

**Kathleen L. Mosier, Ph.D.**

TeamScape LLC  
5669 Keith Avenue  
Oakland, CA 94618

Phone: 510.735.4846      Email: [kathleenmosier@yahoo.com](mailto:kathleenmosier@yahoo.com)

---

**Education**

University of California, Berkeley

Ph.D., Industrial/Organizational Psychology, December, 1990

Dissertation: *Decision Making on the Air Transport Flight Deck: Process and Product*

San Jose State University, San Jose, California

M.A., Psychology, 1983

University of Detroit, Detroit, Michigan

M.A., English, 1971

B.A., English, 1971, summa cum laude

**Professional Experience**

Founder and Principal Scientist, TeamScape LLC, 2016-present

Professor of Psychology, San Francisco State University, 2006-2016

Chair of Psychology, Fall 2005-2008

Associate Professor of Psychology, San Francisco State University, 2002-Fall, 2006.

Assistant Professor of Psychology, San Francisco State University, Fall, 1997-2002.

*Courses:*

Graduate Seminar in Organizational Psychology

Graduate Research Methods

Introduction to Industrial/Organizational Psychology

Human Motivation

Lecturer, University of California, Berkeley

*Courses:*

Organizational Behavior (Graduate and Undergraduate courses), 1991-1992.

Introduction to Industrial/Organizational Psychology (Undergraduate course), 1995.

Expertise and Decision Making (Graduate seminar), 1996.

Senior Research Associate, San Jose State University Foundation (at NASA, ARC), 1994-1997.

Research Associate, Stanford University Center of Excellence (at NASA, ARC), 1990-1993.

Research Associate, San Jose State University Foundation (at NASA, ARC), 1989; 1983-1984.

**Honors and Awards**

Elected Fellow, Human Factors and Ergonomics Society

President's Award for Probationary Faculty, SFSU, Fall, 2001

Psi Chi National Honors Society, 1981-1983

National Honor Society, University of Detroit, 1967-1971

Dean's Key, University of Detroit, 1967-1971

President's Grant, University of Detroit, 1967-1971

General Motors Scholarship, University of Detroit, 1967-1971

## **Professional and Civic Activities**

### **Professional Offices and Service**

Vice President and Secretary General, International Ergonomics Association, 2015-2018  
President, Human Factors and Ergonomics Society, 2009-2010  
Executive Council, Human Factors and Ergonomics Society, 2004-2007, 2008-2011  
Associate Editor, *Journal of Cognitive Engineering & Decision Making*  
Editorial Board, *Human Factors*  
Editorial Board, *International Journal of Aviation Psychology*  
Editorial Board, *International Journal of Applied Aviation Studies*  
Consulting Board, *Journal of Applied Psychology*  
Reviewer, *Journal of Experimental Psychology, Applied*  
Ad Hoc Reviewer, Human Factors and Ergonomics Society conference proposals  
Ad Hoc Reviewer, National Science Foundation (grant proposals)  
Ad Hoc Reviewer, Society for Industrial/Organizational Society conference proposals  
President, Association for Aviation Psychology, 1996-2000  
Program Chair, Cognitive Engineering and Decision Making Technical Group,  
Human Factors and Ergonomics Society, 1995-1997  
Chair (2000-2002), and Secretary/Treasurer (2003-2004), Aerospace Systems Technical  
Group, Human Factors and Ergonomics Society  
Executive Council, Human Factors and Ergonomics Society, 2004-2006  
Treasurer, Bay Area Applied Psychologists, 2000 - 2003

### **Professional Affiliations**

Human Factors and Ergonomics Society  
Association for Aviation Psychology  
Australian Association for Aviation Psychology, 1998-2000  
Society for Industrial and Organizational Psychology  
American Psychological Society, 1998-2000  
Western Psychological Association  
Society for Judgment and Decision Making  
Brunswik Society

### **Book Reviewer**

Lawrence Erlbaum Associates, Inc.  
Human Factors and Ergonomics Society

### **SFSU Activities**

University Graduate Council, 1999-2006. Chair, 2002-2008  
University Academic Program Review Task Force, 2004-2005  
University Task Force on Writing, 2004-2005  
APC Subcommittee on the University Policy on Written English Proficiency, 2002-2003  
University CUSP II Academic Experience Committee, 2003-2004  
Psychology Department Retention/Tenure Committee, 2003-2006. Chair, 2004-2005.  
University Women's Association Webmaster, 2003-present  
Coordinator, MS Program in Industrial-Organizational Psychology, 1998-2005  
Graduate and Undergraduate Coordinator, Psychology Department, Spring, 2000  
Advisory Committee, Psychology Department, Spring, 1998; 2000-2002  
University General Education Committee, 1998 - 1999  
Psychology Department Graduate Review Writing Committee, Fall, 1997

**Books**

Mosier, K.L., & Fischer, U., Eds. (2011). *Informed by Knowledge: Expert Performance in Complex Situations*. NJ: Taylor and Francis.

**Journal Articles highlighting research**

Meyers, Morgan (2014). Improving communication on a cosmic scale. *InterSci*, 51-55.

**Journal Special Issue**

Mosier, K. L., & Militello, L., (Eds.) (2016). Extending Naturalistic Decision Making: Reaching across domains, disciplines and applications. Special issue of *Journal of Cognitive Engineering & Decision Making*.

