Shawn A. Pruchnicki, MSc, Rph, CSPI

NASA Ames Research Center Mail Stop 262-4 Moffett Field, CA 94035-1000 shawn.a.pruchnicki@nasa.gov 614-565-8795

Statement of Research Focus:

My research interest lies in the area of safety/just culture, accountability and how these are operationalize in safety sensitive domains. Understanding socio-technical failure and using such understanding proactively is one goal. I would like to focus specifically on how models of organizational behavior, ethics and organizational accountability look when viewed through complexity theory.

Professional Education:

Current	PhD program	Industrial System	Engineering	g. Human Factors.
Current	PhD brogram.	mausinai Systems	s rangineering	2. Human Factors.

Dr. David Woods. Academic Advisor. The Ohio State University.

Columbus, Ohio

May 2006 Masters of Aeronautical Science Program; Human Factors.

Embry-Riddle Aeronautical University. Daytona Beach, Florida.

June 1990 Paramedic Training. Nationally Registered. Grant Medical Center

LifeFlight Parmadic Program. Columbus, Ohio.

January 1990 Professional Firefighting Training. Ohio Fire Academy.

Reynoldsburg, Ohio.

July 1989 Bachelor of Science in Pharmacy, Ohio State University.

Columbus, Ohio.

Professional Experience:

Jun 2010 - Present

Senior Research Associate. San Jose State University Research Foundation on permanent assignment at the National Aeronautics and Space Administration (NASA) AMES Research Center. Moffett Field, CA.

- Researcher involved in numerous aerospace human factors issues. Current and past subjects include
 - o Single Pilot Workload study
 - o Navigational Reference System (NRS) project

Jun 2009 – Present

Owner and Chief Researcher; Human Factors Investigation and Education. Columbus, Ohio

Human Factors expertise specializing in accident investigation and safety/just culture implementation. Has worked with several airlines and medical organizations to help them achieve their safety goals.

Dec 2009 - Jun 2010 Independent contractor - Air Transport Pilot/Research Associate. San Jose State University in collaboration with the National Aeronautics and Space Administration (NASA) AMES Research Center Moffett Field, CA.

- Current research into the human factors issues regarding NextGen development. Specifically the navigation reference system (NRS).
- FAA research contract numbers:
 - 09-AJP61FGI-0101
 - 09-AJP61FGI-0102

Jan 2009-Present

Adjunct Faculty: The Ohio State University, Columbus Ohio

College of Engineering, Department of Aviation. Courses taught in undergraduate program – over 300 hours of undergraduate instruction given:

Aviation Safety (560)

Human Factors (540)

Accident Investigation (493)

Aviation History (322)

Advanced Human Factors & Accident Causation (493)

College of Pharmacy.

Courses created and taught in Doctor of Pharmacy Program: Group Studies-Clinical Toxicology (694)

Mar 1999-Apr 2009

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

- Cat II Qualified.
- Scheduled Part 121 airline
- Operations throughout United States, Mexico, Bahamas and Canada.

Aug 1989-Present

Poison Information Specialist. Pharmacist. The Central Ohio Poison Center. Columbus. Ohio.

- Responsible for telephone consultation for general public and health care professionals.
- Clinical instructor for Doctor of Pharmacy students, Emergency Medicine physicians and Paramedics.
- Over 67,000 calls managed to date.

Jun 1988-Sept 1997 Firefighter/Paramedic. Jackson Township Fire Department. Grove City, Ohio.

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

Additional Teaching Positions:

Sept 2009-Present

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

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

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

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

Nov 1997-Feb 1999

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

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

Nov 1997-Feb 1999

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

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

Oct 1996-Feb 1999

Flight Instructor, Airnet Systems. KCMH Columbus, Ohio.

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

Oct 1996- Feb 1999 Flight Instructor, Academy for instrument ratings. KCMH Columbus Ohio

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

Apr1990-Apr 1996

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

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

Jun 1992-Nov 1995

Instructor: American Red Cross. Columbus, Ohio.

Taught CPR and first aid to general public.

