Shawn A. Pruchnicki, PhD, FRAeS, RPh, ATP, CFII

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Statement of Research Focus and Expertise:

My research interest lies in 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. To understand why it happened and who was involved and how they were involved? Additionally, the role that design features of both automation and complex interfaces affect human decision judgement in accident events.

This type of research and its application through my investigations across many types of industries has shown significant success in understanding 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 airlines, 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 Systems 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

Feb. - 2023-Present Senior Research Fellow. College of Engineering. University of

Johannesburg, South Africa.

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

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 Research/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 (Nine cases) with legal work in numerous fields such as medical, aviation and two very high-profile police officer criminal cases later listed.

Sept. 2018-Feb. 2023 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 Engineer 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-Current Faculty (Full-time Lecturer/Professor): The Ohio State University, Columbus Ohio.

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

Integrated Systems Engineering

Behind Human Error 5710 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, Angleof-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	umł	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 Qualified.
- 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.

Mar 1991-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
 - o 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.

Jul 1989-Present Pharmacist. Ohio State Board of Pharmacy. Licensure #03-2-17688.

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 (Both aircraft and simulator):

Jan. & June 2017 In Cessna 172. Flight test profiles to 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 in-flight 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:

Sept. 2017-'19 GAJSC Working Group – CFIT. Associate Site Director representing the

PEGASAS consortium. Federal Aviation Administration, Washington D.C

Aug. 2016-'17 GAJSC Working Group 2.0 – Safety Enhancement (SE-33) Safety Culture.

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.

Member: May 2005 – September 2006

Co-Chairman: September 2006 to August 2008

National Human Factors Working Group

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

Master Executive Council-Central Air Safety Comm. Council 37

Member October 2001 – June 2003 Assistant Chief Accident Investigator June 2003 – October 2004

Chief Accident Investigator Nov. 2004 – December 2005

October 2007 – October 2008

Central Air Safety Vice-Chairman June 2007 – October 2008 Master Executive Council - Aviation Safety Action Program(ASAP)

ASAP ERC Member August 2006 – January 2008
ASAP Coordinator/ERC January 2008 – August 2008

Other Major activities and responsibilities.

Faculty Service:

November 2023 – Present OSU Stamps Eminence Reviewer

November 2023 – Present OSU COE Strategic Research Initiative Proposal reviewer

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

faculty advisor

Student Supervision:

Durbin University of Technology (DUT):

Master's committee member-at-large.

Marijan Ilcev

Ohio State University (OSU), Columbus Ohio:

PhD committee member.

Ron Gnatt - College of Engineering

University of North Dakota (UND), United States:

PhD committee member-at-large.

James Norman - Aerospace Sciences.

Lund University, Lund Sweden:

Supervision for graduate students on their Master's thesis activities and course work;

Patrik Nyström. College of Engineering.

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

High School Students.

Caroline Scholz – Interview to discuss current concerns in the aviation industry and how I developed by career trajectory. Freshman at Elm Brook High School, Brookfield, WI.

Justus Blanton – Support for his AP research class for a project while he is examining loss of control while on final during experiencing a turbulence event. The dependent variables are analog vs digital instruments. Supporting and guiding his study design, the actual testing and helping and supporting his analysis of the results. Senior at Springboro High School in Springboro, Ohio.

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.

United States Government Interview/Testifying

April 2024 On April 17, 2024, testified to the U.S. the Senate led by Chairman Senator

Richard Blumenthal who is the Chair of the U.S. Senate Permanent Subcommittee on Investigations. The topic was Boeing whistleblower Sam Salehpour. I was present and testified as an expert on Safety Culture.

https://www.youtube.com/watch?v=IE0pwIRWacg

April 2024

U.S. Senate Permanent Subcommittee on Investigations. Caitlin A. Warner Chief Counsel. Chair Richard Blumenthal. Confidential interviews related to a significant aviation safety related matter in the United States.

Participation in Lawsuits as Expert Witness:

First responder/police

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. Subject took plea bargain.
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. Subject took plea bargain.