**Journal Articles (asterisk indicates student author)**

- Durso, F. T., Stearman, E. J.,\* Morrow, D. G., Mosier, K. L., Fischer, U, Pop, V. L.,\* & Feigh, K. M. (2015). Exploring relationships of human-automation interaction consequences on pilots: Uncovering subsystems. *Human Factors*, 57, 397-406.
- Mosier, K.L., Fischer, U., Morrow, D., Feigh, K., Durso, F., Sullivan, K.,\* & Pop, V.\* (2013). Automation, task, and context features: Impacts on pilots' judgments of human-automation interaction. *Journal of Cognitive Engineering and Decision Making*, 7, 377-399.
- Mosier, K. L., Rettenmaier, P.,\* McDearmid, M.,\* Wilson, J.,\* Mak, S., Raj, L.,\* & Orasanu, J. (2013). Pilot/ATC Communication Conflicts: Implications for NextGen. *International Journal of Aviation Psychology*, 23, 213-226.
- Sullivan, K. B., Feigh, K. M., Mappus, R., Durso, F. T., Fischer, U., Pop, V., Mosier, K. L., & Morrow, D. G. (2013). Using neural networks to assess flight deck human-automation interaction. *Reliability Engineering and Systems Safety*, 114, 26-35.
- Mosier, K. L., & Fischer, U. M. (2010). The role of affect in Naturalistic Decision Making. *Journal of Cognitive Engineering and Decision Making*, 4, 240-255.
- Mosier, K. L. (2009). Searching for coherence in a correspondence world. *Journal of Judgment and Decision Making*, 4(2), 154-163.
- Khoo, L., & Mosier, K. (2008). The impact of time pressure and experience on information search and decision-making processes. *Journal of Cognitive Engineering and Decision Making*, (2), 275-294.
- Mosier, K., Sethi, N, McCauley, S., Khoo, L., & Orasanu, J. (2007). What You Don't Know CAN Hurt You: Factors Impacting Diagnosis in the Automated Cockpit. *Human Factors*, 49, 300-310.
- Jacobson, C., & Mosier, K. L. (2004). Coherence and correspondence decision making in aviation: A study of pilot incident reports. *International Journal of Applied Aviation Studies*, 4(2), 123-134.
- Mosier, K. L., Skitka, L. J., Dunbar, M., & McDonnell, L. (2001). Air Crews and Automation Bias: The Advantages of Teamwork? *International Journal of Aviation Psychology*, 11(1), 1-14.
- Mosier, K. L., Keyes, J., & Bernhard, R. (2001). Information presentation and cognitive response in the automated cockpit. *International Journal of Aviation Research and Development*, 1(2), 117-134.
- Skitka, L. J., Mosier, K. L., & Burdick, M. (2000). Accountability and automation bias. *International Journal of Human-Computer Studies*, 52, 701-717.
- Skitka, L. J., Mosier, K. L., Burdick, M., & Rosenblatt, B. (2000). Automation bias and errors: Are crews better than individuals? *International Journal of Aviation Psychology*, 10(1), 83-95.
- Skitka, L. J., Mosier, K. L., & Burdick, M. (1999). Does automation bias decision making? *International Journal of Human-Computer Studies* 50, 991-1006.  
Featured also in *New Scientist Magazine*, November 6, 1999, and *Air Safety Week*, November 15, 1999. (also featured on *National Public Radio*, November 7, 1999)

- Mosier, K. L., Skitka, L. J., Heers, S., & Burdick, M. D. (1998). Automation bias: Decision making and performance in high-tech cockpits. *International Journal of Aviation Psychology*, 8, 47-63.  
 Featured also in *APA Monitor*, July, 1998.  
 Reprinted in D. Harris & W. Li (Eds., 2015). *Decision making in aviation* (pp. ). Burlington, VT: Ashgate
- Nemeth, C., Mosier, K., & Chiles, C. (1992). When convergent thought improves performance: Majority versus minority influence. *Personality and Social Psychology Bulletin*, 18 (2), 139-144.
- Zedeck, S., & Mosier, K. L. (1990). Work in the family and employing organizations. *Special issue of the American Psychologist*, 45, 240-251.
- Zedeck, S., Maslach, C., Mosier, K., & Skitka, L. (1988). Affective response to work and quality of family life: Employee and spouse perspectives. *Special issue of the Journal of Social Behavior and Personality*, 3(4), 135-158.  
 Reprinted in E. B. Goldsmith (Ed.), (1989). *Work and family: Theory, research, and applications*. CA: Sage Publications.