Jun 1992-Feb 1999

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

 Toxitricks is a practical "hands-on" program designed to assist pre-hospital and hospital personnel with common pediatric toxicological emergencies.

Mar1991-Nov 1995

Instructor: Pediatricks Program, Children's Hospital. Columbus, Ohio.

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

Certificate and Training Programs:

Sept 2007

Learning Laboratory for Human Factors Investigators. Dr. Sidney Dekker. Lund University. Lund, Sweden.

Mar 2006

Human Factors in Aviation Safety Course. University of Southern California (USC). Viterbi School of Engineering. Los Angeles, California.

Apr 2005-Dec 2007

National Transportation Safety Board Academy, Ashburn, VA

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

Aug 1989-Mar 2000 Provider American Heart Association

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

Oct 2001-Feb 2005

Air Line Pilots Association (ALPA). Herndon, VA

- Courses taken
 - Safety Two School
 - Advanced Accident Investigation
 - Basic Accident Investigation
 - Basic Safety Course & Bloodborne Pathogen Training.

Licensure:

Jul1991-Present Certified Specialist in Poison Information. American Association

of Poison Control Centers.

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

Department of Public Safety. Division of EMS. Columbus, Ohio.

Jul 1989-Present Pharmacist. Ohio State Board of Pharmacy.

Licensure #03-2-17688.

Aviation Certificates:

Airline Transport Pilot: Airplane Multi-Engine Land

Type rating CL-65 turbojet

Commercial pilot:

Airplane Single-Engine Land

Flight Instructor:

Airplane Single-Engine & Multi-Engine Land, Instrument

Ground Instructor: Basic, Instrument, Advanced

Flight Time:

Total	4267	Turbojet PIC	974
PIC	1925	Instrument	318
SIC	2029	Simulator	198
Turbojet	2928	Flight Instructor	615

Other Professional Activities:

Oct 2001-Oct 2008

Air Line Pilots Association (ALPA) Major activities and responsibilities.

Air Transport Association's Data Communications Task Force

Human Factors Sub-group. Washington D.C.

Member: May 2008 to October 2008

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

Co-Chairman: September 2006 to August 2008 Member: May 2005 – September 2006

National Human Factors Working Group

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

Master Executive Council-Central Air Safety Comm. Council 37 Chief Accident Investigator October 2007 – October 2008 November 2004 – December 2005

Vice-Chairman

Assistant Chief Accident Investigator
Member

June 2007 – October 2008

June 2003 – October 2004

October 2001 – June 2003

Master Executive Council - Aviation Safety Action Program (ASAP)

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

Mar1990-Apr1993 Member: Education Committee. The Central Ohio Poison Center. Columbus, Ohio.

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

Participation in Aviation Accident Investigations:

August 2007 Pinnacle Airlines (d.b.a. Northwest Airlink) Flight 4712 non-fatal

accident, CRJ-200. April 15, 2007. Human Factors analysis for the

ALPA investigation team in conjunction with the National Transportation Safety Board's investigation (NTSB)

DCA07FA037.

August 2006 Comair Airlines (d.b.a. Delta Connection) Flight 5191 fatal

accident (49), CRJ-100. August 27, 2006. Member of the

Operations/Human Factors working group. ALPA investigator in

support of the National Transportation Safety Board's

investigation (NTSB) DCA06MA064.

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

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

Transportation Safety Board's investigation (NTSB)

DCA05MA003.

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

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

NYC04LA174.

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

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

Assessment of Flight Crew Performance" for ALPA at Air Transat.

Publications (Peer-reviewed):

<u>Manuscripts</u>

Pruchnicki, S., Christopher, B., Burian, B. Human Factors Issues of Navigation Reference System Waypoints. *Proceedings from the 16th International Symposium on Aviation Psychology.* May, 2011. Dayton, Ohio.

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

Fennell, K., Pruchnicki, S., McKenney, D., Reidemar, H., Comstock, K. Aviation Automation Design and Implementation – The Need for Human Factors Considerations. *Proceedings from the 15th International Symposium on Aviation Psychology.* April, 2009. Dayton, Ohio.