Aviation

August 2022

July 2021

October 2020

State of Connecticut Circuit Court in the matter of Brookhaven LLC and
Interstate Aviation v. Cessna Aircraft Corporation. Wrongful Death.
Aviation consultant for plaintiffs. William Katt lead counsel. Still active
case.

State of Illinois Circuit Court, Cook County in the *matter of Smithburg v*. *American Airlines, Inc., SCRUB, Inc, and the City of Chicago*. Wrongful Injury. Aviation consultant for plaintiffs. Marc McAllister lead counsel. Settled out of court.

State of Indiana Circuit Court in the matter of *Patrick Kelly and Kesha Kelly vs Glenndale Airport, Glenndale LLC, Flight Training Centers LLC, Dale Etherington, Steve Stants and Duke Energy Indiana LLC.* Wrongful Death. Aviation consultant for plaintiffs. Jared Harts lead counsel. Still active case.

State of North Carolina Superior Court Division, County of Mecklenburg, in the matter of *Hudson and Vernon vs. The City of Charlotte and American Airlines*. 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. Settled out of court.

March 2019

The United States District Court for the Middle District of Pennsylvania in the matter of *Apfelbaum vs United States of America*. Will testify for the plaintiff as to the effects of spatial disorientation in an aircraft accident. Lane Jubb lead counsel. Settled out of court.

Medical

May 2019

State of Illinois Circuit Court of the 17th Judicial Circuit, Winnebago County in the matter of *Brown vs. Rockford Health Systems/ Dr. Joe Manaligod MD*. 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

August 2018

State of Illinois Circuit Court of the 17th Judicial Circuit, Winnebago County in the matter of *Mendez vs. Rockford Health Systems/Dr. Jose Luis Gonzalez MD*. 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. Settled out of court.

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.

Automobile/Traffic

February 2023

State of Ohio Circuit Court in the matter of *Steven Wheeler vs. Dakota Smith*. Wrongful injury auto accident. Human factors consultant for plaintiffs. Bruce MacDonald lead counsel. Settled out of court.

Publications (Peer-reviewed):

Manuscripts

P A. Hancock, Jessica Cruit, Janeen A. Kochan, Alexandra D. Kaplan, Yazmin Diaz & **Shawn Pruchnicki** (2022) Pilots' Responses to Unexpected Events: Conceptual, Theoretical, Methodological, and Analytical Issues, The International Journal of Aerospace Psychology, DOI: 10.1080/24721840.2022.2090944

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

- **Pruchnicki, S.**, Pearson, J. "Collaboration of Cultures: Aviation and Healthcare in Helicopter Air Ambulance Service" *Proceedings from International Society of Air Safety Investigators (ISASI) Seminar.* 2022. Brisbane, Australia.
- 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.
- 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.

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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.

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- 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.
- **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.

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- 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. 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.
- Herndon, A., Jarrott, W., McKenny, D., McKnight, C., Miller, S., **Pruchnicki, S.**, Trigeriro, W. Manual Flight Operations: Flight Final Technical Report. MITRE Technical Report 180181. Funded through FAA Project number 0216RE04-MF. Pp 1-44. Unknown 2018.
- 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/TC-18/48. 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. Atlantic City, NJ. May 2016.

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.

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/TC – 18/28. 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.

Book Chapters

Camacho, C., **Pruchnicki, S.** Miller, C. Jefferies, C. & Balkin, A. (In Press). *Simulation Training in the Medical Industry*. In "Simulation and Training: Processes, Challenges and Solutions. CRC Press. Expected print/release date is September 2025.

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

Professional Technical 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.

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.

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

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. Fatigue in the Cockpit. Professional Pilot Magazine 2022. 57 (5) 2-3.