### **Book Chapters**

- Mosier, K. L., & Manzey, D. (2020). Humans and automated decision aids: A match made in heaven? In M. Mouloua & P. Hancock (Eds.), *Human performance in automated and autonomous systems: Current theory and methods* (pp. 19-41). Boca Raton, FL: CRC Press
- Fischer, U., & Mosier, K. (2020). Teamwork in spaceflight operations. In P. Ward, J. M. Schraagen, J. Gore, & E. Roth (Eds.), *The Oxford handbook of expertise: Research & application* (pp. 830-849). UK: Oxford University Press. DOI: 10.1093/oxfordhb/9780198795872.013.36
- Orasanu-Engel, J., & Mosier, K. L. (2019). Flight crew decision making. In B. Kanki et al. (Eds.), *Crew resource management, 3rd Edition* (pp. 139-174). San Diego, CA: Academic Press.
- Burian, B. K., Mosier, K. L., Fischer, U. M., & Kochan, J.A. (in press). New teams on the flight deck: Humans and context-sensitive information automation. In E. Salas & M. Patankar (Ed.), *Human Factors in Aviation, 3rd Ed.*
- Mosier, K., Fischer, U., Hoffman, R., & Klein, G. (2018). Expert professional judgments and “Naturalistic Decision Making.” In K. A. Ericsson, R. R. Hoffman, A. Kozbelt, & A. M. Williams (Eds.), *The Cambridge handbook on expertise and expert performance* (pp. 453-475). Cambridge University Press.
- Mosier, K. L., & Munc, A. (2014). NASA NextGen flightdeck research: A database of research areas and results. In M. A. Vidulich, P. S. Tsang, and J. M. Flach (Eds.), *Advances in Aviation Psychology, Vol. 1* (pp. 51-68). Ashgate.
- Mosier, K. L. (2013). Judgment and Prediction. In J. D. Lee and A. Kirlik (Eds.), *The Oxford Handbook of Cognitive Engineering* (pp. 68-87). NY: Oxford University Press.
- Mosier, K. L., Fischer, U., & Orasanu, J., (2013). Expertise, cognition, and CRM issues in NextGen automation use. In S. J. Landry (Ed.). *Advances in human aspects of aviation* (pp. 361-372). Boca Raton, FL: CRC Press.
- Mosier, K. L., & Fischer, U. M. (2010). Judgment and decision making by individuals and teams: Issues, models and applications. In D. Harris (Ed.), *Reviews of Human Factors, Volume 6* (pp. 198-256). Santa Monica, CA: Human Factors and Ergonomics Society.  
 Reprinted in D. Harris & W. Li (Eds., 2015). *Decision making in aviation* (pp. 139-197). Burlington, VT: Ashgate.
- Mosier, K. L., (2010). The Human in Flight: From Kinesthetic Sense to Cognitive Sensibility. In E. Salas & D. Maurino (Eds.), *Human Factors in Aviation* (pp. 147-173). Burlington, MA: Elsevier.
- Mosier, K. L. (2008). Technology and “naturalistic” decision making: Myths and realities. In J. M. Schraagen, L. Militello, T. Ormerod, & R. Lipshitz (Eds.), *Macro cognition and naturalistic decision making* (pp. 41-54). VT: Ashgate.

- Mosier, K. L., & McCauley, S. T. (2006). Achieving coherence: Meeting new cognitive demands in technological systems. In A. Kirlik (Ed.), *Adaptation in Human-Technology Interaction: Methods, Models and Measures*. Oxford University Press. (pp. 163-174)
- Cesna, M., & Mosier, K. L. (2005). Using a prediction paradigm to compare levels of expertise and decision making among critical care nurses. In B. Brehmer, R. Lipshitz, & H. Montgomery (Eds.), *How do professionals make decisions?* NY: Lawrence Erlbaum. (pp. 107-118)
- Mosier, K. L., Keyes, J., & Bernhard, R. (2003). Dealing with conflicting information: Will crews rely on automation? In G. Edkins and P. Pfister (Eds.), *Innovation and consolidation in aviation: Selected contributions to the Australian Aviation Psychology Symposium 2000* (pp. 243-253). Also published in Proceedings of the Fifth Australian Aviation Psychology Symposium, November, 2001, Manly, Australia.
- Mosier, K. L. (2002). Automation and cognition: Maintaining coherence in the electronic cockpit. In E. Salas (Ed.), *Advances in Human Performance and Cognitive Engineering Research, Volume 2*. Elsevier Science Ltd. (pp. 93-121)
- Mosier, K. L., Skitka, L. J., Heers, S. & Burdick, M. (1997). Patterns in the use of cockpit automation. In M. Mouloua & J. Koonce (Eds.), *Human-Automation interaction: Research and Practice*. Hillsdale, NJ: Lawrence Erlbaum Assoc., Inc. (pp. 167-173).
- Mosier, K. L. (1997). Myths of Expert Decision Making and Automated Decision Aids. In C. Zsombok & G. Klein (Eds.), *Naturalistic Decision Making* (pp. 319-330). Mahwah, NJ: Erlbaum.
- Mosier, K. L., & Skitka, L. J. (1996). Humans and Automation: Made for Each Other? In R. Parasuraman & M. Mouloua (Eds.), *Automation and Human Performance: Theory and Applications* (pp. 201-220). NJ: Erlbaum.
- Mosier, K. L., & Skitka, L. J. (1995). Automation and accountability. In N. McDonald, N. Johnston, & R. Fuller (Eds.), *Applications of Psychology to the Aviation System*. England: Ashgate Publishing, Ltd.
- Mosier, K. L., Skitka, L. J., & Korte, K. J. (1994). Cognitive and social psychological issues in flight crew/automation interaction. In M. Mouloua & R. Parasuraman (Eds.), *Human performance in automated systems: Current research and trends* (pp. 191-197). NJ: Erlbaum.