Hollnagel, E., Pruchnicki, S., Woltjer, R., Etcher, S. A Functional Resonance Accident Analysis of Comair 5191. *Proceedings from the 8th International Symposium of the Australian Aviation Psychology Association.* April, 2008. Sydney, Australia.

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

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

Abstracts

Pruchnicki, S., Does Postmortem Toxicological Analyses of Tetrahydrocannabinol (THC) in Aviation Accidents Accurately Identify Its Physiological Impairment at the Time of Accident. *Journal of Toxicology; Clinical Toxicology* 2009 47: (7) 738. Poster presentation at the North American Congress of Clinical Toxicology Annual Meeting. San Antonio, Texas, September 2009.

Pruchnicki, S., Baker, S.D. The Use of Modern Photographic Technology for Animal Identification. *Journal of Toxicology; Clinical Toxicology* 2009 47: (7) 709. Poster presentation at the North American Congress of Clinical Toxicology Annual Meeting. San Antonio, Texas, September 2009.

Pruchnicki, S., Good TF, Walson PD. Severe Hydroxychloroquine Poisoning Reversed With Diazepam. *Journal of Toxicology; Clinical Toxicology* 1996 34: (5) 582. Poster presentation: North American Congress of Clinical Toxicology Annual Meeting, Portland, Oregon, September 1996.

Haley, K., Greene, S., Pruchnicki, S., Poison Center Training of Emergency Medical Services Personnel. *Proceedings of the AAPCC/AACT/ABMT annual meeting. October 1990, Tucson, Arizona.* Poster presentation. North American Congress of Clinical Toxicology Annual Meeting. Tucson, Arizona. Oct 1990.

Other Professional Papers

Burian, B, Christopher, B., Pruchnicki, S., Cotton, S., Human factors evaluation of the implementation of the navigation reference system (NRS) Phase 2 report. NASA study 09-AJP61FGI-0101 and funded through FAA AJP-61. Pp. 1-149. June, 2011.

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

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

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

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

Publications (Non-Peer reviewed):

Magazine

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

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

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

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

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

<u>Newsletter</u>

Pruchnicki, S. Got Flaps? *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication. 6: (2) 1-2, 2007.

Pruchnicki, S. Some QRH items not prompted by EICAS. *On Course*. A Comair Airlines safety publication. Spring, 2007.

Pruchnicki, S. Go ahead, make that PIREP. *The Leading Edge*. The Comair/ALPA Central Air Safety Committee Publication 4: (1) 14-15, 2005.

Pruchnicki S. Over-the-counter medications and flying? *Upfront.* The ALPA Comair MEC Publication. Fall, 2004.

Fessel, D., Pruchnicki, S. Are you tired of hearing about fatigue? *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication 3: (1) 1-2, 2004.

Pruchnicki, S. Dean, A. Self analysis techniques can prevent accidents. *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication 2: (2) 1-2, 2003.

Pruchnicki, S. Pilot Behavior May Be a Precursor to Incidents & Accidents. *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication 2: (1) 1-2, 2003.

Pruchnicki, S. Drug Interaction. *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication 1: (1) 6, 2002.

Pruchnicki, S. Unprompted QRH Items. *The Leading Edge.* The Comair/ALPA Central Air Safety Committee Publication 1: (1) 10, 2002.

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International Forums

May 2011 Accepted presentation: "Human Factors Issues of Navigation

Reference System Waypoints" International Symposium on

Aviation Psychology. Dayton, Ohio.

November 2010 Invited speaker. "The Lexington air disaster - analyzing an air

accident, step by step". Risky Business Conference. London,

England.

Sept 2007 & Invited speaker: "The New View and Comair 5191".

Sept 2009 Presented at the Learning Laboratory for Human Factors

Investigators. Masters Program. Dr. Sidney Dekker. Lund

University. Lund, Sweden.

