Collaboration with Southern Illinois University, Kent State University. \$600,000 research grant.

January 2014 to December 2014	Technical Lead (OSU): PEGASAS Weather in the Cockpit Study I. Collaboration with Southern Illinois University, Kent State University. \$257,000 research grant.		
January 2014 to December 2014	Technical Lead (OSU): PEGASAS National General Aviation Information Database. (NGAFID). Collaboration with Purdue University, University of North Dakota and Georgia Tech. \$163,000 research grant.		
September 2013 to December 2014	Technical Lead (OSU): PEGASAS Angle-of-Attack study. Collaboration with Purdue University & Florida Institute of Technology. \$141,000 research grant.		
November 2012 to September 2013	Principle Investigator: Center for Aviation Studies at Ohio State and NetJets Seed Grant Program. NextGen Implementation and Industry Participation. \$10,000 Research Grant.		
February 1996 to February 1997	Co-Investigator: Pruchnicki, S, Laubacher, M. Conrail Inc. Regional Professional Education Program. The Central Ohio Poison Center. \$36,000 Hazardous Materials Research & Education Grant.		
Editorial Responsi	bilities:		
September 2021	Invited, reviewer and referee for Easeediting. To assist and support papers		
	those researchers where English is not their primary language. Beijing China.		
April 2021			
April 2021 November 2019	China.		
-	China. Invited, Referee for Frontiers in Public Health. One review completed Invited, Referee for Reliability Engineering and System Safety. One review		
November 2019	China. Invited, Referee for <i>Frontiers in Public Health</i> . One review completed Invited, Referee for <i>Reliability Engineering and System Safety</i> . One review completed. Invited Referee for <i>Aeronautical Journal</i> Aerospace International Royal		
November 2019 April 2018	China. Invited, Referee for Frontiers in Public Health. One review completed Invited, Referee for Reliability Engineering and System Safety. One review completed. Invited Referee for Aeronautical Journal Aerospace International Royal Aeronautical Society. Two reviews completed.		
November 2019 April 2018 December 2017	China. Invited, Referee for Frontiers in Public Health. One review completed Invited, Referee for Reliability Engineering and System Safety. One review completed. Invited Referee for Aeronautical Journal Aerospace International Royal Aeronautical Society. Two reviews completed. Invited Referee for Ergonomics. One review completed. Invited Referee for Journal of Cognitive Engineering and Decision		

completed three reviews

Invited Editorial Board Member for International Journal of Aeronautical Science & Aerospace Research (IJASAR). Have either supervised or

July 2016

January 2015	Invited Referee for <i>Process Safety and Environmental Protection</i> . The Cu
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official journal of the European Federation of Chemical Engineering. The

Netherlands.

December 2013 Reviewed ISCRR grant proposal for use of technology in traumatic brain

injury patients. Monash University, Queensland, Australia.

Reviewed book proposals (3 books) for Ashgate Publishing Company. Oct 2009

London, U.K.

Oct 1993-Feb 1999 Creator and Senior Editor- *The Antidote*. The Central Ohio Poison

Control Center's Educational Newsletter. Children's Hospital. Columbus,

Ohio.

Mar1991-Mar 1992 Review Editor. Pre-hospital Drug Therapy. Text book project.

Gonsoulin SH, Raynovich, Mosby Lifeline Publishing. New York.

Sept 1990-Sept 1996 Review Editor. Journal of Emergency Medical Services (JEMS).

EMS Journal. Pharmacology and Toxicology related chapters.

Professional Organizations:

June2022	Fellow -	Internati	onal Society of	of Air Safety	Investigators (ISASI).
3.5 2016		3.6 1	α	CT .	1.00 . 10.1

May 2016 Associate Member – Society of Experimental Test Pilots

June 2015 Associate Member – The Charter Institute Ergonomics & Human Factors

February 2015 Member - Royal Aeronautical Society

July 2013 Member - The Honor Society

Member - Resilience Engineering Association March 2013

Member - Phi Kappa Phi Honor Society September 2012

Member - Institute of Electrical and Electronic Engineers (IEEE) December 2011 August 2008 Associate Member - Human Factors and Ergonomics Society

May 2003 Member - Association for Aviation Psychology (AAP) June 2003/June 2022 Associate Member - International Society of Air Safety

Investigators (ISASI).

Honors: 2013	Invited member of the Honor Society based on grade point average.
2012	Invited member of Phi Kappa Phi Honor Society. Grade point in top

of graduate students at Ohio State.

10%

2006 Graduated with distinction. GPA 4.0. Master of Science; Master of Aeronautical Science – Human Factors. Embry-Riddle Aeronautical

University. Daytona Beach, Florida.

1990 Honor Graduate. Paramedic class of 1990. Highest GPA. Grant Medical

Center Paramedic Program.

Community Work:

2015 – 2022	Instructor at the Port Columbus Regional Airport Authority "Fear of Flying" course for the public. With OSU Department of Psychology.
2008 - 2015	Church volunteer, crosswalk guard and concession work at events.
2007 - 2014	Local community sports coach for 5/6-year-old sports. Basketball, baseball and soccer.
2006 - 2007	GRE tutoring. Helped prospective GRE students with math and reading skills.

References:

Capt. (Ret.) Shawn Etcher – Operations Air Safety Investigator, National Transportation Safety Board (NTSB). (202) 527-4610

Capt. (Ret.) Mitch Serber – Chief Safety Officer, Boeing Executive Flight Operations. (703) 983-1629

Capt. (Ret.) Alan Dean – Safety Officer, Boeing Aircraft. (219) 669-1737

Ky Dickens – Film Maker, Director. Yellow Wing Productions. (312) 907-2509