### **Proceedings and Other Publications**

- Banks, C. G., Mosier, K., Robertson, M., Honan, M., & Cascio, W. (2017). Enhancing business effectiveness and worker sustainability through HFE. *Proceedings of the 61st Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES
- Mosier, K., & Fischer, U. (2015). Communication protocols to support collaboration in distributed teams under asynchronous conditions. *Proceedings of the 59th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES
- Gonzalez, K.,\* Mosier, K., Lam, J.,\* & Fischer, U. (2015). Characteristics impacting teamwork and performance for space operations. *Proceedings of the 59th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES.
- Ligda, S. F., Fischer, U., Mosier, K., Matessa, M., Battiste, V., & Johnson, W. (2015). Effectiveness of advanced collaboration tools on crew communications in reduced-crew operations. *Proceedings of HCI International 2015*. Springer
- Mosier, K., & Fischer, U. (2014). Impact of communication delay on collaborative task performance. *Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting*. Santa Monica, CA: HFES.
- Fischer, U., & Mosier, K. (2014). The impact of communication delay and medium on team performance and communication in distributed teams. *Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting*. Santa Monica, CA: HFES.

- Fischer, U., Miller, C., Morrow, D., Mosier, K., Orasanu, J., & Veinott, B. (2013). Exploring communication in remote teams: Issues and methods. In *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting* (pp. 309-313). Santa Monica, CA: HFES.
- Fischer, U., Mosier, K., & Orasanu, J. (2013). The impact of transmission delays on Mission Control – Space Crew communication. In *Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting* (pp. 1372-1376). Santa Monica, CA: HFES.
- Fischer, U., Mosier, K., & Orasanu, J. (2013). Issues of grounding and team coordination in asynchronous mission control-space crew interactions. In H. Chaudet, L. Pellegrin, and N. Bonnardel (Eds.), *Proceedings of the 11th International Conference on Naturalistic Decision Making* (pp. 193-196). Paris, France: Arpege Science Publishing.
- Mosier, K. L., Munc, A.,\* Reich, K.,\* Fox, D.,\* Swarts, J.,\* Tomko, O'Neill, M.,\* & Cunningham, K.\* (2013). NASA NextGen flightdeck research: A database of research areas and results. *Proceedings of the 17th International Symposium on Aviation Psychology*. Dayton, OH: Wright State University.
- Mosier, K.L., Fischer, U., & the HART Group (2012). Automation, Task and Context Features: Impacts on Pilots' Perceptions of Human-Automation Interaction. *Proceedings of the 56th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES
- Sullivan, K. B., Feigh, K. M., Durso, F. T., Fischer, U., Morrow, D., Mosier, K. L., Blosch, J.,\* & Pop, V. (2011). Using neural networks to assess human-automation interaction. *Proceedings of the 30th IEEE Digital Avionics Systems Conference*.
- Mosier, K.L., Fischer, U., Cunningham, K., Munc, A., Reich, K., Tomko, L., & Orasanu, J. (2012). Aviation decision making: Evidence from ASRS and NTSB reports. *Proceedings of the 56th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES.
- Mosier, K. L., Rettenmaier, P. McDearmid, M., Wilson, J. Mak, S., Raj, L., Orasanu, J. (2010). Pilot/ATC Communication Conflicts: Implications for NextGen. *Proceedings of the 54th Annual Meeting of the Human Factors and Ergonomics Society*. Santa Monica, CA: HFES.
- Mosier, K. L., & Fischer, U. M. (2009). Does affect matter in Naturalistic Decision Making? *Proceedings of the 9th International Conference on Naturalistic Decision Making*, London, June 23-26.
- Mosier, K. L., Bartholomew, M., Weng, E., & Xavier, L. (2007). Risk, ambiguity, and information use in a decision dilemma. *Proceedings of the 51st Annual Meeting of the Human Factors and Ergonomics Society*, Baltimore, MD, October 1-5.
- Mosier, K. L. (2005). The impact of technology on 'naturalistic' decision making. *Proceedings of the 7th International Conference on Naturalistic Decision Making, Amsterdam, The Netherlands (June 15-17, 2005)*.
- Khoo, Y-L., and Mosier, K. (2005). Searching for Cues: Factors Affecting the Decision-Making Processes of Regional Airline Pilots. *Proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society, September 29, Orlando, FL*.
- Mosier, K. L., Kirlik, A., Bisantz, A., Pritchett, A., & Rothrock, L. (2004). Brunswik's lens model in human factors research: Modern applications of a classic theory. *Proceedings of the 48th Annual Meeting of the Human Factors and Ergonomics Society*, New Orleans, LA.
- Mosier, K., Lyall, E., Sethi, N, Wilson, J., McCauley, S., Harron, G., Khoo, L., Hecht, S., Richards, J., & Orasanu, J. (2003). Factors Impacting Coherence in the Automated Cockpit. *Proceedings of the 47th Annual Meeting of the Human Factors and Ergonomics Society*, Denver, CO, October 13-17.
- Mosier, K. L., Bernhard, R., & Keyes, J. (2001). Cognition in the cockpit: In need of a theory. In R. Jensen (Ed.), *Proceedings of the Eleventh International Symposium on Aviation Psychology*, Columbus, OH, March 5-9.
- Mosier, K. L. (2001). Cognition in the automated cockpit: A coherence perspective. *Proceedings of the 45th Annual Meeting of the Human Factors and Ergonomics Society*, Minneapolis, MN, October 8-12.