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 2024	Invited presentation: "Human Factors Considerations for both pilots and Mechanic related investigations" Presentation for conference at The University of Trinidad and Tobago. Camden Campus, Trinidad.
August 2022	Accepted presentation: "Collaboration of Cultures: Aviation and Healthcare in Helicopter Air Ambulance Service" International Society of Air Safety Investigators (ISASI) Seminar. Brisbane, Australia.
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 Textbook". 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** November 2022 Invited Keynote Presentation: "The Operationalization of Safety 2". Also, panel member for all day workshop on various implementation of safety programs and management struggles. EPRI Fall Workshop in Human Performance. Electric Power Research Institute (EPRI). Chicago, IL. 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. EPRI Fall Workshop in Human Performance. Electric Power Research Institute (EPRI). Dallas, Texas. May 2018 Invited panelist. Air Line Pilots Association. Trained for Life: Humancentered 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 – It's 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 21st 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. Invited speaker: "Comair 5191, Situational awareness and lessons February 2008 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 the theater, post-film question and answer sessions with the 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 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	TV Talk Show (Total 2)
May 2024	TV Talk Show – Nexus – TRT World London, England. SME with three other experts discussing current Boeing problems and potential fixes – Anchor Mathew Moore (5/7). https://youtu.be/ijwP_tMAk9c?si=99KzgjkvWDrUBVL4
April 2024	TV Talk Show – Dr. Phil Primetime Show [Aired May 14 th 2024] SME & Script Writer – Screen credit for show preview pieces and for opening the show with Dr. Phil McGraw in a taped show. Show was designed as a follow up after testifying to the U.S. Senate. Worked with Producer to draft questions for my preview pieces and questions for Dr. Phil McGraw during the show. (4/23).

TV Series Acting (Total 6)

Oct. 2012 – Present TV Series – Mayday Air Crash Investigation – National Geographic/Discovery Channel/ Smithsonian Channel.

- SME & Script Writer/Actor Himself: Season 23, Episode 10. Saudi 163 accident.
- ➤ SME/Actor Himself: Season 22, Episode 8. Air Illinois 710 accident.
- ➤ SME/Actor Himself: Season 21, Episode 3. Delta Connection Comair Flight 5191 accident.
- SME/Actor Himself: Season 20, Episode 2. Air Sweden 294 accident.
- ➤ SME/Actor Himself: Season 18, Episode 9. China Airlines Flight 140 accident.
- ➤ SME/Actor Himself: Season 8, Episode 7. Science of disaster Cruel Skies

Major and Minor Film Work (Total 6)

December 2015

Hollywood Film – "Aftermath" – Technical advisor for all aviation scenes. Starring Arnold Schwarzenegger.

- Specifically reviewed and correct/suggested changes to Mr. Schwarzenegger's lines for authenticity. Including while shooting scenes with Mr. Schwarzenegger.
- Helped pre-production leadership design some instruments such as ATC radar, and some employee costume designs.
- Completely redesigned high school makeshift morgue for authenticity set for hours before shooting the scene.
- Worked beside the camera with Director and Mr. Schwarzenegger on changing a scene to make it more authentic including altering set design and his lines.
- Other pre-production and on-scene responsibilities. The film was released to limited theater in the United States and DVD. Fictional film. Director Elliot Lester. Released in April 2017. Los Angeles, CA.

December 2015

Hollywood Film – "*Aftermath*" – Extra (background) actor on memorial/funeral scene with Arnold Schwarzenegger. Was released in April 2017. Los Angeles, CA.

December 2014 Taped Film – 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 typical conduct and supplying wardrobe choices. Fictional film. Director Kellie Madison. Released in US 6/1/2014 to DVD. Los Angeles, CA.

February 2012 Movie - "Sole Survivor" Actor, on camera subject matter expert, and post-production assistant for documentary film "Sole Survivor". Director Ky Dickens, Produced by Aurinko, S & McIntyre, A. Release date Fall 2013. Yellow Wing Productions. Chicago, Illinois.

February 2012 Movie – "Sole Survivor" Associate Producer - documentary film "Sole 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 (Total 121)

May 2024 Live on-air interview – Regarding the severe inflight turbulence event aboard Singapore Flight 321, killing one passenger, injuring 41, 26 of which critically.

Scrips News, Atlanta, Georgia – Anchor Unknown (5/24)

May 2024 Live on-air interview – Regarding the crash of Iranian President's helicopter in remote Iran, search techniques and recovery.

➤ Asharq News, Dubai, United Arab Emirates, – Anchor Unknown (5/19)

May 2024 Taped interview – Boeing manufacturing problems and safety culture concerns.

