

WILLIAM ANTHONY TUCCIO, PhD

ATP • CFII

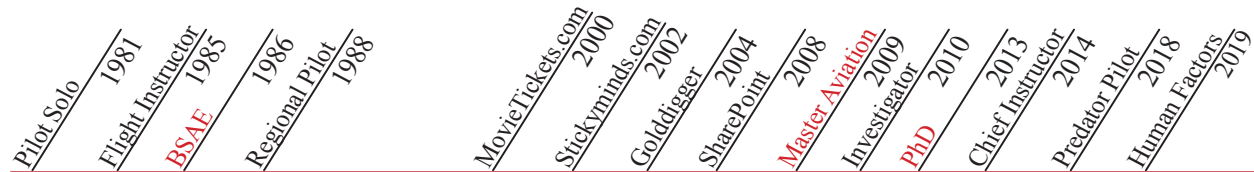
bill@tuccio.com • 202-805-1587

at-a-glance locations

- ▼ Alaska
- ▼ California
- ▼ Kansas
- ▼ Washington, DC
- ▼ Virginia
- ▼ New York
- ▼ Connecticut
- ▼ Georgia
- ▼ Florida
- ▼ England
- ▼ Iraq
- ▼ Singapore



at-a-glance timeline



education

- STUDENT - BS IN INTERDISCIPLINARY STUDIES** 2021-present
Liberty University
Graphic Design and Computer Science
- PHD IN AVIATION** 2010-2013
Embry-Riddle Aeronautical University
Dissertation: Collaborative Audio Transcription and Repair as a Method for Novice Pilots to Learn Approach Briefing Crew Resource Management (CRM) Skills
- MS IN AERONAUTICAL SCIENCE** 2006-2009
Embry-Riddle Aeronautical University
Aviation/Aerospace Safety Systems Specialization
- BS IN AERONAUTICAL ENGINEERING** 1982-1986
Rensselaer Polytechnic Institute
Cooperative Education with NASA Langley

aviation certifications and experience

Airline Transport Pilot (Multi)..... 9,000 Total (including 1,000 Large UAS)
Commercial Pilot (SES, SEL)..... Tailwheel and Turbine Experience
Private Pilot (Glider)..... 45 Hours
Certified Flight Instructor (CFII, ME) 2,000 Dual Given
SD3 Type Rating..... 3,000 Hours
ATR42 Type Rating 1,500 Hours
DOD 2628 MQ-1-C Predator UAS..... 1,000 Hours in Theatre
FAA Physiological Training
sUAS Certificate

leadership

NATIONAL TRANSPORTATION SAFETY BOARD 2010-2018
Led cockpit voice recorder (CVR, “Black Box”) group recovery and review efforts. Led study on new investigative methods incorporating ethnomethodology/ conversation analysis (EMCA). Led study on how to improve the NTSB hearing process.

COMMUNITY 1991-present
Served as president, treasurer, and secretary of various homeowner association boards. Led the successful effort to pave a half-mile private road that crossed ten different property lines. Served in leadership capacities for the Knights of Columbus.

OTHER LEADERSHIP ROLES 1996-present
During the “Internet Boom” leading the development of the first online movie ticketing website; led the revamping of public knowledge-base website and associated back office customer relationship management system; led the development of automotive data mining application; led the development of various entrepreneurial ventures; led the startup of a retail computer training store; led research study to improve flight instructor effectiveness; chief flight instructor.

National Transportation Safety Board investigative history



aviation experience

PILOTING EXPERIENCE 1981-present
Began at the age of 16 in 1981, learning to fly in Danbury, Connecticut.

AVIATION HUMAN FACTORS 2019-present
At GARMIN International, design, develop, and test user experience and systems integration.

LARGE UAS OPERATOR 2018-2019
At General Atomics, trained as pilot operator in the Predator Grey Eagle (MQ-1-C) authorized to fly military-owned aircraft. Deployed to Iraq in support of Operation Inherent Resolve, our intervention against ISIL.