- Mosier, K. L., & Skitka, L. J. (1999). Automation use and automation bias. *Proceedings of the 43rd Annual Meeting of the Human Factors and Ergonomics Society*, Houston TX, September 27-October 1, pp. 344-348.
- Mosier, K. L., Skitka, L. J., Dunbar, M., McDonnell, L., Burdick, M., & Rosenblatt, B. (1998). Automation Bias and Errors: Are Teams Better than Individuals? *Proceedings of the 42nd Annual Meeting of the Human Factors Society*, Chicago, IL, October 5-9. pp. 201-205.
- Mosier, K. L., Skitka, L. J., Burdick, M. D., & Heers, S. T. (1996). Automation bias, accountability, and verification behaviors. *Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting*, Philadelphia, PA, pp. 204-208.
- Mosier, K. L., Skitka, L. J., & Heers, S. T. (1995). Automation and accountability for performance. In R. Jensen (Ed.), *Proceedings of the Eighth International Symposium on Aviation Psychology*, Columbus, Ohio, pp. 221-226.
- Mosier, K. L., & Zacharias, G. L. (1993). Flight Performance Measurement Utilizing a Figure of Merit (FOM). In R. Jensen (Ed.), *Proceedings of the Seventh International Symposium on Aviation Psychology*, Columbus, OH.
- Mosier, K. L., Palmer, E. A., & Degani, A. (1992). Electronic Checklists: Implications for Decision Making. *Proceedings of the 36th Annual Meeting of the Human Factors Society*, Atlanta, GA, October 12-16, pp. 7-12.
- Zacharias, G. L., Riley, E. W., & Mosier, K. L. (1992). Timeline Analysis for Behavioral Representation of Datalink Operations. Final Report No. R90331, Contract No. NAS2-13375.
- Mosier, K. (1991). Expert Decision-Making Strategies. In R. Jensen (Ed.), *Proceedings of the Sixth International Symposium on Aviation Psychology*, Columbus, OH.
- Mosier, K. L., & Chidester, T. R. (1991). Situation assessment and situation awareness in a team setting. *Designing for Everyone: Proceedings of the 11th Congress of the International Ergonomics Association*, Paris, 15-20 July, pp. 798-800.
- Mosier-O'Neill, K. (1989). A contextual analysis of pilot decision making. In R. Jensen (Ed.), *Proceedings of the Fifth International Symposium on Aviation Psychology*, Columbus, OH, pp. 371-376.
- Mosier, K., & Hart, S. G. (1985). Levels of information processing in a Fitts' law task (LIPFitts). *Proceedings of the 21st Annual Conference on Manual Control*, Columbus, OH.
- Craig [Mosier], K. (1982). Instrument position control manipulation (IPCOM II): Helicopter pilot response as a function of control-display compatibility. *Proceedings of the 18th Annual Conference on Manual Control*.

### **Technical Reports**

- Mosier, K., Fischer, U., Burian, B., & Kochan, J. (2017). *Autonomous, Context-Sensitive, Task Management Systems and Decision Support Tools I: Contextual Constraints and Information Sources*. NASA/TM-2017-219565. NASA Ames Research Center.
- Mosier, K. L., & Fischer, U. M. (2014). *CRM Principles and Practices for SPO*. Final report, NASA Agreement #NNX12AB08A, SJSURF Acct #21-1614-4877-SFSU. Submitted to Dr. Walter Johnson, NASA Ames Research Center.
- Mosier, K. L., & Fischer, U. (2014). CRM Principles and Practices for SPO: CRM Interviews and Observations. Final report, NASA Agreement #NNX12AB08A, SJSURF Acct #21-1614-4877-SFSU. Submitted to Dr. Walter Johnson, NASA Ames Research Center.
- Mosier, K. L. (2012). *NextGen Flight Deck Research Database*. Final report, NASA Cooperative Agreement NNX10AK52A. NextGen Flight Deck Research Project. Submitted to Dr. Tom McCloy, Scientific and Technical Advisor for Human Factors, FAA Human Factors Research and Engineering, ATO-P. Barbara Burian, NASA Technical Monitor. SFSU Research Associates:

Kerry Cunningham,\* Danielle Fox,\* Alec Munc,\* Matthew O'Neill,\* Kendra Reich,\* James Swarts,\* Linda Tomko

- Orasanu, J., Mosier, K., & Fischer, U. (2012). *Recommended Updates to FAA Advisory Circular No. 120-51E on Crew Resource Management*. FAA/NASA NextGen Flight Deck Human Factors Research, Interagency Agreement #DTFAWA-10-X-80005, Annex 9. Submitted to Dr. Tom McCloy, Scientific and Technical Advisor for Human Factors, FAA Human Factors Research and Engineering, ATO-P.
- Mosier, K. L., Fischer, U., & Orasanu, J. (2011). *Addressing the Challenges in NextGen Decision Making*. Interim Report, FAA/NASA NextGen Flight Deck Human Factors Research, Interagency Agreement #DTFAWA-10-X-80005, Annex 9. Submitted to Dr. Tom McCloy, Scientific and Technical Advisor for Human Factors, FAA Human Factors Research and Engineering, ATO-P. SFSU Research Associates: Christine Thomas\*, Kerry Cunningham\*.
- Mosier, K. L., Fischer, U., & Orasanu, J. (2011). *Flight Crew Decision Making: Now and NextGen*. Interim Report, FAA/NASA NextGen Flight Deck Human Factors Research, Interagency Agreement #DTFAWA-10-X-80005, Annex 9. Submitted to Dr. Tom McCloy, Scientific and Technical Advisor for Human Factors, FAA Human Factors Research and Engineering, ATO-P. SFSU Research Associates: Christine Thomas, Kerry Cunningham, Stanton Mak, Matthew McDearmid, Joanna Smith.
- The HART Group (2011). *Automation in the Cockpit: Toward a Human-Automation Relationship Taxonomy*. Interim Report, FAA cooperative agreement DTFAWA-10-C-00084. Submitted to Dr. Tom McCloy, Scientific and Technical Advisor for Human Factors, FAA Human Factors Research and Engineering, ATO-P. (The HART group comprises researchers from Georgia Tech, San Francisco State, and the University of Illinois. In alphabetical order: Francis T. Durso, Karen Feigh, Ute Fischer, Daniel Morrow, and Kathleen Mosier. SFSU Research Associates: **Justin Blosch, Jordan Wilson.**)