 ZDF/NBC German Television newscast - Reporter Nicola Wenz (5/16)

April 2024 Live on-air expert - Testified to the U.S. the Senate led by Chairman Senator Richard Blumenthal.

➤ C-SPAN Live – Regarding Safety Culture concerns at Boeing based on whistleblower reports and other information sources. (4/23)

April 2024 Live on-air expert – Concerns raised by Boeing Whistleblower Sam Salehpour

➤ CNN Headline News London England – via satellite live Anchor Richard Quest. (4/10)

January 2024	Live on-air interview – Regarding the Alaska Airlines Door Plug In- Flight Blowout. ➤ Asharq News, Dubai, United Arab Emirates – Anchor Unknown (1/8)
January 2024	Live on-air interview – Regarding the Alaska Airlines Door Plug In- Flight Blowout. ➤ NewsNation Live, – Anchor Marni Hughes (1/8)
January 2024	Live on-air interview – Regarding the Alaska Airlines Door Plug In- Flight Blowout. ➤ Spectrum News, – Anchor MaryLee Melendez & Curtis Jackson (1/8)
January 2024	Live on-air interview – Regarding the landing A350 and DHC- 8 on runway collision accident in Japan. ➤ CNA News, Singapore – Anchors Teresa Tang and Julie Yoo (1/2)
October 2023	Live interview – Interview for attempted engine cut-off by Alaska Airlines pilot jump seater on Horizon Airlines Flight 2059. ➤ ABC 7 San Francisco – Anchor Kristen Sze (10/25)
October 2023	 Taped interview – Helijet S-76 Lighting strike with significant vehicle damage. CTV News Vancouver, 6PM newscast - Reporter Ben Miljure (10/25) CTV News Vancouver, 6PM newscast - Reporter Kevin Charach (10/26)
April 2023	Taped interview – American Airlines & John Glenn International Airport to Phoenix flight bird strike and engine failure/fire. ➤ WBNS 10TV, 6PM newscast - Reporter Ashley Bornancin (4/23)
January 2023	Taped interview - Subject matter expert interview on Russian aviation isolation and the state of their infrastructure on safety. Are their airlines safe to fly on? ➤ Voice of America – Anchor – Liliya Anisimova (1/27)
January 2023	Live on-air - Subject matter expert interview on 2-hour NAS shut down due to NOTAM system wide failure. ➤ Sky News Arabia – Anchor – Omar Ali. (1/11)
January 2023	Live on-air - Subject matter expert interview on 2-hour NAS shut down due to NOTAM system wide failure. ➤ Spectrum News 1 California – Anchor – Seth Lemon (1/11)
December 2022	 Taped interview – Cleveland Hopkins International Airport ATC outage due to sabotage by an individual. ▶ WEWS News5 - Reporter Tara Morgan (12/6)

October 2022	 Taped interview – Fatal Beechcraft accident near Parkersburg West Virginia NBC4, 6PM newscast - Reporter Eric Halperin (10/18)
October 2022	Taped interview − Fatal Beechcraft accident near Parkersburg West Virginia ➤ WBNS 10TV, 6PM newscast - Reporter Hillary Lake (10/18)
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 Dubai, United Arab Emirates 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. ➤ Dubai, United Arab Emirates - Anchor Sahar (4/3)
February 2021	Live on-air expert – Resumption of air service after a year of COVID impact on the aviation industry. ➤ Dubai, United Arab Emirates - Anchor Sahar (2/9)
January 2021	Live on-air expert - Indonesian transportation lines, Boeing 737-500 after takeoff from Jarkarta Indonesia. ➤ Dubai, United Arab Emirates - 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 \triangleright 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 Lemon. (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.

Podcast (Total 1)

May 2024

PBD Podcast. With Patrick Bet-David. Discussion over aviation safety in the United States in addition to Senate testimony and continued problems with Boeing and their lack of a safety culture.

PBD Podcast has over 14 million subscribers and typical guests include high profile news makers from numerous industries. He also includes other guests from the entertainment industry. As a sample, a few of the guests in the last year have included Kevin Hart, Roseanne Barr, Mike Tyson, Neil DeGrasse Tyson, Robert Kennedy Jr., and Shaquille O'Neal.