Mar 2006 Invited speaker. "The Use of Color in Aircraft Flight Deck

Displays" Human Factors in Aviation Safety Course. Instructors Captain Robert Sumwalt and Dr. Najmedin Meshkati. University of Southern California (USC). Viterbi School of Engineering. Los

Angeles, California.

Aug 1991 Invited speaker. "Pre-Hospital Emergency Pharmacology."

Presented at International Fire and Rescue Conference annual

meeting. Columbus, Ohio.

National

March 2010 Invited Speaker. "Building a Positive Safety Culture in Your

Organization". Presented at the 2011 Air Charter Safety

Symposium. Washington, DC.

September 2010 Invited panelist. "Safety Culture – It's Not Just an Accident". At

the 62th Annual National Business Aviation Association (NBAA) convention. Presented at the Safety Town Hall Meeting. Atlanta,

Georgia.

June 2010 Invited speaker. "Human Factors Considerations for Incident

Investigations". Presented at FAA Aviation Shared Vision

conference. San Diego, CA

March 2010	Invited speaker. "Creating a Just Culture in Your Organization". Presented at the Human Factors and Wings Seminar. Dallas, Texas
January 2010	Invited speaker. "System Safety and Crew Resource Management". Presented at the Boeing Executive Flight Operations Safety meeting. Palm Springs, California.
March 2006	Instructor. "Survival Factors In Aircraft Accidents". The ALPA Basic Accident Investigation Course. Presented in San Antonio, Texas.
May 2004 to October 2008	Instructor. "Human Factors in Accident Investigation". The ALPA Basic Accident Investigation Course. Presented twice a year in several locations. Herndon, VA, San Diego, CA, & San Antonio, TX.
October 1998	Instructor. "Weapons of Mass Destruction, Chemical Terrorism" Disaster Planning International. Domestic Preparedness Training. Tucson, Arizona.
November 1997	Instructor. "Hazardous Material Operations". HAZ/MAT DQE. Good Sheppard Hospital. Barrington, Illinois.
July 1993	Course Coordinator & Instructor. "Toxitricks." Presented at Emergency Nurses Association Annual Conference. San Antonio, Texas.
January 1992	Instructor. "Pediatricks." Presented at Emergency Nurses Association Annual Conference. Austin, Texas.
Regional/Local	
January 2011	Invited speaker: Human Error and a Viable Safety Culture in Health Care. Pharmacy 850: Seminar for MS in Health Systems. The Ohio State University College of Pharmacy. Columbus, Ohio.
September 2010	Invited speaker: "Safety and Just Cultures" Aviation 540 and 560. The Ohio State University Department of Aviation. Columbus, Ohio.
May 2010	Invited speaker: The NTSB and FAA Regulations. Aviation 530: Aviation Law. The Ohio State University Department of Aviation. Columbus, Ohio.

May 2008 Invited speaker: "Comair 5191- A Human Factors Perspective". Aviation 540: Human Factors. The Ohio State University Department of Aviation. Columbus, Ohio. February 2008 Invited speaker: "Comair 5191, Situational awareness and lessons Learned". Professional Pilot's Association of Central Ohio. Columbus, Ohio. November 2007 Invited speaker: "Aviation Career Choices; Pilot and Accident Investigation". Aviation 300: The National Aviation System. The Ohio State University Department of Aviation. Columbus, Ohio. November 2006 Invited speaker: "Human Factors". Pharmacy 816: Medication Use System Management. Graduate Program in Pharmaceutical Administration. The Ohio State University College of Pharmacy. Columbus, Ohio. March 2005 Facilitator for on-line workshop. "Toxicology: Clinical Management of the Overdosed Patient" Pharmacy 779D: Advanced Pharmacotherapeutics. The Nontraditional Doctor of Pharmacy Program: The Ohio State University College of Pharmacy. Columbus, Ohio. October 2004 Invited speaker. "Toxicology: Clinical Management of the Overdosed Patient" Pharmacy 779D: Advanced Pharmacotherapeutics. The Nontraditional Doctor of Pharmacy Program: The Ohio State University College of Pharmacy. Columbus, Ohio. September 1996 to Invited speaker. "Hazardous Materials in the Emergency February 1997 Department." Presented to seven different emergency departments throughout Ohio. August 1996 Invited speaker. "Management of the Overdose Victim". Fairfield-Licking-Perry County Fire School. Lancaster, Ohio. June 1996 Course coordinator & Instructor. "Hazardous Materials Operations and the Poison Center Staff". A four part lecture series. Central Ohio Poison Center, Children's Hospital. Columbus, Ohio. January 1995 Instructor. "Pediatricks." Presented for the Children's Hospital Emergency Department staff. Columbus, Ohio.

