

Scott R. Winter

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College Education:

Doctor of Philosophy in Aviation Technology (May 2013)

Purdue University, West Lafayette, IN

Dissertation Title: Pilot Decision-Making in Irreversible Emergencies.

Master of Science in Cross Disciplinary Studies (Dec. 2006)

(Concentrations in Aviation Weather and Education)

Minnesota State University, Mankato, MN

Thesis Title: Enhancement Methods for the Education of Aviators.

Bachelor of Science (May 2005)

Minnesota State University, Mankato, MN

Major in Professional Flight, Minor in Geography

Summa Cum Laude

Work Experience:

Over ten years of work experience in the aviation domain, including research, industry, and teaching and advising students at both the graduate and undergraduate level.

- **Embry-Riddle Aeronautical University**
 - **Assistant Professor of Doctoral Studies** (June 2017-Present)
 - Teach courses in the doctoral program
 - Chair and serve as committee member on student dissertations
- **Florida Institute of Technology (FIT)**
 - **Assistant Professor of Aeronautical Science.** (August 2013-May 2017)
 - Teach courses assigned by the College of Aeronautics.
 - Complete research on general aviation safety, human factors, and pilot education.
 - Advise undergraduate and graduate students on courses, projects, theses and dissertations.
 - Note: FIT does not offer tenure-track positions for its faculty.
- **Purdue University, West Lafayette, IN**
 - **Graduate Research Assistant, Dept. of Aviation Tech.** (June 2010-July 2013)
 - Teach two classes: AT 241 Basic Aircraft Systems (Fall), and AT 285 ATC Procedures and Weather (Spring).
 - Complete research projects on pilot's transition to glass cockpits and risk perception of the Small Aircraft Transportation System (SATS).
 - Acting as a SATS captain for the Cirrus SR20 aircraft and as a co-pilot on the university's Beechjet.
- **Cirrus Design Corporation, Duluth, MN** (Oct. 2006 – Dec. 2009)
 - **Subject Matter Expert, Flight Standards** (Oct. 2006 – Oct. 2007)
 - Author and manager for *Pilot's World* (online monthly publication).
 - Collaborated in training development and courseware projects.
 - Designed Safety Advisors for company and customer pilots.
 - Check Airman for company recurrent training program.

- **Training Coordinator, International Flight Standards** (Oct. 2007 – Dec. 2009)
 - Audit, train, and support International Standardized Training Centers.
 - Assist in developing and supporting new Training Centers.
 - Supported and presented at numerous International Cirrus Owner Fly-In events, provided new-product and recurrent training for international representatives of Cirrus Design, provided media support, and customer introductions to new products.
 - *International Travel Experience*
 - 3 trips, instructor training, and flying experiences in South Africa.
 - 2 trips to Europe. Flew a Garmin equipped Cirrus SR22 around Europe (U.K., France, Germany, Poland) on demonstration flights, interacted with customers, and flew media photo flights.
 - Flew demonstrator aircraft to Dominican Republic for owners' event and completed customer presentation.
 - Trained Malaysian pilots to fly SR20 in Australia, and supported and presented at owners' event.
- **Minnesota State University, Mankato, MN** (Dec. 2003 – Dec. 2006)
 - Lab/Graduate Assistant
 - Weather Analysis Laboratory for Educational Resources (WALTER). Teaching assistant in Introductory Weather courses.
 - Developed laboratory lessons for aviation students using X-Plane and visualization graphics.
 - Managed and supported the MSU Radon Project: Radon testing program in association with the Minnesota Department of Health.
 - Teaching Assistant
 - Department of Aviation
 - Taught two semesters of Private Pilot Ground School, S06 & F06. Developed all presentation materials, quizzes, & exams.

