

Steven Hampton

*Associate Dean for Research, College of Aviation
Professor of Aeronautical Science
Embry-Riddle Aeronautical University
600 South Clyde Morris Boulevard
Daytona Beach, FL 42114-3900*

ADDRESS: 230 Bridle Path Lane
Ormond Beach, FL 32174

EDUCATION: Ed.D. Nova University
MBA-A Embry-Riddle Aeronautical University
B.S. Embry-Riddle Aeronautical University

EXPERIENCE: Associate Dean for Research, College of Aviation 2004 – Present
Interim Associate Provost, Research and Graduate programs 2001 - 2004
Professor, Aeronautical Science 1995 - present teaching Graduate and Undergraduate courses.
Professor, Flight Technology 1990 - 1995
Responsible for the development of training programs for NASA's AGATE initiative.
Executive Director, Southeast SATSlab
Responsible for the development of flight courses.
Evaluator for the American Council on Education
Evaluator of Flight Training Devices for Undergraduate programs.
Development of collaborative flight laboratory agreements for Embry-Riddle students with Northwest Airlines, United Airlines, TWA, and Delta Airlines.

Phase Check Pilot, ERAU. 1974 - present

Flight Hours:

Total	-	9,900
Instruction	-	9,000
Multi-Engine-		4,400
Instrument	-	950

Airframe and Powerplant Mechanic

AFFILIATIONS: University Aviation Association
National Coalition for Aviation Mobility
Institute Management Council (JPDO)
National Safe Skies Alliance
AAIA
ASEE
American Council on Education Program/Course Evaluator

AWARDS:

President's Innovation Award, 1993 for *"Innovative Crew Training for Undergraduate Pilots"*

President's Innovation Award, 1994 for development of an introductory flight concepts course for FAA non-flight personnel entitled; *"The Other Half of the Sky."*

President's Innovation Award 1995 for development of *"PC-Based Flight Training - A New Paradigm for Flight Simulations."*

The National Aeronautics and Space Administration "1998 Turning Goals into Reality Award"

The National Aeronautics and Space Administration "2001 Public Service Group Achievement Award" *"For exceptional team performance in creating and validating the AGATE Unified Instrument-Private Pilot Curriculum"*

The National Aeronautics and Space Administration "2002 Group Achievement Award"

The National Aeronautics and Space Administration "2002 Turning Goals into Reality Award"

CURRENT RESEARCH ACTIVITY:

Lead manager FAA General Aviation Center of Excellence. A consortium of five public/private universities working together to address the needs of the general aviation community sponsored by the Federal Aviation Administration. \$16 mill. +

"USAir/ACSS NextGen Implementation Project" Federal Aviation Administration, 2009, \$350,000.

"Florida NextGen Implementation Project" Federal Aviation Administration, 2008, \$450,000.

RECENT PRESENTATIONS:

"Small Aircraft Transportation System" Royal Aeronautical Society, London, May 2003 (invited)

"Small Aircraft Transportation System" Cranfield University, United Kingdom, May 2003 (invited)

"General Aviation" Track Chair at the 2001 Digital Aviation Systems Conference in Daytona Beach, Florida, October 2001.

Small Aircraft Transportation System, Session Chair at the 2001 Digital Aviation Systems Conference in Daytona Beach, Florida, October 2001.

"AGATE/SATS" Presented at the University Aviation Association Conference, October 2000.

"Aviation Training in the 21st Century – Strategies and Issues" Presented at the Revolution in General Aviation Training Conference, Oregon State University, Corvallis, OR, June 14-16 2000.

“AGATE Training Update” Presented at the SAE General Aviation Training Conference, Wichita May 9-11 2000.

PUBLICATIONS:

“Training issues associated with the Advanced General Aviation Transportation Experiment and the potential for enhanced Decision-Making using new Cockpit Displays” A paper presented at the Digital Avionics Systems Conference, Philadelphia, October 2000.

“Training Issues Associated with the Advanced General Aviation Transportation Experiment and Small Aircraft Transportation System” A paper presented at the International Aviation Training Symposium, Oklahoma City, September 1999.

“Personal Computer Based Training Devices: Reality or Fiction in the USA?” Steven Hampton, William F. Moroney, Presented at the Royal Aeronautical Society, Low Cost Simulation – New Opportunities in Flight Training, London, United Kingdom, May 1998.

“Advanced General Aviation Aircraft Cost Metrics.” (funded by NASA Langley), co-authored with Fleming, K. , and Carl, D.R., 1996.