October 1994 Invited speaker. "Toxicology Update." Presented at the Ohio Association of Emergency Medical Services Annual State Meeting. Columbus, Ohio. Course Coordinator & Instructor. "Toxitricks", Presented for July 1993 Guernsey Memorial Hospital staff. Cambridge, Ohio. July 1993 Invited speaker. "Revenge of the Toxic Toddler." Presented at the Ohio Association of Emergency Medical Services Annual State Meeting. Columbus, Ohio. September 1991 Instructor. "Pediatricks." Presented for the Ohio State University Emergency Department staff. Columbus, Ohio. Grants: February 1996 to Co-Investigator: Pruchnicki, S, Laubacher, M. Conrail Inc. February 1997 Regional Professional Education Program. The Central Ohio Poison Center. \$36,000 Hazardous Materials Research & **Education Grant.** One year comprehensive program to better prepare both poison center and emergency department staff to manage victims of hazardous materials exposure. Deliverables included poison center manual for hazardous materials exposures – training program for poison center professional staff – 12 presentations to various emergency department staff members on the management of hazardous materials victims. Media WBNS 10 TV Interviewed as background information for a story September 2009 aired on the evening 5:30PM newscast, September 15. Consulted as aviation expert regarding laser incident with a commercial aircraft at Port Columbus International Airport. WBNS studios, Columbus, Ohio. January 2009 WBNS 10 TV Evening 5:30PM newscast, January 16. Live on-air aviation expert regarding the US Airways Flight 1549 ditching in New York. Viewership around 30,000. WBNS studios, Columbus, Ohio.

Editorial Responsibilities:

Oct 2009 Reviewed book proposal for Ashgate Publishing Company.

London, U.K.

Oct 1993-Feb 1999	Creator and Senior Editor- <i>The Antidote</i> . The Central Ohio Poison Control Center's Educational Newsletter. Children's Hospital. Columbus, Ohio.
Mar1991-Mar 1992	Review Editor. <u>Pre-hospital Drug Therapy</u> . Text book project. Gonsoulin SH, Raynovich, Mosby Lifeline Publishing. New York.

Sept 1990-Sept 1996 Review Editor. Journal of Emergency Medical Services (JEMS). EMS Journal. Pharmacology and Toxicology related chapters.

Professional Organizations:				
August 2008	Associate Member Human Factors and Ergonomics Society (HFES).			
May 2003	Member of the Association for Aviation Psychology (AAP).			
February 2003	Associate Member of the International Society of Air Safety Investigators (ISASI).			
Honors:				
2006	Graduated with distinction. GPA 4.0. Master of Science; Master of Aeronautical Science – Human Factors. Embry-Riddle Aeronautical University. Daytona Beach, Florida.			
1990	Honor Graduate. Paramedic class of 1990. Highest GPA. Grant Medical Center Paramedic Program.			
1989	Pfizer Award for excellence in community Pharmacy practice.			

References:

Dr. Barbara K. Burian - Research Psychologist. Human Systems Integration Division NASA Ames Research Center. (706) 348-1617

Capt. Shawn Etcher – Air Safety Investigator Eastern Region Aviation, National Transportation Safety Board (NTSB). (202) 527-4610

Capt. Jeff VanderWel - Director of Safety, NetJets International. (843) 705-8134

Capt. Mitch Serber – Multi-Discipline Systems Engineer, MITRE Corporation. (703) 983-1629

Capt. Alan Dean – Chief Safety Officer, Boeing Executive Flight Operations. (219) 669-1737