Dissertation Students Advised (Chaired, Co-Chaired, and Committee Member):

1. Gajapriya Tamilselvan (in progress) Committee Member
Title: TBD
2. Timothy G. Rosser (December 2016) Co-Chair
Title: Which Emotions Mediate the Relationship Between Type of Pilot Training and Willingness to Fly in Commercial Aircraft?
3. Abdullah S. Ozyurek (December 2016) Co-Chair
Title: An Examination of How Ratings of Airlines are Affected by Different Types of Information: A Mediation Analysis
4. Nicholas Kasdaglis (December 2016) Committee Member
Title: Angle of Attack Visualization: A Proposal for a Tangible Interactive In-Flight Loss of Control Recovery System
5. Hussain Fayez A. Alhallaf (May 2016) Committee Member
Title: In Pursuit of Aviation Professionalism: Examining the Relationship Between Factors Affecting the Aviation Profession and the Concept of Aviation Professionalism
6. Ismael Cremer (December 2015) Committee Member
Title: Creating and Validating a Perception of Airport Sustainability (PASS) Scale
7. Wei Tan (December 2015) Committee Member
Title: Contribution to the Onboard Context-Sensitive Information System (OCSIS) of Commercial Aircraft
8. Briditte K. Armon (July 2015) Committee Member
Title: Distributed Influence in Global Virtual Teams: An Investigation of the Boundary Conditions and Mediating Action Mechanisms of Shared Leadership.

Thesis Students Advised (Chaired, Co-Chaired, and Committee Member):

1. Eric Schanafelt (in progress) Chair
Title: TBD
2. Yousef Aba Alkhail (December 2016) Chair
Title: A Comparison of Airline Passenger's Perception and Attention Toward Onboard Safety Briefing Video Presentations
3. Vivalda Patin (May 2017) Chair
Title: Consumers' Level of Trust in Using Automated Aircraft, Vehicle or Trains as a Transportation Means
4. Anthony Lolchoki (in progress) Committee Member
Title: The Impact of Computer Tablets on Flight Training Among FIT GA Pilots
5. Adam R. Goetz (in progress) Committee Member
Title: Demonstration of Augmented Reality and Its Effects on Situational Awareness
6. Koray Balkose (in progress) Committee Member
Title: Effectiveness of Randomized Line Orientated Flight Training Scenarios in Threat and Error Management Training
7. Xinpei Lu (December 2016) Chair
Title: Consumer Likelihood to Complain in the U.S. Commercial Airline Industry
8. Madison C. Hart (May 2016) Committee Member
Title: Consumer Perception of Controlled Rest in Position
9. Ahmet Erdal Peker (May 2016) Chair
Title: The System Wide Trust Effect to the Multiple Transportation Modes
10. Kyle D. Wickham (May 2016) Committee Member
Title: Synthetic Vision Systems in Aviation and Their Impact on Situational Awareness
11. Arthur J. Clauter II (May 2015) Chair
Title: Airline Consumers' Perception of Pilots Using Approved Antidepressants
12. Abdullah S. Ozyurek (May 2015) Chair
Title: The Predictors of Pilots' Opinions to Land or Go-Around After an Unstable Approach
13. Katie M. Reid (May 2015) Committee Member
Title: Consumers' Trust in Pilots Based on Pilot's Preference for use of Breathalyzer in the Cockpit
14. Rian M. Mehta (December 2014) Committee Member
Title: System Wide Trust Contagion Effect
15. Alexander D. Quow (December 2014) Committee Member
Title: The Effects of Aircraft Reliability on Consumer Trust as Predicted by SWT
16. Clayton E. D'souza (July 2014) Chair
Title: Airline Consumers' Perception of Transportation Security Administration's Prohibited Items
17. Hannatu Z. Dogo (July 2014) Committee Member
Title: Aircraft Accidents Due to Inflight Encounter with Weather in FAR Part 91 Operations
18. Lu Shi (July 2014) Chair
Title: Validity and Reliability of a Mini-Situational Judgment Test (SJT)
19. Umar Ya'u Gwallameji (May 2014) Chair
Title: Perceptions of a Safety Risk Management Program at a Collegiate Flight School: A Case Study
20. Bilal Yakubu (May 2014) Committee Member
Title: A Study of How UAA Member Schools are Adapting Their Flight Program to Meet the New Training Standard as Set Forth by the Airline and Pilot Improvement Act of 2010

Peer Refereed Journal Publications (* denotes student author):