SAFETY ADVOCATE 2017-present
Volunteering for the FAA as a FAAS Team Representative, have developed and offered two seminars. In 2017, a seminar to improve flight instructor skill. In 2021, a seminar on using electronic flight bags on private pilot practical tests.

ACCIDENT INVESTIGATOR (RECORDERS) 2010-2018
At the National Transportation Safety Board, working within the Office of Research & Engineering, Recorder Division, assisted with transportation accident investigations with a focus on aviation. Principle responsibilities included leading groups of subject matter experts in review of cockpit voice recorders from aviation accidents and creation of factual transcripts and reports used to determine probable cause. Other responsibilities include analysis of flight data recorders, video recordings, and forensic analysis of electronic devices found onboard accident vehicles. Attended NTSB Basic Accident Investigator two-week course (AS101), covering methodology of accident investigation, legal aspects of NTSB, party system, interviewing, aircraft performance, wreckage analysis and numerous case studies; later teaching the recorder module for this course. Taught modules at USDOT's Transportation Safety Institute Advanced General Aviation Aircraft Accident Investigation Course and attended the same. Led research study into how EMCA could be incorporated into NTSB investigative methods. Participated in outreach by publishing papers and moderating a session with Board Member T. Bella Dinh-Zarr at the Transportation Research Board. Assisted in recovery of over 950 electronic devices/recorders across 450 accident investigations, the large majority in aviation, with some in rail and highway. Last performance review reflected a perfect "outstanding" rating.

FLIGHT INSTRUCTOR 1985-present
From 1985 to present, engaged in part time flight instruction in varied locations. In 2019, became the Part 141 Chief Instructor of Air Associates of Kansas. From 2014-2017, acted as Part 141 Chief Instructor at GT Aviation, Friendly, Maryland, for courses from private through multiengine instrument instructor. From 2019, Chief Instructor at Air Associates of Kansas. Since 1985, related activities include President of college flying club, flight instructing in Alaska, and flight instructing for a military Aero Club at Eglin AFB.

AIRCRAFT OWNER AND COMMUNITY 1986-2010
From 1986 to 1987 owned Bellanca Citabria, Binghamton, New York. From 2002 to 2009, owned Maule MX-7-180. From 2006 to 2007 owned Cessna 152. From 2009 to 2011, owned Cessna 182RG Skylane. Lived on a private airport from 2002 to 2010.

COMMUTER AIRLINE PILOT 1988-1996
At American Eagle, from 1988 to 1996 flew as a crewmember on routes in the Northeastern United States, Florida and the Bahamas. Served as first officer in FAR part 135 operations in Shorts 330 from 1988 to 1989; Captain in Shorts 330 from 1989 to 1990; Captain in FAR part 121 Shorts 360 from 1989 to 1993; and Captain in ATR 42 from 1993 to 1996.

ON-DEMAND CHARTER PILOT 1987-1988
At Montair, flew as FAR part 135 captain in Beechcraft Baron based out of Burlington, Vermont. Operations were on-demand, single pilot charter serving business, air ambulance, and cargo operations.

teaching and academic experience

FLIGHT INSTRUCTION 1985-present
As previously stated in Aviation Experience.

PROGRAM ADVISORY COMMITTEE 2021-present
For Seneca College, member of Remotely Piloted Aircraft Systems (RPAS) Business Operations Program Advisory Committee advising the college on industry related to RPAS.

HUMAN FACTORS & SMS SUBJECT MATTER EXPERT 2020-present
For Seneca College, served as subject matter expert to design new remotely piloted aircraft systems (RPAS) human factors course and safety management systems course.

ACCIDENT INVESTIGATION 2015-2017
While at the National Transportation Safety Board, taught AS101 recorders module, assisted teaching human factors recorder module (2015), taught three modules at DOT TSI Advanced General Aviation class.

INMATE RE-ENTRY TRAINING 2009-2010
For Okaloosa Correctional Facility, Crestview, Florida, formulated a lesson plan and administered six classes to teach inmates re-entering society parenting skills. Class was part of an overall plan by the state of Florida to use community volunteers to educate inmates to reduce recidivism. Each class had about 20-25 inmate-students.