“Considerations in the Design and use of Personal Computer-Based Aircraft Training Devices (PCATDs) for Instrument Flight Training: A Survey of Instructors.” (Funded by the Federal Aviation Administration), co-authored with William F. Moroney, and David W. Biers, 1996.

“The Real Training Value of FTDs in an Airline Training Program.” Research conducted in association with Paul Kingston, Captain Tom Peters, Delta Air Lines, Chris Lehman, Edward M. Boothe, Consultant, Flight Simulation and Training with results presented at the International Aircrew Training Conference, Gerald D. Gibb, Steven Hampton, John A. Wise and John C. Wolf Embry-Riddle Aeronautical University, November, 1995.

“An Evaluation of Reduced Motion-Based Simulator use During Initial Training for MD-88 Crews.” Steven Hampton, Gerald D. Gibb, Monty Lee, John Wise, and John Wolf, Presented at the International Aviation Psychology Conference, Columbus, Ohio, 1995.

“The Use of Personal Computer-Based Training Devices in Teaching Instrument Flying: A Comparative Study.” (Funded by the Federal Aviation Administration), co-authored with William F. Moroney, and David W. Biers, 1994.

“An Operational Evaluation of Stand-Alone GPS Receivers: Ergonomic Considerations” Co-Principal Investigator, funded by Battelle Corporation.

“PC Based Simulation: An Alternative for Teaching Instrument Flying Skills.” A paper presented at the American Society of Mechanical Engineers Winter Meeting, at their principal; Technical meeting on Transportation of the 21st Center, Atlanta, GA, (1991). (Funded internally by a grant from ERAU)

RESUME

Steven Hampton, Ed.D.

Dr. Hampton is an academic faculty member, researcher and active pilot. He received his Ed.D. from Nova university in 1989. While working towards the degree he did extensive work in the development of aviation training programs, and was a key member of a team that re-designed the flight-training program at Embry-Riddle to be a proficiency based program in the early 1980's. Since then, he has been applying his knowledge to the fields of general and commercial aviation. While he was responsible for the development of curricula and courseware for flight training at Embry-Riddle in Daytona Beach Dr. Hampton led the effort to integrate electronic media and CBT for flight students in the classroom and campus tutor labs.

He has experience working with four major US airlines, Simuflite, and Flight Safety developing training programs and bridge-programs for undergraduate students at Embry-Riddle. This involved the development of on-campus training to prepare the students prior to training at the airlines facilities. An integral element of these efforts is the introduction of cockpit automation and human factors that deal with interpersonal skills needed for today's general aviation and commercial aircraft.

Another of his major contributions has been Steven's involvement in research evaluating the capabilities of low cost training devices in an attempt to continue to reduce training costs. Notable credits include the first FAA funded study evaluating the use of Personal Computer-Based Aviation Training Devices (PCATDS) that is cited in AC 61-121. Other achievements in this area include a study conducted with colleagues from Embry-Riddle and industry (IVEX and Delta Airlines), evaluating the capabilities of FTDs for initial training at airline training programs.

Steven acted as the Principle Investigator and Industry Lead for a team developing flight-training programs for the NASA sponsored Advanced General Aviation Transportation Experiment (AGATE). The program, a five year NASA/FAA effort to revitalize General Aviation research capabilities through the development of a near all-weather capable aircraft. As the Principle Investigator and Industry Lead, Steven was responsible for the coordination and management of all team activities, NASA/FAA reporting requirements, and deliverables. For his efforts Steven was recognized twice by NASA, earning a National Public Service Award for Teaming and the prestigious "Turning Goals into Reality" award twice.

Because of his demonstrated capability at organizing and working with teams of aviation companies (AGATE) Steven was named Executive Director of the Southeast SATSlab, an independent non-profit Florida consortium. The Southeast SATSlab, a high technology program designed to bring an advanced transportation system to the southeastern states and later to the rest of the nation. The NASA program invested intechologies in infrastructure and technology demonstrations to show the feasibility and economic viability of a multi-modal transportation system that makes use of the extensive network of commercial and general aviation airports. The Southeast SATSlab teamed with two other State SATSLabs (Virginia and Maryland) and an (AAAI) industry consortium to compete for and won the right to manage the NASA program as

the single point of contact.