1. **Winter, S. R.**, Rice, S., *Rains, T., *Milner, M., & *Mehta, R. (2017). A longitudinal study on the alteration of consumer perceptions and the use of pilot medication. *Journal of Air Transport Management*, 59, 100-106.
2. *Mehta, R., Rice, S., **Winter, S. R.**, & Buza, P. (in press). Cabin depressurization as a hijacking mitigation tactic: A consumer perceptions study. *Collegiate Aviation Review International*.
3. **Winter, S. R.**, Rice, S., *Friedenreich, K., *Mehta, R., & *Kaiser, B. (Accepted). Passenger perceptions toward the federal flight deck officer program and their willingness to fly. *Aviation Psychology and Applied Human Factors*.
4. Rice, S., **Winter, S. R.**, *Mehta, R., *Winter, R., & Rice, A. (in press). Consumer perceptions of aircraft safety scale (C-PASS): An empirically developed scale for American consumers. *The Technology Collection*.
5. Rice, S., **Winter, S. R.**, Deaton, J. E., & Cremer, I. (2016). What are the predictors of system-wide trust loss in transportation automation? *Journal of Aviation Technology and Engineering* 6(1), 108.
6. **Winter, S. R.**, Rice, S., *Mehta, R., *Winter, R., *Reid, K., & Cremer, I. (2016). Using system-wide trust theory to make predictions about trust in transportation automation. *Journal of Technologies and Human Usability*, 12(2), 1-11.
7. *Remy, B., **Winter, S. R.**, & Rice, S. (2016). Consumer trust in pilots part 2: An affective perspective. *The International Journal of Interdisciplinary Social and Community Studies*, (11)2, 35-45.
8. **Winter, S. R.**, Rice, S., *Tamilselvan, G., & *Tokarski, R. (2016). Mission-based citizen views on UAV usage and privacy: An affective perspective. *Journal of Unmanned Vehicle Systems* 4, 1-11 doi: 10.1139/juvs-2015-0031.
9. Rice, S., **Winter, S. R.**, & *Tokarski, R. (2015) How trust in commercial airline pilots is affected by their perceived sociability: A mediation analysis. *Collegiate Aviation Review*, 33(2), 1-15.
10. Rice, S. & **Winter, S. R.** (2015). Which emotions mediate the relationship between type of pilot configuration and willingness to fly? *Aviation Psychology and Applied Human Factors*, 5(2), 83-92.
11. **Winter, S. R.**, *Carryl, J., & Rice, S. (2015). Controlled rest in position (CRIP): Consumer perceptions in the United States. *Collegiate Aviation Review*, 33(1), 14-28.
12. Rice, S., **Winter, S. R.**, *Kraemer, K., *Mehta, R., & Oyman, K. (2015). How do depression medications taken by pilots affect passengers' willingness to fly? A mediation analysis. *Review of European Studies*, 7(11), 200-212.
13. Rice, S., *Mehta, R., **Winter, S.R.**, & Oyman, K. (2015). A Trustworthiness of Commercial Airline Pilots (T-CAP) Scale for American Consumers. *Journal of Aviation Technology and Engineering*, 4(2), 55-63.
14. **Winter, S. R.**, Rice, S., *Reid, K. M., & *Mehta, R. (2015). Consistency of aviation students when taking the private pilot knowledge exam. *Journal of Aviation/Aerospace Educational Research*, 24(2), 21-38.
15. **Winter, S. R.**, Rice, S., *Mehta, R., Cremer, I., *Reid, K. M., Rosser, T. R., & Moore, J. C. (2015). Indian and American consumer perceptions of cockpit configuration. *Journal of Air Transport Management*, 42, 226-231.
16. Cremer, I., Rice, S., & **Winter, S.R.** (2015). Attitudes toward sustainability between Indians and Americans on water reuse for different purposes at airports. *International Journal of Sustainable Aviation*, 1(3), 234-244.
17. **Winter, S.R.** & Rice, S. (2015). Pilots who are perceived as unsociable are perceived as more likely to have a mental illness: An affective perspective. *Aviation Psychology and Applied Human Factors*, 5(1), 36-44.
18. *Mehta, R., Rice, S., **Winter, S.R.** (2014). Examining the relationship between familiarity and reliability of automation in the cockpit. *Collegiate Aviation Review*, 32(2), 1-13.
19. Rice, S., Mehta, R., Steelman, L. & Winter, S.R. (2014). A trustworthiness of commercial airline pilots (T-CAP) scale for Indian consumers. *International Journal of Aviation, Aeronautics, and Aerospace*, 1(3), 1-15.
20. **Winter, S. R.**, Fanjoy, R. O., Lu, C. T., Carney, T. Q., & Greenan, J. P. (2014). Decision to use an airframe parachute in a flight training environment. *Journal of Aviation Technology and Engineering*, 3(2), 28-34.