MICROSOFT SHAREPOINT TRAINING 2006-2009
Designed and administered corporate, hands-on training on the use of Microsoft's collaborative software platform, SharePoint. Training was conducted at Eglin AFB, Florida for the 308th Armament Systems Wing and Air Armament Command (AAC). In addition to group training, also conducted one-on-one training on an as needed basis. Additionally, wrote software learning management system software for the Wing and AAC.

DATABASE TRAINING AND CONSULTING 1997-1999
Taught one-on-one for the Corporate Angel Network in White Plains, New York the skills necessary to migrate a Paradox database to Microsoft Access. Custom database design was used to link the travel needs of cancer patient families with unused space on participating corporate flights.

CORPORATE SOFTWARE TRAINING 1997-1998

Designed and administered training on word processing and corporate policy at the law firm of Davis, Polk and Wardwell in New York, New York.

EDUCATIONAL AND BUSINESS SOFTWARE TRAINING 1996

Managed the startup concept of delivering software training in retail, mall environment in Danbury, Connecticut for Computerology, Inc. The target demographic were ages five through adult. In addition to structured training classes, Computerology supervised children's use of educational software while their parents shopped in the mall.

BUSINESS SOFTWARE TRAINING 1992-1996

Taught business software classes part-time for CompuTrain in Carmel, New York. Classes included word processing, spreadsheets, financial and database programming. Also taught quadriplegics how to control software through voice commands.

other experience

QUALITATIVE RESEARCH 2012-present

Through study and hands-on research, developed actionable skills in managing and investigating large volumes of qualitative data, including documents, audio and video recordings, and transcripts. Leveraged these skills with Qualitative Data Analysis Software and inductive research methods.

ETHNOMETHODOLOGY/CONVERSATION ANALYSIS (EMCA) 2014-2020

Self-directed study using EMCA to improve flight instructor effectiveness. Collected over 100 hours of actual flight instruction video and audio recordings and performed a qualitative, EMCA study. Attended courses in EMCA, including becoming a Conversation Analytic Role-play Method (CARM) affiliate (see www.carmtraining.org). Partnered with an experienced EMCA researcher to publish papers and deliver training seminars to flight instructors.

SOFTWARE ENGINEER 2005-2010

TYBRIN (Jacobs) Corporation, Ft. Walton Beach, Florida

Research activities included comparison of competing software technologies and designs to solve the requirements problems posited by various customers. Teaching activities included design and administration of training programs to teach newly developed SharePoint-based software products at Eglin AFB/ACC to the user community. Software development work conducted in the area of project and personnel management and military mission and sortie scheduling (Patriot Excalibur) using the Capability Maturity Model Integrated (CMMI) and agile methods.

SOFTWARE ENGINEER 2002-2005

Fresh Beginnings, Niceville, Florida

Administrative work included the documentation of created software products. Research activities included comparison of competing software technologies and designs to solve the requirements problems posited by various customers. Work conducted in the area of disintermediated customer relationship management, direct marketing for the auto industry, and development of a datamining package for marketing.

LEAD DEVELOPER

2000-2002

Software Quality Engineering, Orange Park, Florida

Administrative work included the management of a development and test team of three employees and documentation of work products. Research activities included investigation of designs of legacy systems and discovery of replacement technologies and designs leading to corporate process reengineering. Teaching activities included teaching the user community how to use the newly implemented systems. Work conducted in the area of the management of magazine subscriptions, training seminars and conference registrations related to the software engineering community. Work also produced a new knowledge base website, <http://www.stickyminds.com>, related to best practices and guidance on software development.

CHIEF TECHNOLOGY OFFICER

1999-2000

Hollywood.com, MovieTickets.com and Broadway.com, Boca Raton, Florida

Leadership work included the personnel management of four geographically separated technology departments as well as the local technology team. Research included discovery of designs and technologies to meet the business growth targets of the Chief Executive Officer, including the development of www.movietickets.com, the first real time seller of movie tickets on the Internet in the year 2000 and www.broadway.com, an online ticket seller for Broadway shows.