➤ San Diego, California. PBD Podcast – Anchor Patrick Bet-David (5/10).

Radio (Total 51)

May 2024	 Taped interview – Airline safety and multiple turbulence injuries on several flights. New Zealand, Auckland. RNZ. Morning Show – Anchor Nathan Rarere (5/27)
May 2024	Live interview – Regarding the United States Senate testimony given on April 17 th regarding Boeing Safety Culture. ➤ BBC Radio London England – Anchor Rahul Tandon (5/19)
May 2024	 Taped interview – Aviation airline safety and GPS jamming and spoofing originating from Russia. ▶ New Zealand, Wellington. RNZ. Morning Show – Anchor Jim Mora (5/8)
May 2024	Live on-air interview – Regarding reports that Boeing workers falsified records that safety related assembly work had been completed when it was not. ➤ ABC News, Melbourne, Australia. – Anchor Patricia Karvelas (5/7)
May 2024	 Taped interview – Regarding accident in Heyburn, ID and obstacles near airports and current regulations. ▶ NPR Boise State Public Radio – Anchor Racheal Cohen (5/7)
April 2024	 Taped interview – Regarding the United States Senate testimony given on April 17th regarding Boeing Safety Culture. ▶ BBC Radio London England – Anchor Rahul Tandon (4/18)
April 2024	Taped interview – Regarding the industry and the number of safety events in addition to what some would say is an increase in their severity. ➤ NPR – Anchor James Doubek (4/9)
March 2024	 Taped interview – Aviation airline safety, specifically the Latam 787 captain's seat accidentally moving forward causing the nose to pitch down. New Zealand, Wellington. RNZ. Morning Show – Anchor Jim Mora (3/21)
March 2024	Taped interview – Regarding the industry and the number of safety events in addition to what some would say is an increase in their severity. ➤ NPR – Anchor Janet Nguyen (3/18)
February 2024	 Taped interview – Aviation airline safety, realistic concerns, Boeing and Airbus problems and safety for the global traveling public. New Zealand, Wellington. RNZ. Morning Show – Anchor Jim Mora (2/29)

January 2024 Live on-air interview – Aviation airline safety, flight attendant safety briefings and how to safely evacuate. ➤ Singapore 89.3FM Morning Show – Anchors Ryan Huang & Audrey Siek (1/16) January 2024 Taped interview – Regarding the Alaska Airlines Door Plug In-Flight Blowout. ➤ NPR – Anchor Janet Nguyen (1/9) January 2024 Live interview – Regarding the Alaska Airlines Door Plug In-Flight Blowout. ➤ BBC Radio London England - Anchor Unknown (1/9) January 2024 Taped interview – Regarding the Alaska Airlines Door Plug In-Flight Blowout. ➤ NPR – Anchor Henry Epp (1/8) January 2024 Live on-air interview – Regarding the Alaska Airlines Door Plug In-Flight Blowout. ➤ KCBS News, San Francisco – Anchors Margie Shafer and Eric Thomas (1/8)January 2024 Live on-air Interview – Regarding the landing A350 and DHC- 8 on runway collision accident in Japan. ➤ KCBS News, San Francisco – Anchors Margie Shafer and Eric Thomas (1/4)December 2023 Subject matter expert interview on air traffic controller fatigue concerns and possible solutions. ➤ KNX 97.1 News radio – Los Angeles. Anchors – Charles and Rob (12/5) September 2023 Subject matter expert interview on possible fake engine parts that have no paperwork. They are all being replaced. ➤ KNX 97.1 News radio – Los Angeles. Anchors – Charles and Rob (9/19) February 2023 Subject matter expert interview on lithium battery fire on United Airlines Flight with crew and passenger injuries. ➤ KNX 97.1 News radio – Los Angeles. Anchors – Charles and Chris (2/8) December 2022 Subject matter expert interview on severe turbulence encountered during Hawaiian Airlines PHX to HNL flight with serious injuries. ➤ KNX 97.1 News radio – Los Angeles. Anchors – Rob and Charles (12/19)