21. **Winter, S. R.**, Rice, S., Rosser, T. G., *Mehta, R., & Rice, A. (2014) Consumer perceptions of starting regional pilot pay given additional qualifications. *International Journal of Aviation, Aeronautics, and Aerospace*, 1(2), 1-18.
22. **Winter, S. R.** & Rice, S. (2014). Student self-awareness in test-taking consistency during assessments. *The International Journal of Assessment and Evaluation*, 21(1), 1-9.
23. Rice, S., *Kraemer, K., **Winter, S. R.**, *Mehta, R., Dunbar, V., Rosser, T. G., & Moore, J. C. (2014). Passengers from India and the United States have differential opinions about autonomous auto-pilots for commercial flights. *International Journal of Aviation, Aeronautics, and Aerospace*, 1(1), 1-12.
24. **Winter, S. R.**, Rice, S., & *Mehta, R. (2014). Aviation consumers' trust in pilots: A cognitive or emotional function. *International Journal of Aviation, Aeronautics, and Aerospace*, 1(1), 1-18.
25. Rice, S., Graves, W., Stauble, M. & **Winter, S. R.** (2014). Are people accurate at self-assessing their consistency of attitudes towards automation? *Journal of Technologies and Human Usability*, 10(1), 9-16.
26. **Winter, S. R.**, Kirschner, J. E., Leib, S. M., & Fanjoy, R. O. (2013). Implementing jet aircraft training in a university setting: Instructor perceptions and lessons learned. *Collegiate Aviation Review*. 31(1), 140-152.
27. Ferrel, D. S., Carney, T. Q., & **Winter, S. R.** (2011). Risk perception analysis of a small aircraft transportation system. *Journal of Aviation Technology and Engineering*, 1(1), 35-41. doi: 10.5703/128828431463

Conference Presentations & Posters (* denotes student author):

1. Rice, S., **Winter, S.R.**, Keebler, J., & *Milner, N. (2017, July). *Proposing a willingness to interact and collaborate with humanoid robots (WICHR) model*. Paper presented at 8th International Conference on Applied Human Factors and Ergonomics, Los Angeles, California.
2. *Milner, M., Rice, S., & **Winter, S. R.** (2017, May). *What information about consumers predict their trust in autopilots*. Paper presented at the 19th International Symposium on Aviation Psychology, Dayton, Ohio.
3. *Tamilselvan, G., & **Winter, S. R.** (2017, May). *Evaluation of flight deck panels from a human factors perspective*. Paper presented at the 19th International Symposium on Aviation Psychology, Dayton, Ohio.
4. **Winter, S. R.**, Rice, S., Keebler, J. R., & *Mehta, R. (2017, March). *Patient perceptions on the use of an auto-piloted emergency medical transport: An affective perspective*. 2017 International Symposium on Human Factors and Ergonomics in Health Care, New Orleans, Louisiana.
5. **Winter, S. R.**, Cremer, I., & Wheeler, B. (2016, October). *Promoting undergraduate research within aviation*. Poster presented at the 9th Annual Florida Statewide Symposium on Engagement in Undergraduate Research, Orlando, Florida.
6. *Inmon, Z. E. & **Winter, S. R.** (2016, September). *Perceptions on the use of manned and unmanned combat aircraft vehicles: An affective perspective*. Poster presented at the University Aviation Association Fall Conference, Omaha, Nebraska.
7. *Stevens, K. P. & **Winter, S. R.** (2016, September). *Unmanned aerial systems and the perception of privacy: Impacts on the use of a geofence*. Poster presented at the University Aviation Association Fall Conference, Omaha, Nebraska.
8. *LePore, R. & **Winter, S. R.** (2016, April). *Public privacy concerns of operating entities use of unmanned aerial systems*. Poster presented at the 9th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
9. *Perry, V. & **Winter, S. R.** (2016, April). *UAS public perception towards privacy and multimedia configuration*. Poster presented at the 9th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.

