

AIR conference

January 14-17, 2016

Saturday, January 16

7:00 a.m. -8:00 a.m. *Continental Breakfast* *San Marcos Ballroom Foyer & A*

7:00 a.m. -4:00 p.m. *Registration and Help Desk* *San Marcos Ballroom Foyer*

8:00 a.m. -9:15 a.m. *Concurrent Sessions*

Leadership/Innovation/Aerospace Technology/Applications

La Ventana Ballroom

Chair: Ed Knab, ERAU-WW

Panelists: Tim Holt, ERAU-WW; Kees Rietsema, ERAU-WW; Eric Anderson, Graduate Student, ERAU-PC

Presenters:

- "Increasing General Aviation Safety through Data Analysis – GA ASIAs" *Shawn Pruchinicki and Philip Smith, Ohio State University #1248*
- "A Study on the Localization of Airport Self Bag-Drop Off system in Korea" *Kangseok Lee, Hanseo University (#1231)*

Unmanned Aerial Systems Certification

San Tan Ballroom

Chair: Stewart Schreckengast, Purdue

Panelists (invited): James Malecha, Federal Aviation Administration; Nancy Graham, Former Director of ICAO's Air Navigation Bureau; Kurt Barnhart, Kansas State University; Jimmy Clem, President/CEO, Unmanned Aerial Consulting; Steven Pennington, USAF; Sarah Nillson, ERAU-PC

Presenter:

- "A Survey of sUAS Operator's FAA Regulation Knowledge" *David Thirtyacre, ERAU-WW (#1211)*

Aviation Management & Operations

San Marcos Ballroom B

Chair: Hon. Robert Sumwalt, National Transportation Safety Board

Presenters:

- "Analysis of Factors Related to Maximum True Airspeed (TAS) During the Handicap Procedure for the 2105 Women's Air Race Classic" *Erica Diels and Claire Schindler, ERAU-PC (#1229)*
- "Determining the Runway Point-of-no-Return for Landing Roll Go-Around in Transport Category Airplanes" *Nihad Daidzic, Minnesota State University-Mankato (#1210)*
- "In Pursuit of Aviation Professionalism: Assessing Aviation Professionalism" *Hussain Alhallaf, Florida Institute of Technology (#1234)*

- “The Results of Non-compliance with Checklist Use and Control Checks in the BED Runway Overrun Crash” *Robert Sumwalt, National Transportation Safety Board (#1257)*

Critical Issues: TBD

Palomino

9:15 a.m.-9:30 a.m.

Break

San Marcos Ballroom Foyer

9:30 a.m. -10:45 a.m.

Concurrent Sessions

State of the Helicopter Industry

San Tan Ballroom

Chair: Dawn Groh

Panelists: Robert Rappoport, Production Test Pilot and Instructor- MD Helicopters; David Small, Regional Aviation Manager- Air Methods Corp, Native Air AX; Scott Burgess, ERAU-WW; Terence Miyauchi, AZDPS; James Linehan, Phoenix PD

Human Factors & Safety

San Marcos Ballroom B

Co-Chairs: Clint Balog, ERAU-WW, Erin Bowen, ERAU-PC

Panelist: Hon. Earl Weener, National Transportation Safety Board Member

Presenters:

- “Cognitive Processes and Challenges during Surprise on the Flight Deck” *Shawn Pruchinicki, Ohio State University (#1251)*
- “The Effect of a Midpoint Marking on Pilot Decision Making While Landing” *Brian Dillman, Rachel Borsa, Lucero Duran & Julius Keller, Purdue University (#1240)*
- “Accident-Precipitating Factors for Crashes in Turbine-Powered General Aviation Aircraft” *Douglas Boyd, University of Texas Health Science Center at Houston and Alan Stolzer ERAU-DB (#1212)*
- “Exploring Pilots' Experiences of Integrating Technologically Advanced Aircraft Within General Aviation” *Calvin Nobles ERAU-WW (#1208)*

Consumer Perceptions in Aviation

La Ventana Ballroom

Co-Chairs: Scott Winter & Madison Hart, Florida Institute of Technology

Presenters:

- “Cognitive Deconstructing Legacy- Is Low-Cost the Business Model of the Future?” *Astrid Zajdband ERAU-WW (#1244)*
- “Effect of Passenger Weight Under-Estimations on Regional Aircraft Performance for the Most Obese States in America” *Douglas Boyd, University of Texas Health Science Center at Houston (#1220)*
- “From Customer Service to Self Service: The Decline of Passenger Satisfaction” *Timothy Holt, ERAU-WW (#1241)*
- “Impact Factors for the National Annual Airline Quality Rating and A³iR Con” *Brent Bowen, Vrushali Suvarna, Hunter Watson, ERAU-PC (#1260)*

10:45 a.m. -11:00 a.m.