### ***Invited Professional Presentations***

- Mosier, K. L. (2018). *HFE Issues in the Future of Work*. Keynote address at Ergonomics and Human Factors 2019, Chartered Institute of Ergonomics and Human Factors, Stratford-upon-Avon.
- Mosier, K. L. (2017). *Cognitive engineering and decision making: The lessons learned from non-healthcare settings*. Presentation at the Congress of the ITNS Italian Chapter of the Italian Society for Safety and Quality in Transplantation, Florence, Italy.
- Fischer, U. & Mosier, K. (2016). *Protocol for Asynchronous Communication in Space Operations*. Presentation to NASA personnel at JSC.
- Mosier, K. (2016). *Introduction to Cognitive Engineering*. Invited keynote address at the XVIII International Congress on Ergonomics, Tijuana, Baja California, Mexico
- Mosier, K., & Fischer, U. (2016). *Protocols for Asynchronous Communication in Space Operations*. Presentation at the 2016 NASA Human Research Program Investigators' Workshop, Galveston, TX.
- Durso, F., Mosier, K., et al. (2015). *Human Systems Integration: Research and Promotion*. Panel presentation at the 19<sup>th</sup> Triennial Congress of the International Ergonomics Association, Melbourne, Australia.
- Mosier, K. (2015). *The Quest for a Safer and More Efficient Sky: Theory and Practice*. Plenary Researcher Panel, 18<sup>th</sup> International Symposium on Aviation Psychology. Dayton, OH.
- Fischer, U., & Mosier, K. (2015). *Communication Protocols to Support Space-Ground Collaboration during Long-Duration Exploration Missions*. Presentation at the NASA Human Research Program Investigators' Workshop, Galveston, TX.
- Fischer, U., & Mosier, K. (2014). *Communication and Performance under Time Delay Conditions*. Presentation at the NASA Human Research Program Investigators' Workshop, Galveston, TX.



- Mosier, K. L. (2011). *Engineered Environments: Implications of the Hybrid Ecology*. Presentation at the Automation and Human Performance Research Summit, Moline, IL, November 7.
- Mosier, K. L. (2011). *Presidential Forum: Human Factors in NextGen Operations: Progress and Perspectives*. Panel organized for the 55<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society, Las Vegas, NV, September 19-23.
- Mosier, K. L. (2010). *Human Factors in Aviation: A Brief (Selective) History*. Presidential Address at the 54<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society, San Francisco, CA, September 27-October 1.
- Mosier, K. L. (2009). *Automation Use and Automation Bias: Lessons from Aviation*. Presentation at the Center for Operator Performance, Richmond, CA, November 4.

### **Professional Presentations**

- Mosier, K. & Fischer, U. (2016, September). From the lab to Mars: Protocol development for asynchronous communication in space operations. Presentation at the Human Factors and Ergonomics Society Annual Meeting, Washington, DC.
- Mosier, K. L., & Fischer, U. (2016). *Supporting Communication and Space-Ground Collaboration during Long Duration Exploration Missions*. Presentation at SIOP 2016, Anaheim, CA.
- Mosier, K., & Fischer, U. (2015). *The Challenges of Asynchronous Communication for Distributed Teamwork: Task Performance and Media Effects*. Presentation at the 12<sup>th</sup> International Conference on Naturalistic Decision Making, McLean, VA.
- Mosier, K. & Fischer, U. (2015). *Single Pilot Operations: A New Frontier for CRM/TEM*. Presentation at the 18<sup>th</sup> International Symposium on Aviation Psychology, Dayton, OH.
- Gonzalez, K.,\* & Mosier, K. (2015). *Characteristics fostering effective teamwork in space flights*. Presentation at the Western Psychological Association. Las Vegas, NV.
- Mosier, K. L. (2014) *Decision Making and Communication across Time and Space: Lessons from NASA*. Presentation at the Modern Management Methods LKNA14 Conference, San Francisco, CA.
- Mosier, K. L. & Fischer, U. M. (2014). *Issues and recommendations for CRM/TEM in SPO*. HCI Aero, 2014.
- Fischer, U., & Mosier, K. (2014). Communication and Performance under Time Delay Conditions. Presentation at the NASA Human Research Program Investigators' Workshop, Galveston, TX.
- Fischer, U., Mosier, K., & Orasanu, J. (2013). *Issues of Grounding and Team Coordination in Asynchronous Communication*. 21<sup>st</sup> International Conference on Naturalistic Decision Making, Marseille, France.
- Pop, V. L., Ferguson, A. N., & the HART Group. (2012). Pilots' perceptions of human automation interaction. *Presentation at the Meeting of the Aerospace Medical Association*, Atlanta, GA.
- Mosier, K. L., Durso, F., Fischer, U., Lyall, B., & the HART Group (2011). *Converging and Complementary Methods for Eliciting Expertise*. Panel organized for the 20<sup>th</sup> International Conference on Naturalistic Decision Making, Orlando, FL, June 1-4.
- Durso, F. T., Pop, V. L., Mosier, K. M., Feigh, K., Fischer, U., Morrow, D., Sullivan, K., Blosch, J., & Wilson, J. (2011). Toward predicting pilot-automation coordination interactions. *Presentation at the Meeting of the Aerospace Medical Association*, Anchorage, AK.
- Fischer, U., Mosier, K. L. & the HART Group (2011). *Toward a Human-Automation Relationship Taxonomy*. Presentation at the International Symposium on Aviation Psychology. Dayton, OH, May 1-4.
- Pop, V. L., Durso, F. T., Feigh, K., Fischer, U., Morrow, D., Mosier, K., Sullivan, K., Blosch, J., & Wilson, J. (2011). Elaborating human factors concepts, guidelines, and concerns for characterizing flight deck automation, *Presentation at the 55<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society*, Las Vegas, NV.