10. *Glista, T, & **Winter, S.R.** (2016, January). *Fatal accident risk analysis of general aviation operations*. Poster presented at the 2016 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
11. *Provillij, R., & **Winter, S.R.** (2016, January). *Designing windowless aircraft: Better for manufacturing, but will passengers fly?* Poster presented at the 2016 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
12. *Warsaw, B., & **Winter, S.R.** (2016, January). *American aviation consumers' willingness to fly while the pilot monitoring performs non-flight activities during cruise flight*. Poster presented at the 2016 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
13. *Seck, I., **Winter, S.R.**, & *Tamilselvan, G. (2016, January). *American public opinion on willingness to fly with the presence of unmanned aerial vehicles in the national airspace*. Poster presented at the 2016 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
14. Rice, S., & **Winter, S. R.** (2015, June). *A quick affect scale: Providing evidence for validity and reliability*. Proceedings from the 10th International Conference on Interdisciplinary Social Sciences, Split, Croatia.
15. **Winter, S. R.**, Geske, R. C., Rice, S., Fanjoy, R. O., & Sperlak, L. (2015, May). *Airframe parachute knowledge and deployment scenarios: A collegiate perspective*. Proceedings of the 18th International Symposium on Aviation Psychology, Dayton, Ohio.
16. **Winter, S. R.**, Rice, S., Cremer, I., & *Mehta, R. (2015, May). *Consumer trust ratings after an airline accident: An affective perspective*. Proceedings of the 18th International Symposium on Aviation Psychology, Dayton, Ohio.
17. Cremer, I., Rice, S., *Mehta, R., & **Winter, S. R.** (2015, May). *Water reuse attitudes for airports: A regression analysis*. Proceedings of the 18th International Symposium on Aviation Psychology, Dayton, Ohio.
18. *Mehta, R., Rice, S, **Winter, S. R.**, & Oyman, K. (2015, April). *Consumer perceptions about cabin depressurization during hijackings*. Presentation at the 8th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
19. *Mehta, R., Rice, S, **Winter, S. R.**, & Oyman, K. (2015, April). *Is there a stigma associated with pilots taking medication?* Poster presented at the 8th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
20. *Mehta, R., Rice, S, **Winter, S. R.**, Moore, J. C., & Oyman, K. (2015, April). *Public perceptions of privacy toward the usage of unmanned aerial systems: A valid and reliable instrument*. Poster presented at the 8th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
21. *Hill, D., **Winter, S. R.**, & Rice, S. (2015, April). *Cultural differences in trust of space tourism travel*. Poster presented at the 8th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
22. *Gaenicke S., **Winter, S. R.**, Rice, S., & Cremer, I. (2015, April). *Attitudes of air pollution from commercial aircraft: A comparison between cultures and genders*. Poster presented at the 8th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
23. Carstens, D. S., **Winter, S. R.**, & Deaton, J. (2015, March). *Safety and human factors perspectives in flight training*. Presentation at the 21st Annual International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, FL.
24. *D'souza, C. E., **Winter, S.R.**, *Mehta, R., Rice, S., & *Brown, A. (2015, January). *Airline consumers' perceptions of Transportation Security Administration's prohibited items*. Proceedings of the 2015 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.