DATAMART DEVELOPER

1997-1999

Integrated Health Systems, St. Simons, Georgia

Administrative work included the management of a datamart of home health care visits including the data quality of the datamart. Research included the discovery of legacy system designs used as data feeds to the datamart and methodologies to extract, transform and load such data into the newly developed datamart. The datamart empowered disintermediated operational reporting of home health care visits throughout the organization.

COMPUTER SUPPORT AND WORD PROCESSING SPECIALIST

1996-1997

Davis Polk & Wardwell, New York, New York

Administrative work included making edits to complex legal documents and Securities and Exchange Commission (SEC) filings based on pen and ink markups by firm lawyers. Teaching included the design and delivery of training on software products and corporate policy to firm employees.

ENTRY LEVEL ENGINEER

1986-1987

Singer-Link Flight Simulation, Binghamton, New York

Software development in FORTRAN programming language related to military flight simulators.

COOPERATIVE EDUCATION STUDENT

1983-1985

NASA Langley, Hampton, Virginia

Alternating four-month work assignments while attending college. Assisted researchers in the areas of cryogenic wind tunnel analysis, low speed wind tunnel analysis, material structural fatigue and laser polymerization.

academic & industry papers, theses and research

- TUCCIO, W. A.** 2021
FAA FAASTeam Webinar
Private pilot airman certification standards (ACS) and our electronic flight bag (EFB) during a practical test
- DESOUZA, D., BETZ, E., CLINKENBEARD M., MORITA, E., SHRIKANT, N., TUCCIO, W. A.** 2020
Language & Communication • 76, pp. 47-57
Taking a detour before answering the question: Turn-initial okay in second position in English interaction.
- BERNARD, T., TUCCIO W. A., ET AL.** 2020
Society of Flight Test Engineers 51st International Symposium (Online)
GARMIN Autoland: Simulator and flight testing of an emergency autonomous landing system,
- BERNARD, T, TUCCIO, W. A., ET AL.** 2020
11th International Conference on Applied Human Factors and Ergonomics (Online)
An approach to aerospace design integrating crew resource management in operational environments
- TUCCIO, W. A. AND GARCIA, A. C.** 2019
Research on Language and Social Interaction
'I would ah probably think about turning...': Teaching routine flight procedures, situation awareness, and aeronautical decision making through 'I Would' prefaces in aviation instruction
- VARTABEDIAN, R. AND MASUNGA, S.** 2019
Los Angeles Times • February 4
Lion Air Crash shows cockpit computers are no substitute for pilot skills (cited as subject matter expert)
- TUCCIO, W. A.** 2018
Aviation Week & Space Technology • November 12-25
Introspection for the NTSB? (Viewpoint)
- SHRIKANT, N.; BETZ, E.; MORITA, E.; SEARLES, D.; CLINKENBEARD, M.; TUCCIO, W. A.** 2018
5th International Conference on Conversation Analysis (ICCA), Loughborough, England
Okay as a second-position preface for multi-unit turns in English
- STOLZER, A. J.; FRIEND, M. A.; TRUONG, D; TUCCIO, W. A.; AGUIAR, M.** 2018
Safety Science • 104, pp. 55-69
Measuring and evaluating safety management system effectiveness using data envelopment analysis.
- TUCCIO, W. A.** 2017
National Training Aircraft Symposium (NTAS), Daytona Beach, Florida
Improving instructor quality using the conversation analytic role-play method (CARM)
- TUCCIO, W. A.; SCHUSTER, B.; GREGOR, J.** 2017
Audio Engineering Society (AES), Forensic Audio Conference, Arlington, Virginia
Deriving engine power from a cockpit voice recording in an accident investigation