- Sullivan, K. B., Feigh, K. M., Durso, F. T., Fischer, U., Pop, V. L., Mosier, K., Blosch, J., & Morrow, D. (2011) Using Neural Networks To Assess Human-automation Interaction IEEE: Digital Avionics and Systems Conference.
- Mosier, K. L. (2009). *Microcognition, macrocognition, and metacognition*. Panel presentation at the 53<sup>rd</sup> Annual Meeting of the Human Factors and Ergonomics Society, San Antonio, TX, October 19-23.
- Mosier, K. L., **Rettenmaier, P., McDearmid, M.**, Ng, S., **Wilson, J.**, Mak, S., & Orasanu, J. (2009). *Effects of operator state on pilot/ATC conflict*. Presentation at the 9<sup>th</sup> International Conference on Naturalistic Decision Making, London, June 23-26.
- Mosier, K. L., **Rettenmaier, P., McDearmid, M.**, Ng, S., **Wilson, J.**, Mak, S., & Orasanu, J. (2009). *Operator Affective States Associated with Risk Perception*. Presentation at the Western Psychological Association Conference, Portland, OR, April 23-26.
- Mosier, K. L. (2003). *Coherence and correspondence: Complementarity in the context of technological advances*. Presented at the 19<sup>th</sup> International Meeting of the Brunswik Society, Vancouver, BC, November 6-7.  
Also served as discussant in Panel Session: *Coherence and correspondence approaches to J/DM: How can we do more to integrate them?*
- Mosier, K. L., **Naranjo, E. L., & Yasuda, D. L.** (2002). *Fairness perceptions of organizational family-responsive policies*. Presented at the 17<sup>th</sup> Annual Conference of the Society for Industrial and Organizational Psychology, April 12-14, Toronto, Canada.  
Presented also at the San Francisco State University BSS Faculty Lecture Series, April 30, 2002.
- Mosier, K. L. (2001). *Coherence/correspondence and CCT in the automated cockpit*. Invited presentation at the 17<sup>th</sup> Annual International Meeting of the Brunswik Society, Orlando, FL, November 15-16.
- Mosier, K. L. (2000). *Automation and cognition*. Invited presentation at the NASA Human Error Modeling Workshop, Moffett Field, CA, June 22-23.
- Mosier, K. L., & Skitka, L. J. (1999). *Exploring automation bias in multiple environments*. Presented at the annual meeting of the Society for Judgment and Decision Making, Los Angeles, CA, November 21.
- Rosenblatt, B. L., Skitka, L.J., Mosier, K. L., & Burdick, M. D. (1998). *Automation bias reduced through training*. Presented at the 10<sup>th</sup> Annual Convention of the American Psychological Society, Washington, DC.
- Mosier, K. L., Skitka, L. J., Dunbar, M., McDonnell, L., & Burdick, M. (1997). *Automation bias in professional flight crews (and others)*. Invited presentation at the Thirteenth Annual International Invitational Meeting of The Brunswik Society, Philadelphia, PA, November 22.
- Mosier, K. L., Skitka, L. J., Dunbar, M., & McDonnell, L. (1997). *Automation bias and countermeasures in flight crews*. Presented at the Ninth International Symposium on Aviation Psychology, Columbus, Ohio
- Burdick, M.D., Skitka, L.J., and Mosier, K.L. (1997). *The debiasing effects of accountability and feedback on automation bias*. Presented at the 41<sup>st</sup> annual meeting of the Human Factors and Ergonomics Society, Albuquerque, NM, October.
- Maslach, C., Zedeck, S., Skitka, L. J., & Mosier, K. (1997). *Health outcomes of job burnout*. Presented at the Eighteenth Annual Scientific Sessions of the Society of Behavioral Medicine, San Francisco, CA, April 18.
- Mosier, K. L., Skitka, L. J., Burdick, M. D., & Heers, S. (1996). *Decision making in a high-tech world: Automation bias and countermeasures*. Presented at the Annual Conference of the Society for Judgment and Decision Making, Chicago, IL, November 3.
- Mosier, K. (1995). *Use of automated cues in the cockpit*. Invited presentation at the Eleventh Annual International Invitational Meeting of the Brunswik Society, Los Angeles, CA, November 11.