25. *Mehta, R., Rice, S., **Winter, S.R.** & Oyman, K. (2015, January). *System wide trust: The contagion effect from automation to human*. Proceedings of the 2015 Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
26. *Mehta, R., Rice, S., **Winter, S.R.** & Oyman, K. (2014, October). *Consumers' perceptions about autopilots and remote-controlled commercial aircraft*. Proceedings of the 57th Annual Meeting of the Human Factors and Ergonomics Society, Chicago, IL.
27. *Mehta, R., Rice, S., & **Winter, S. R.** (2014, October). *Examining the relationship between familiarity and reliability of automation in the cockpit*. Presentation at the University Aviation Association Fall Conference, Daytona Beach, FL.
28. **Winter, S. R.**, Rice, S., & *Reid, K. M. (2014, July). *Using system-wide trust theory to analyze passenger loss of trust in aircraft automation*. Proceedings of the 2nd International Conference on Human Factors in Transportation, Krakow, Poland.
29. **Winter, S. R.** & Rice, S. (2014, June). *Evaluating consistency self-awareness in educational testing*. Proceedings of the 21st International Conference on Learning, New York, NY.
30. *Mehta, R., Rice, S., & **Winter, S. R.** (2014, April). *Consumers' perceptions about autopilots and remote-controlled commercial aircraft*. Poster presented at the 7th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
31. *Mehta, R., **Winter, S. R.**, & Rice, S. (2014, April). *Examining the relationship between familiarity of automation and perceived reliability across various levels of pilot experience*. Poster presented at the 7th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
32. *Remy, B., **Winter, S. R.**, & Rice, S. (2014, April). *American aviation consumer's trust in pilots*. Presentation at the 7th annual Human Factors and Applied Psychology Student Conference, Daytona Beach, FL.
33. **Winter, S. R.**, Rice, S., Rosser, T. G., & Rice, A. (2014, January). *Consumers want new pilots to make more money, but they don't necessarily want to pay for it*. Paper presented at the Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
34. **Winter, S. R.**, Rice, S., & *Mehta, R. (2014, January). *Aviation consumers base their trust in pilots in part on ethnicity*. Paper presented at the Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
35. *Reid, K. M., **Winter, S. R.**, Rice, S., & *Mehta, R. (2014, January). *How consistent are aviation students when taking the private pilot knowledge exam?* Paper presented at the Aviation, Aeronautics, and Aerospace International Research Conference, Phoenix, AZ.
36. **Winter, S. R.**, Kirschner, J. E., Leib, S. M., & Fanjoy, R. O. (2013, November). *Implementing jet aircraft training in a university setting: Instructor perceptions and lessons learned*. Paper presented at the University Aviation Association Fall Conference, San Juan, Puerto Rico.
37. **Winter, S. R.**, & Moore, J. C. (2013, November). *Free internet-based student response systems in the aviation classroom*. Presentation at the University Aviation Association Fall Conference, San Juan, Puerto Rico.
38. **Winter, S.R.**, Leib, S. M., Geske, R. C., Spence, T. B., Sperlak, L. A., Rudari, L., & Cestari, C. D. (2013, October). *An examination of factors leading to runway excursions*. Paper presented at the 66th Annual International Air Safety Summit, Washington, D.C.
39. **Winter, S. R.** & Fanjoy, R. O. (2013, May). *Pilot decision-making in irreversible emergencies*. Presentation at Canadian Aeronautics and Space Institutes' AERO 2013, Toronto, Canada.
40. Geske, R. C., Johnson, M. E., Dillman, B., **Winter, S. R.**, Young, J. P. (2013, May). *Effect of autopilot on pilot performance during ILS approach in general aviation technically advanced aircraft*. Presentation at Canadian Aeronautics and Space Institutes' AERO 2013, Toronto, Canada.