- TUCCIO, W. A.** 2017
FAA FAASTeam Seminars, Leesburg, Virginia
 Improving your effectiveness as an instructor
- TUCCIO, W. A. & NEVILE, M.** 2017
Journal of Aviation/Aerospace Education & Research • 26(1)
 Using conversation analysis in data-driven aviation training with large-scale qualitative datasets
- TUCCIO, W. A. & NEVILE, M.** 2016
Annual Meeting of the Language and Social Interaction Working Group (LANSI), New York
 Interventionist conversation analysis in aviation: Improving instructor talk and student radio skills
- TUCCIO, W. A. & NEVILE, M.** 2016-2018
 Self-directed research of flight instruction recordings aimed at improving flight instructor effectiveness
- TUCCIO, W. A.; ESSER, D. A.; DRISCOLL, G.; MCANDREW, I.; SMITH, M. O.** 2016
Pragmatics and Society • 7(1), pp. 30-56
 Interventionist applied conversation analysis: Collaborative transcription and repair based learning (CTRBL) in aviation
- NATIONAL TRANSPORTATION SAFETY BOARD** 2015
Public comments to FAA on cockpit voice recorder advisory circular
 Led effort to draft public comments on advisory circular, approved by Board and submitted to FAA
- TUCCIO, W. A.** 2015
Transportation Safety Institute, Advanced General Aviation Accident Investigation, Oklahoma City, Oklahoma, August 2015 & December 2015
 Delivered three modules related to accident case studies and glass cockpit technology in general aviation
- TUCCIO, W.A.; FENWICK, A.; DELGADO, Y.; HOIDAL, M.; MIKKOLA, M.** 2015
National Transportation Safety Board - Internal Report
 Improvement to the Hearing Process
- TUCCIO, W. A.** 2014
Accident Investigators Recorders (AIR), Singapore
 Recovery of video
- TUCCIO, W. A.** 2014
American Association for Applied Linguistics Annual Conference, Portland, Oregon
 Experimental evaluation of collaborative transcription and repair based learning with aviation pilots [Poster Session]

- STOLZER, A.** 2013
FAA Air Traffic Organization NextGen & Operations Planning Grant
 Enhanced General Aviation Pilot Study (EGAPS) Research. Assistant to author. Performed statistical analysis and acted as writer/editor of the final technical report.
- TUCCIO, W. A.** 2013
PhD Dissertation • Embry Riddle
 Collaborative audio transcription and repair as a method for novice pilots to learn approach briefing crew resource management (CRM) skills
- TUCCIO, W. A.** 2013
Journal of Navigation • 66(1), pp. 135-147
 Aviation approach charts in an iPad world
- TUCCIO, W. A. & TOWNSEND, H** 2012
Journal of Aviation Technology and Engineering (JATE) • 2(1)
 A linear programming model for time-alignment of cockpit voice recorder and flight data recorder data
- JOSLIN, R.E.; GOODHEART, B.J.; TUCCIO, W.A.** 2011
International Journal of Applied Aviation (JATE) • 11(2), pp. 13-36
 A mixed method approach to runway incursion rating
- STOLZER, A. J.** 2011-2013
GA - Systems Safety Management Research sponsored by Federal Aviation Administration
 Implemented the research website for FRAT, and gained Institutional Review Board approval for research as part of Aviation Safety Information Analysis and Sharing – General Aviation (ASIAS-GA)
- TUCCIO, W. A.** 2011
The Center for Computer-Assisted Legal Instruction
 Aviation accident investigation compared to civil litigation (AVA01)
- STOLZER, A. J.** 2010-2012
Contract No. DTFA03-02-D-0037 from the FAA WM J Hughes Technical Center
 Assistant to Dr. Alan Stolzer on System Safety Management Transformation (SSMT) Safety Management System (SSM), Pilot Project Criteria/Requirements Development. Grant purpose was to provide guidance to design and manufacturing (D&M) firms on implementation of Safety Management Systems. Assistance included interviews with companies, summary reports and draft text. Contributed to documents providing guidance to D&M firms on how to write a system description. Advised the FAA on the data management issues related to SMS. Created a matrix comparison between SAE AS9100B and FAA preliminary D&M SMS framework.
- STOLZER, A. J.** 2011
Federal Aviation Administration, AVP-300
 Appendix D: System Description & Hazard Identification Process” of the document Design and Manufacturing Safety Management System (SMS) Pilot Project Guide (my role was to compose document under direction of Alan Stolzer, PhD, principal investigator, and respond to peer reviews by SSMT working group and FAA)