In 2000 he was appointed Interim Associate Provost Graduate Programs and Research, Steven worked to increase the number of faculty participating in research activities, the total value of contracts and grants, and the value of expenses charged. This office, which is responsible for monitoring all Contracts' and Grant's externally funded, provides assistance during the grant/contract proposal process as well as after award activity including monitoring of the activity to ensure compliance. During his tenure a relational database was developed to keep track of all awards and expenses so that the university could develop metrics regarding research activity. As a result of an increase in activity, \$1.5 million in 2000 - \$10 million in 2003/4 the Office of Sponsored Programs grew in size and complexity operating more efficiently with an expanded customer base.

In April of 2001 Steven was appointed Embry-Riddle's lead for the FAA's General Aviation Center of Excellence. This program is focused on providing university and industry resources to the FAA across a broad spectrum of intellectual and technical capability. Embry-Riddle is leading a team of five universities with a broad geographic/technical/cultural background. Member institutions are Embry-Riddle, University of North Dakota, University of Alaska, and Wichita State University. Funding for this program to date is at the \$16 million+ level. Steven worked with the FAA on behalf of the consortium to attain an Indefinite Delivery/Indefinite Quantity (IDIQ) contract with a total value of \$20 million over a period of ten years. The Secretary of Transportation announced the award in Daytona Beach, Florida September 30th, 2002.

Steven was appointed to the Institute Management Council (IMC) of the Next Generation Air Transportation System (NGATS) in 2005 for one of two seats on the institute's board representing Federal Advisory Boards and the academic community. The IMC is responsible for ensuring that the aviation industry is represented within the Federal JPDO and Federal NextGen process to develop and implement the Federal NextGen vision by 2025. As a member of the Aircraft Working group supporting the JPDO and NextGen vision Steven has helped draft an Avionics Roadmap being used by the FAA to develop strategic plans for national investments by US Airlines and the Federal Aviation Administration.

In addition, because of his extensive experience Steven has conducted evaluations of aviation training programs for the American Council on Education for accreditation purposes at the Coast Guard (Mobile, Alabama), Marines (Cherry Point), Army (Fort Rucker), Air Force (Kirtland AFB, Albuquerque) and the FAA Academy (Oklahoma City). In addition, he evaluated the aviation programs at Massey University in New Zealand in 1997.

Research and Personal Development Activity Highlights

- 1978 Bachelor of Science in Aeronautical Studies
- 1981 Master of Business Administration
- 1989 Doctor of Education

- 1992 Developed and conducted an award winning seminar “*The Other Half of the Sky*” to introduce senior FAA Air Traffic managers to aviation. FAA \$25,000
- 1993-94 Received grant to evaluate the use of Personal Computer Based Training Devices. FAA \$180,000
- 1994-95 Evaluated the use of Flight Training Devices as an alternative to Full Flight Simulators at Delta Airlines.
- 1996 Developed design guidelines for use in the development of Personal Computer Based Training Devices. FAA \$25,000
- 1996 Led a team to develop metrics to be used in measuring the success of technology developments for general aviation aircraft. NASA \$125,000
- 1996-97 Compiled an electronic database of available flight training materials and devices. NASA \$25,000
- 1997 Evaluated the aviation programs at Massey University in New Zealand as an independent reviewer at the request of the Vice Chancellor and Head of School. Massey University is the largest secondary and post secondary institution in New Zealand. The aviation program is internationally recognized and attended by students from across the pacific.
- 1997 Organized and led the industry/university team competing for the AGATE Training Systems Technology competitive tasking notice. The team successfully developed training systems for the AGATE aircraft. NASA \$3,500,000
- 2000 Named Executive Director of the Southeast SATSLab, a consortium of Industry, Government and Universities in a high technology program that was designed to bring an advanced transportation system to the southeastern states and later to the rest of the nation. Initial competitive award \$2,500,000 plus state matching of \$1,000,000, \$85,000 (2002), \$2,300,000 (2002), \$2,400,000 (2003) + \$500,000 (State 2003), \$1,900,000 (2004), and \$750,000 (2005) + \$50,000 (State 2005). Total Value - \$11,485,000
- 2001 Named point of contact for the FAA General Aviation Center of Excellence team led by Embry-Riddle Aeronautical university. Currently leads a team of 4 Universities after an initial commitment from FAA of \$300,000 a year, the center was awarded grants and contracts worth \$1,119,013 in 2001, \$795,792 in 2002, \$1,603,746 in 2003, \$2,002,938 in 2004, \$3,268,311 in 2005, \$4,697,834 in 2006, \$1,498,941 in 2007, and \$1,518,464 in 2008. Total Value \$16,505,000.
- 2005 Appointed to the Institute Management Council for the Next Generation Air Transportation System.