41. Bowen, E.E., Wulle, B., **Winter, S. R.**, Kirschner, J.E., & Crombie, K. (2012, November). *Able flight at purdue: Opportunities in technology*. Invited presentation at IsLAND Conference on Disability, West Lafayette, IN.
42. **Winter, S. R.**, Kirschner, J. E., Leib, S. M., & Fanjoy, R. O. (2012, October). *Perceptions of instructors on student training in a jet aircraft: A preliminary qualitative analysis*. Paper presented at the Human Factors and Ergonomics Society Annual Student Conference, Boston, MA.
43. **Winter, S. R.** & Fanjoy, R. O. (2012, April) *Student perceptions on the use of hotseat*. Presentation session presented at Purdue Aviation Graduate Research Symposium, West Lafayette, IN. (Winner of Best Presentation Award)
44. Bowen, E. E., Kirschner, J. E., **Winter, S. R.**, Crombie, K., & Wulle, B. (2012, January). *Able Flight: Pilot Training for Persons with Disabilities*. Invited presentation at the Special Needs Leadership Development Program, West Lafayette, IN.
45. Chrisman, C. G., Fehrenbacher, J. G., Johnson, M. E., Kozak, B. J., LaRowe, R. E., & **Winter, S. R.** (2011, September). *Establishing a definition and framework for sustainability in aviation*. Poster session presented at University Aviation Association Fall Student Conference, Indianapolis, IN.
46. **Winter, S.R.** & Fanjoy, R. O. (2011, May). *Student and instructor perceptions of training in a technologically advanced aircraft*. Paper presented at 16th International Symposium on Aviation Psychology, Dayton, OH.
47. Chrisman, C. G., Fehrenbacher, J. G., Johnson, M. E., Kozak, B. J., LaRowe, R. E., & **Winter, S. R.** (2011, April). *A framework for aviation sustainability*. Presentation session presented at Purdue Aviation Graduate Research Symposium, West Lafayette, IN.
48. **Winter, S. R.** & Keen, C.S. (2006, January). *Aviation weather – Educating for the glass cockpit*. Poster presented at the American Meteorological Society Annual Conference, Atlanta, GA.
49. **Winter, S. R.** & Keen, C. S. (2005, May). *Educating aviators in visualizing weather*. Presentation session presented at the MSU Undergraduate Research Conference, Mankato, MN. (1st Place)

External Funding:

Serving as PI or Co-PI:

Year of Award	Funding Source	Project Title	Amount
2013	Federal Aviation Administration	Helicopter Safety	\$85,000
2013	Federal Aviation Administration	Angle of Attack for General Aviation Aircraft	\$139,688
2013	Federal Aviation Administration	IDIQ FAA Contract	\$50,000
2015	Federal Aviation Administration	LED Runway Closure Signage	\$62,323
2016	Federal Aviation Administration	General Aviation Runway Incursions	\$171,001
2016	Federal Aviation Administration	Runway Safety Human Factors	\$40,628

TOTAL: \$548,640

Serving as Co-I:

Year of Award	Funding Source	Project Title	Amount
2016	Federal Aviation Administration	Airport Safety Database	\$58,000
2016	Federal Aviation Administration	Airport Safety Database Phase 2	\$50,000

TOTAL: \$108,000

GRAND TOTAL: \$656,640

Project Descriptions:

- **Helicopter Safety:** This project seeks to examine the current state of the art in rotorcraft FDM products and services, implement a system for data collection and analysis, and identify shortcoming with corresponding means of improvement as supported by data analysis and engagement with subject matter experts.

- **Angle of Attack for General Aviation Aircraft:** The ultimate aim of this research is to provide pilots and instructors with information that could provide additional assistance to interpret the flight path & aircraft attitude relationship. The current analysis of AOA displays is anecdotal in nature and there needs to be a rigorous study accomplished which solidifies the touted benefits by various industry groups.
- **IDIQ FAA Contract:** Indefinite Delivery/Indefinite Quantity contract with the FAA to conduct small-scale research studies at FIT to provide near-term data to the FAA.
- **LED Runway Closure Signage:** This project will evaluate the pilot acquisition distance of LED-based runway closure lighting to ascertain if such lighting is comparable or greater than traditional incandescent (L-893) runway closure lighting. Evaluation will be completed at three airports with varying light pollution, during day and night Visual Flight Rules.
- **General Aviation Runway Incursions:** The purpose of this study is to complete a comprehensive analysis of, and determine the root causes and event patterns that result in, general aviation runway incursions. The raw number of runway incursions has increased from 954 to 1383 during that same time period. In about 80% of those events, the responsibility for the incursion can be traced back to general aviation (GA) pilots. When comparing GA events to non-GA events, we see that the rate of incursions is disproportionate; the vast majority of the events are due to GA pilots, while other pilots, such as commercial and military, have not been responsible for as many incursions.
- **Airport Safety Database:** The goal of this research is to review and categorize accident and incident data in accordance with the Commercial Aviation Safety Team and the International Civil Aviation Organization (ICAO) taxonomy to identify top safety risks.