TUCCIO, W.A. 2011
Journal of Aviation/Aerospace Education [JAAER] • 21(3)
 Heuristics to improve human factors performance in aviation

TUCCIO, W.A. 2007
Master's Thesis (Capstone) • Embry-Riddle
 A comparison of turf management practices at turf runway airports in the southeast

attendance at seminars and other developmental

DREW, P.; HERITAGE, J.; ROBINSON, J. D.; FOX, B. A.; RAYMOND, C.; SORJONEN, M. 2017
Conversation Analysis Summer Institute. University of Colorado, Boulder, June 23-30

STOKOE, E. 2016
Conversation analytic role-playing method (CARM) affiliate workshop. Loughborough University, England, January 21-22

PANAM INTERNATIONAL FLIGHT ACADEMY 2016
Airbus A320 Type Rating Ground School. PanAm International Flight Academy, Miami, Florida, January.

NATIONAL TRANSPORTATION SAFETY BOARD 2015
Professional Development Program. January-June.

awards and other publications

FAA CENTER OF EXCELLENCE FOR GENERAL AVIATION (CGAR) 2012
 Outstanding Student of the Year Award.

TUCCIO, W. A. 2010-2018
 Various factual reports for National Transportation Safety Board accident investigations summarizing the contents of cockpit voice recorders, flight data recorders, and other electronic devices. Available in public dockets via <http://www.tuccio.com>.

TUCCIO, W. A. 2008
www.stickyminds.com
 Big brother testing

TUCCIO, W. A. 2008
Sun n' Fun Aviation Forums, Lakeland, Florida, April
 Turf airport study

WOOD, JANICE 2008
General Aviation News • March 21, pp. 25-26
 Got turf? Magazine article on the Turf airport study.

TUCCIO, W. A. 2003
Southern Aviator • August 6
 Living with your plane: The joy of living with your plane

- TUCCIO, W. A.** 2003
Southern Aviator • March
 Arnie Odegaard and his Sky Ranch Inn
- TUCCIO, W. A.** 2001
www.stickyminds.com
 Flight plans, stormy requirements, and other extremes
-
- entrepreneurial**
- TUCCIO, W. A. & HUVARD, T.** 2008-present
AircraftMerchants.com
 Design and technical support of aircraft brokerage website using ColdFusion and SQL.
- TUCCIO, W. A. & HUVARD, T.** 2019
Forensic Field Assistant by Go Team Tools
 Mobile (Apple) application for quick identification of avionics/electronics found at the scene of accidents. Sold to NTSB in 2020.
- TUCCIO, W. A. & HUVARD, T.** 2010-2014
Aerocharts.com
 Apple Mobile applications including, aviation approach charts (iTerps), aviation trip planner (iFlyWhere), social aircraft site (Planes on Poles), airport time zone app (AirportZulu).
- TUCCIO, W. A. & HODISH, M.** 2002-2003
w59.net
 Developed a mail order concept to convert 8mm, DVD and VHS tapes to streaming video for delivery on the internet. The concept was targeted at a five-year technology window where emerging internet broadband was ahead of the consumer ability to upload large, video files. The business strategy was to enable consumers and businesses to post links to video of products being sold on the internet and print classified publications.
- TUCCIO, W. A., WEST, B., HODISH, M., HUVARD, T.** 1998-1999
GPSNavSource
 Investigated the possibility of using available government data to create an FAA approved, aviation GPS database source for GPS navigation devices.
- TUCCIO, W. A. & HUVARD, T.** 1997-2000
Internet E-Commerce
 Developed internet based, generic e-commerce software in an effort to create an application service provider model for e-commerce. Application demonstrated on the Wright Brothers “Century of Flight” e-commerce store.
- TUCCIO, W. A.** 1997-1999
One Way Round Trip (owy.com)
 Developed internet based system to manage pilot rental currency and qualifications for Fixed Base Operators (FBO). The concept took advantage of emerging internet connectivity to enable general aviation aircraft renters to share aircraft qualification information between different FBOs. The system also facilitated flight sharing through a geographical search engine.