Break

San Marcos Ballroom Foyer

11:00 a.m. -12:15 p.m.

Concurrent Sessions

Emergency Response

La Ventana Ballroom

Co-Chairs: MK Gorman, ERAU-WW; John Griffith, ERAU-WW

Panelists: Hon. Robert Sumwalt, NTSB; Jim Linehan, ERAU-PC; Heather Strouse, Capital Aviation Consulting; Deputy Chief Beth Hendel, Phoenix, FD

Presenter:

- “The Results of Non-compliance with Checklist Use and Control Checks in the BED Runway Overrun Crash” *Hon. Robert Sumwalt, National Transportation Safety Board (#1257)*

Emerging Technologies in Aviation

San Marcos Ballroom B

Co-Chairs: Vahid Motevalli, Tennessee Tech and Bruce Conway, ERAU-WW

Presenters:

- “Relative Material Loss: A Methodology for Assessing Island Airport Steel Marine Bulkheads” *Robert Ernsting, ERAU-DB (#1237)*
- “Wingsuit Materials Research – The Effect of Currently Used Materials on Wingsuit Aerodynamics” *Timothy Sestak, ERAU-PC (#1227)*
- “Validating the Knowledge, Skills, and Abilities Composite Measure: An Aviation Industry Pilot Study Presentation” *Aaron Glassman, Jason Newcomer, Matthew Earnhardt, ERAU (#1217)*
- “Class 1 EFB Deployment in a Fractional Ownership Pilot Population” *Kyle Tekaucic & Shawn Pruchinicki, Ohio State University (#1249)*

Critical Issues

San Tan Ballroom

Chair: Doug Drury, University of South Australia

Presenters:

- “Are We Facing a Pilot Shortage?” *Timothy Clifton, ERAU-PC (#1255)*
- “Perception of Safety Culture for Air Traffic Controllers in Korea” *Seock J. Hong, Kang-Seok Lee, University of North Texas (#1246)*
- “Air Transport Pilot Supply and Demand: Current State and Effects of Recent Legislation” *Michael McGee ERAU-WW (#1219)*
- “Cross-Sectional Assessment of Safety Culture Perceptions and Safety Behavior in Collegiate Aviation Programs in the United States” *Micah Walala & Julius Keller Purdue University (#1213)*

12:15 p.m.-1:00 p.m. Lite Lunch (by RSVP at Registration Desk) *San Marcos Ballroom Foyer & A*

1:00 p.m.-2:00 p.m. *Critical Issues* *San Tan Ballroom*

Co-Chairs: Jimmy Clem, CEO Unmanned Aerial Consulting and Dan Macchiarella, Dean, College of Aviation, ERAU-DB

Presenters:

- “System Safety Modeling of Alternative Geofencing Configurations for Small UAS” *James Luxhoj, LCR (#1221)*
- “Cyber Security and Privacy of Air Traffic Systems” *Radhakrishna Sampigethay, ERAU-PC (#1230)*
- “Wireless, Inductive, Self-Charging Electric Unmanned Aerial Systems” *Jeffrey Austen, Rabie Belkacemi, Hicham Chaoui, Robert Craven, Satish Mahajan & Vahid Motevalli, Tennessee Technological University(#1253)*
- “Frank Whittle and the Invention of the Jet Engine” *Juan Merkt, ERAU-PC (#XXXX)*

Note: Additional presenters will be published in the final proceedings.

Roundtable Presentations

La Ventana Ballroom

Chair: tbd

Note: Presenters will be published in the final proceedings.

- 2:00 p.m. – 4:00 p.m. *WINGS Seminar: Unmanned Aircraft Systems (UAS) in the National Airspace System (NAS) - Overview of Regulations [w/lite refreshments] San Marcos Ballroom B (& A Overflow)*
 Co-Chairs: Sarah Nilsson and Brian Roggow, ERAU-PC
 Presenters: Tina Buskirk, FAASTeam Program Manager, Scottsdale FSDO; James Malecha, Federal Aviation Administration; Sarah Nilsson, ERAU-PC
- 4:00 p.m. – 6:00 p.m. *Preparation for A³iR Con Communiqué (RSVP Req'd at Registration Desk) La Ventana Ballroom*
 Chair: Mary Fink, along with members of the Planning Committee and Staff
- 6:00 p.m. *Dinner on Your Own Chandler's Historic District*