Courses Taught:

- AVT 1001 Aeronautics 1 (Private Pilot Ground School)
- Provides basic aeronautics instruction for all students. Prepares flight students for the FAA private pilot written examination. Includes aircraft components, basic aerodynamics, airports, air traffic control, airspace, regulations, performance, weight and balance, aeromedical factors, aviation weather and air navigation (3 credits).
- AVT 1002 Aeronautics 2 (Commercial Pilot Stage 1 Ground School)
- Provides advanced instruction for private pilot candidates in visual flight rules, flight planning and navigation in a complex airspace system. Also provides initial ground instruction in FAA commercial pilot written examination topics such as advanced aerodynamics and advanced avionics, including the global positioning system (GPS) (3 credits).
- AHF 3101 Introduction to Human Factors
- Introduces the field of engineering psychology (ergonomics) that examines the interaction of humans and machines. Analyzes aircraft accidents and industrial safety concepts, and the design of aircraft, computers and other products (3 credits).
- AVT 4002 Undergraduate Aviation Research
- Requires students to plan, conduct and report on aviation research or scholarly activity. Includes a research plan, progress reports, a final research report and an oral and graphic summary and defense (3 credits).
- AVT 4301 Aviation Safety
- Explores the historical roots of modern safety organizations and the safety responsibilities and operations of the FAA and the NTSB. Closely examines aviation safety planning, icing and human-centered accidents (3 credits).
- AVS 4302 Fundamentals of Safety Management Systems
- Provides instruction on safety management systems (SMS). Presents topics on safety reporting systems, quality management principles and safety culture (3 credits). Designed this as a new course at FIT.
- AVS 5204 Aviation Safety Analysis
- Provides aviation and selected non-aviation professionals with a strong background in aviation safety analysis. The material and methods studied, including a variety of safety databases, provide a foundation for safety management, safety program development, team performance analysis, and personnel resource management (3 credits).
- AVT 5302 Aircraft Accident Investigation
- Covers conceptual and operational avionics systems in air-transport aircraft. Includes communications, navigation, flight control, flight management and engine instrumentation systems, and various electronic displays. Focuses on the pilot's perspective for effective use of the entire suite of avionics in improved decision making and safety (3 credits).
- AVS 5301 Multi-Cultural Team Operations in Aviation
- Explores the theory and origins of understanding multicultural teams, along with practical applications for management in the aviation field. Examines power distance, individualism/collectivism, gender difference and uncertainty avoidance in terms of Hofstede's studies. Applies knowledge within a small group setting to create deliverables (3 credits). Designed this as a new course at FIT.

AVS 5999 Thesis Chair

- Preparation and submission of a research thesis on a selected topic in aviation science under the direction of the graduate faculty (variable credits, list of students below).

AVS 6999 Dissertation Chair

- Preparation of doctoral dissertation (variable credits, list of students below).

University Service:

Service is a key component of the academic profession. I believe social service allows for increased growth both on a personal and professional level. I enjoy working with student organizations, as well as serving on university committees. I work to stay active with national and international professional organizations such as the University Aviation Association.

National Level Organizations:

University Aviation Association

- Strategic Planning Committee Member 2013-Present
- Publications Committee Member 2013-Present
- Graduate Education Committee Member 2013-Present
- Collegiate Aviation Review International: Manuscript Reviewer 2013-Present

Manuscript Reviewer

- The Journal of Aviation Technology and Engineering: 2013-Present
- Collegiate Aviation Review International: 2013-Present
- Human Factors and Ergonomics Society Annual Conference: 2013-Present

Aviation Qualifications:

Certifications:

- Airline Transport Pilot:
 - Single-Engine Land
- Commercial Pilot Multi-Engine Land, Instrument, BE-400 MU-300 SIC Privileges
- Certified Flight Instructor:
 - Instrument and Multi-Engine Ratings
- Cirrus Standardized Flight Instructor
- 3rd Class Medical

Flight Experiences:

- International Flight Experience:
 - England
 - France
 - Germany
 - Poland
 - Australia
 - South Africa
 - Caribbean

Flight Time (As of July 2017, Approx.)

Category	Time (Hours)
Total Flight Time:	2600
Airplane Single Engine:	2350
Airplane Multi Engine:	250
Instrument:	250 (Actual and Simulated)
Pilot-In-Command:	2400
Cross Country:	1450
Cirrus:	1600
Turbine	80

References available upon request.

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