- Mosier, K. (1995). *Naturalistic Decision Making: A Domain-Integrated Overview*. Panel presentation at the 39th Annual Meeting of the Human Factors and Ergonomics Society, San Diego, CA, October 9-13.
- Skitka, L. J., & Mosier, K. L. (1994). *Automation bias: When, where, why?* Presented at the Annual Conference of the Society for Judgment and Decision Making.
- Heers, S. T., Marchioro, C. A., Mosier, K. L., & Skitka, L. J. (1994). *Automation and Accountability in a Low Fidelity Flight Task*. Presented at the 38th Annual Meeting of the Human Factors and Ergonomics Society, Nashville, TN, October 24-28.
- Mosier, K. (1993). *Who (or What) is doing the Managing in Cockpit Resource Management?* Presented at the 37th Annual Meeting of the Human Factors and Ergonomics Society, Seattle, WA, October 11-15.
- Zacharias, G. L., Riley, E. W., Miao, A. X., & Mosier, K. L. (1992). *Timeline Analysis and Modeling of Datalink Simulation*. Presented at the Third Ames Aviation Safety/ Automation Program Investigator's Meeting, NASA Ames Research Center, Moffett Field, CA, August 19-21.
- Mosier, K. L. (1992). *Measuring Crew Situation Assessment*. Presented at the Third Ames AS/A Program Investigators' Meeting, NASA Ames Research Center, Moffett Field, CA, August 19-21.
- Mosier, K. L. (1991). *Measures of Crew Situation Assessment*. Presented at the Second Ames Aviation Safety/ Automation Program Investigators' Meeting, NASA Ames Research Center, Moffett Field, CA, August.
- Mosier, K. L. (1990). *Approaches to studying crew productivity and group processes using high fidelity simulators: Decision making on the flight deck*. Presented at the Twelfth Psychology in the DoD Symposium, Colorado Springs, CO.
- Skitka, L. J., Mosier, K. L., Maslach, C., & Zedeck, S. (1990). *Job stress: Is it all in your head?* Presented at the annual conference of the Western Psychological Association, Los Angeles, CA.
- Mosier, K. L., Skitka, L. J., Zedeck, S., & Maslach, C. (1989). *Supervision and comfort: Salient aspects of working life*. Presented at the Joint Annual Convention of the Western Psychological Association and the Rocky Mountain Psychological Association, Reno, Nevada.
- Banks, C., May, K., & Mosier, K. (1989). *Development and content validation of multiple-test selection procedures*. Presented at the annual conference of the Society of Industrial/Organizational Psychologists.
- Mosier, K., & Zedeck, S. (1988). *Job satisfaction: The other perspective*. Presented at the annual conference of the Western Psychological Association, Burlingame, CA.

### **External Grants and Contracts**

- Understanding Key Components of Successful Autonomous Space Missions*. NASA NRA grant, funded through GA Tech agreement, June, 2016-June, 2020. Kathleen L. Mosier, Co-Principal Investigator. (\$300,718)
- Dynamic Information Management for Transport Operations*. Cooperative agreement/grant with NASA Ames Research Center, funded through San Jose State University Foundation. Kathleen L. Mosier, Principal Investigator. March 1, 2015-May 31, 2016. (\$117,700)
- CRM Issues Surrounding Single-Pilot Operations for Transport Aircraft*. Cooperative agreement/grant with NASA Ames Research Center, funded through San Jose State University Foundation. Kathleen L. Mosier, Principal Investigator. April 1, 2013-June 31, 2014. (\$145,930)
- Protocols for Asynchronous Communication in Space Operations: Communication Analyses and Experimental Studies*. NASA NRA grant, funded through GA Tech agreement, October, 2012-November, 2015. Kathleen L. Mosier, Co-Principal Investigator. (\$449,048)
- NASA/FAA Research Database*. NASA Ames Research Center Cooperative Agreement, October 1, 2011-September 30, 2012. Kathleen L. Mosier, Principal Investigator (\$91,103).

*Decision Making Capabilities and Limitations (FAA NextGen Topic 12-04)*. NASA Ames Research Center Cooperative Agreement. May 1, 2010- December 31, 2011. Kathleen L. Mosier, Principal Investigator (\$126,899).

*HART: Human Automation Relationship Taxonomy*. Funded by FAA through GA Tech agreement, May 1, 2010 – August 31, 2011. Kathleen L. Mosier, SFSU Principal Investigator (\$82,605).

*Operator State and Crew/ATC Conflict*. NASA Ames Research Center (contract with Perot Systems). February, 2009-September, 2010. Kathleen L. Mosier, Principal Investigator (\$20,000).

*Training for Automation Use*. NASA Ames Research Center, Aviation Safety Program, February, 1999 – August, 2003, NAG2-1285. Kathleen L. Mosier, Principal Investigator; Elizabeth Lyall, Co-Investigator. (\$363,000)

*Automation: Decision Aid or Decision Maker?* NASA Ames Aerospace Human Factors Research Division, Cooperative Research Grant, NCC2-237, October, 1993 – September, 1997. Principal Investigator, Linda J. Skitka; Kathleen L. Mosier, NASA Ames on-site Principal Investigator.

### ***Internal Grants and Professional Awards***

Mosier, K. (2004). Providing Decision Support for a Latina Breast Cancer Population. Summer Stipend, 2004; 2005. (Co-PIs: Jeff Belkora and John Maa)

Presidential Award for Professional Development of Probationary Faculty Leave with Pay, Fall, 2001 (competitive award).

Mosier, K. L (2000). *The Impact of Justice Norms on Perceptions of Work/Life Policies*. SFSU Mini-Grant, Spring, 2001.

Mosier, K. L. (1997). *Information and Automation Issues in Free Flight Conflict Management*. SFSU Summer Stipend, 1998.