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	Subject matter expert interview on Coronavirus and the global aviation industry. ➤ Marketplace – NPR. Anchor – 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) July 2015 Live on-air expert – The disappearance of Malaysian Flight 370, possible 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 (Total 55)

May 2024

Daily Beast

➤ Interview regarding the injuries and death of a passenger on the Singapore flight that encountered unforecasted severe clear air turbulence. Washington DC. Reporter – Rachel Olding (5/21)

May 2024

Epoch Times

➤ Interview regarding the concerns with Boeing manufacturing and safety culture. Washington DC. Reporter – Jacob Burg (5/16)

May 2024

Washington Examiner

➤ Interview regarding the concerns with Boeing manufacturing of both the B737 and B787. Washington DC. Reporter – Elaine Mallon (5/11).

April 2024

Agence France-Presse

➤ Interview regarding the United States Senate testimony given on April 17th regarding Boeing Safety Culture. Paris, France. Reporter – John Biers (4/26).

March 2024

Reuters (India)

➤ Interview and fact checking for numerous other articles on the B777 flight from Sydney to San Francisco leaking unknown fluid from right main landing gear. Fuel or hydraulic fluid? Reporter – Carmel Jaeslin (3/20)

February 2024 Newsday

➤ Interview for article on single engine aircraft landing accident in New York and statistics of these types of accidents. Reporter – Matt Chayes (2/21)

February 2024 USA Today

➤ Interview for article on the dangers of flying in Southern California after military helicopter accident. Reporter – N'dea Yancey-Bragg (2/8)

January 2024 Interview - New York Post

➤ Carbon fiber aircraft fuselage design and its strength as related to escape time for airliners ground based aircraft fires. Reporter Mike Avila (1/11)

January 2024 Interview – CNN Travel London England.

Regarding the Alaska Airlines Door Plug In-Flight Blowout. Author Jacopo Prisco (1/9)

January 2024 New York Post

Regarding the landing A350 and DHC- 8 on runway collision accident in Japan. Mike Avila (1/5)

December 2023 Frommer's

➤ Interview for article on spike in runway incursions. Reporter – Sean Cudahy (12/15)

October 2023 Associated Press

➤ Interview for article on attempted engine cut-off by Alaska Airlines pilot jump seater on Horizon Airlines Flight 2059. Reporter – Gene Johnson (10/25)

October 2023 New York Times

➤ Interview for article on attempted engine cut-off by Alaska Airlines pilot jump seater on Horizon Airlines Flight 2059. Reporter – Mike Baker (10/24)

October 2023 CBS interview web site print.

Expert interview regarding attempted engine cut-off by Alaska Airlines pilot jump seater on Horizon Airlines Flight 2059. Anchor – Kerry Breen (10/24)

August 2023 Washington Post

➤ Interview for article on the shoot down of Russian Wagner Chief Yevgeny Prigozhin. Reporter – Jan Ludwig (8/24)

November 2022 Newsday

➤ Interview for article on experimental aircraft (SeaMax M-22) accident just off East Hampton New York. Reporter – Joan (10/18)

October 2022 USA Today

➤ Interview for article on continued ban on cell phone usage on modern day aircraft. Should we still be worried? Reporter – Zach Wichter (10/25)

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 on a 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 manufacturer, 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 <u>www.theverge.com</u>

➤ 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)

July 2015 Wall Street Journal – Front page

➤ 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)

August 2014 Cleveland.com and The Plain Dealer

➤ 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)

April 2014 www.defenseone.com

➤ 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:		
December 2023	Evaluator for Stamps Eminence Scholarship.	
December 2023	Evaluator for COE Strategic Research Initiative Proposals.	
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 faculty awards: Harrison Faculty Award for Excellence Clara M. and Peter L. Scott Faculty Award	
Mar '90 to Apr '93	Member: Education Committee. The Central Ohio Poison Center. Columbus, Ohio.	
Sept '86 to May '89	Member: Drug Abuse Education Committee. The Ohio State University. College of Pharmacy. Columbus, Ohio	
Grants: Total - \$ 5,	807,335	
May 2024 April 2026	Co-PI (OSU): FAA Grant Award. Project will provide students with UAS knowledge, experience and actual flight proficiency skills that will advance students in the employable fast-growing drone industry. The program is designed to strengthen the delivery of drone education: teacher professional development and an unmanned aircraft systems aviation program for high school students - \$346,400 FAA research grant.	
September 2023 August 2026	Technical Scientist: Pilot Interactions with Advanced Flight Deck Technologies (Artificial Intelligence A.I.). Research data is needed to inform human factors considerations for design and operational evaluation of highly automated flight deck systems, and pilot interactions with flight deck displays and controls in a transport airplane - \$996,963 FAA research	

in Non-Normal and Abnormal Events - \$90,000.

Co-PI (OSU): COE TTHP. Evaluation of Automated and Complex Flight Deck Systems in Commercial Aircraft: Identification and Assessment of

How Risks of Autonomy Produce Challenges to Flight Crew Performance

grant.

September 2022 September 2023

June 2021 to December 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	Principle 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: Start Dates and Totals (21 articles & 5 book proposals)
September 2023	Malmquist, S., Vincenzi, D., Pruchnicki, S. & Lemos, K. Textbook editor <i>Simulation and Training: Processes, Challenges and Solutions.</i> Projected release date end of 2024. CRC Press.
September 2021	Invited, reviewer and referee for Easeediting. To assist and support papers those researchers where English is not their primary language. @ completed. Beijing China.
April 2021	Invited Referee for Frontiers in Public Health. One review completed.
November 2019	Invited Referee for <i>Reliability Engineering and System Safety</i> . One review completed.
April 2018	Invited Referee for <i>Aeronautical Journal</i> Aerospace International Royal Aeronautical Society. Four reviews completed.
December 2017	Invited Referee for Ergonomics. One review completed.

June 2017	Invited Referee for <i>Journal of Cognitive Engineering and Decision Making</i> . One review completed.
August 2016	Reviewed book proposal (2 books) for Routlage Publishing. London, U.K.
July 2016	Invited Referee for Safety Science. 11 reviews completed.
July 2016	Invited Editorial Board Member for International Journal of Aeronautical Science & Aerospace Research (IJASAR). Have either supervised or completed three reviews.
January 2015	Invited Referee for <i>Process Safety and Environmental Protection</i> . The 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.
Oct 2009	Reviewed book proposals (3 books) for Ashgate Publishing Company. London, U.K.
Oct 1993-Feb 1999	Creator and Senior Editor- <u>The Antidote</u> . The Central Ohio Poison Control Center's Educational Newsletter. Children's Hospital. Columbus, Ohio.
Mar '91-Mar '92	Review Editor. <u>Pre-hospital Drug Therapy</u> . Textbook project. Gonsoulin SH, Raynovich, Mosby Lifeline Publishing. New York.
Sept '90 – Sept '96	Review Editor. Journal of Emergency Medical Services (JEMS). EMS Journal. Pharmacology and Toxicology related chapters.
Professional Organ	nizations:

Professional Organizations:

Society (HFES)
boolety (III EB)
January 2023 Professional Member of the American Institute of Astronautics &
Aeronautics (AIAA)
June 2022 Fellow - Royal Aeronautical Society
May 2016 Associate Member – Society of Experimental Test Pilots
June 2015 Associate Member – The Charter Institute Ergonomics & Human Factors
July 2013 Member - The Honor Society
March 2013 Member - Resilience Engineering Association
September 2012 Member - Phi Kappa Phi Honor Society
December 2011 Member - Institute of Electrical and Electronic Engineers (IEEE)
August 2008 Associate Member - Human Factors and Ergonomics Society
May 2003 Member - Association for Aviation Psychology (AAP)
June 2003 Member - International Society of Air Safety Investigators (ISASI).

Honors/Awards:	
2022	Awarded Fellow status in the Royal Aeronautical Society.
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 10% of graduate students at Ohio State.
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.
1989	Pfizer Award for excellence in community Pharmacy practice.

Community and Academic Service:

2015 – 2019	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 – Chairman of the Operations Division, 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