

Kenneth Patrick Byrnes

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Dedicated and driven professional with over a decade of aviation leadership experience. Extensive aviation expertise, outstanding communication skills, vast problem solving ability, with a strong business sense.

Education: *Northcentral University* Prescott, AZ
PhD in Airline Management and Management of Engineering and Technology, March 2015
Dissertation topic: Measuring the affect of organizational safety culture on pilot aeronautical decision making

Embry-Riddle Aeronautical University Daytona Beach, FL
Masters Degree in Business Administration in Aviation, May 2005
Area of Concentration: Airline Management

Embry-Riddle Aeronautical University Daytona Beach, FL
Bachelor of Science in Aeronautical Science, December 2001
Minor: Meteorology, Completed aircraft dispatcher training program

Work

Experience: *Embry-Riddle Aeronautical University* Daytona Beach, FL
Assistant Dean of the College of Aviation January 2017- Present

- Assist the Dean and the Associate Dean with the supervision and oversight of 150 faculty and staff members.
- Assist the Dean and the Associate Dean with the supervision and oversight of over 2500 student's studying in 11 different academic programs with degrees ranging from Associate to PhD.
- Assist the Dean with subjects such as strategic planning, budget, philanthropy, curriculum, facilities and research.
- Provide customer service to students on subjects ranging from academic advisement to graduation evaluations.
- Serve as the campus expert and FAA lesion for the FAA approved ATP-R program.

Embry-Riddle Aeronautical University Daytona Beach, FL
Flight Department Chairman September 2009- Present
Associate Professor Aeronautical Science

- Manage an annual budget of \$22M+; Generating \$12,500,000+ positive net revenue over the past 9 fiscal years.
- Develop and maintain channels of communication with professional groups and industry to insure that flight activities provide appropriate educational preparation for the students.
- Maintain a strong and competent instructional cadre to meet curriculum requirements and high standards of the department.
- Provide leadership for over 300 aviation professionals and 1200+ flight students.
- Oversee the Fleet Maintenance Center, Flight Dispatch, FAA Testing Center, Flight Records, Flight Operations, and the Advanced Simulation Center.
- Coordinate with the FAA, NTSB, DOT, TSA, USAF, and other

- Center, Flight Records, Flight Operations, and the Advanced Simulation Center.
- Coordinate with the FAA, NTSB, DOT, TSA, USAF, and other agencies.
- Promote and provide leadership for a strong safety culture.
- Teach courses in the College of Aviation: Aviation Legislation, Private Pilot Operations, and Instructional Design in Aviation.

Embry-Riddle Aeronautical University

Adjunct Professor of Aeronautical Science

Daytona Beach, FL

August 2005- September 2009

- Provided classroom instruction in AS121 (Private Pilot Operations) and AS 340 (Instructional Design in Aviation).

Embry-Riddle Aeronautical University

Assistant Chief Pilot

Daytona Beach, FL

August 2005- September 2009

- Assist the Chief Pilot in establishing rules, procedures and regulations pertaining to the operation of ERAU aircraft and flight training procedures.
 - Responsible for the safe and efficient operation of the Flight Department.
 - Responsible for developing strategy that will enhance operational performance
 - Create measurement tools that determine operational performance.
- Responsible for supervising 150+ employees and over 900 students.
- Responsible for forecasting demand and resource utilization.
- Responsible for determining the optimum fleet size.
- Responsible for the enhancing and maintaining the flight management system
 - Lead continuous improvement initiatives.
 - Responsible for producing a flight schedule that assures the maximum utilization of all resources (aircraft, simulators and Instructor Pilots).
 - Coordinate with other departments on campus to ensure maximum customer service.

Embry-Riddle Aeronautical University

Chief of Flight Production

Daytona Beach, FL

May 2005-August 2005

- Temporary position created to study the flight department system, identify deficiencies, and recommend enhancements.
- Created a new scheduling system that increased productivity by 50%.
- Responsible for producing a flight schedule that assures the maximum utilization of all resources (aircraft, simulators and Instructor Pilots).
- Develops a semester, monthly, weekly, and daily system of planning and scheduling.
- Oversees the Flight Scheduling department and ensures that the daily production plan is executed accurately.

Embry-Riddle Aeronautical University

Flight Training Manager

Daytona Beach, FL

July 2003-May 2005

- Responsible for supervising 20+ flight instructors and over 150 students.
- Conduct ERAU stage checks and FAA certificated check rides.
- Develop plans of action for students who are not progressing as expected.
 - Responsible for ensuring that each student has the required aeronautical experience before submitting their airmen application to the FAA.

Embry-Riddle Aeronautical University

Assistant Training Manager / Flight Instructor

Daytona Beach, FL

March 2001-July 2003

- Supported the Training Manager in supervising other flight instructors and students.
- Evaluated students who were having problems in their flight courses.

- Supported the Training Manager in supervising other flight instructors and students.
- Evaluated students who were having problems in their flight courses.
- Provided flight instruction to prepare students for their FAA practical exams.

- Airline Transport Pilot
- Commercial Pilot - Airplane Single

Flight Certifications and

- Expert Flight Instructor; Instrument Airplane
- Multi-Engine Instructor rating
- Advanced Instrument Ground Instructor
- FAA Part 141 and 142 Check Airman
- 1800+ hours of flight time

Certifications and Honors:

- Six Sigma Green Belt Certification
- President's Special Recognition for Exemplary Dedication to Safety, 2017
- President's Special Recognition for Exemplary Dedication to Safety, 2012
- Best Academic Project - Crystal Ball Simulation Software
"Predicting Flight Training Devices (FTDs) at Embry-Riddle Aeronautical University"
- Embry-Riddle Flight Department Customer Service Award, Fall 2005
- Embry-Riddle Champion of Safety Award, 2004

Publications:

- Employment motivation of airline pilots in the USA. International Journal of Aviation Management (IJAM), 3(4), 2017.
- Employing Flight Simulation in the Classroom to Improve the Understanding of the Fundamentals of Instruction among Flight Instructor Applicants. Journal of Aviation/Aerospace Education & Research, 26(1), 2017. <https://doi.org/10.15394/jaaer.2017.1623>
- Seize the Day: It is a great time to be a pilot, AOPA's Flight Training Magazine feature article, December, 2015.
- A simulation approach to enhancing aircraft availability. International Journal of Aviation Systems, Operations and Training, 1, 2014.

Professional Committees:

- National Pilot Sourcing Forum, Alternative paths to wings working group co-lead. Washington D.C. (2017-Present).
- Embry-Riddle Aeronautical University College of Aviation Research Committee (2016-Present).
- Flight training industry representative on the FAA's ADS-B Equip 2020 Working Group. Washington, D.C. (2014-Present).
- Chancellors Advisory Committee at ERAU (2015-2017).
- Member of the Florida Aviation and Aerospace Industry Cluster Task Force commissioned by the Florida Governor (2011-2013).

Community:

- ERAU Hockey Club Faculty Advisor (2015-Present).
- East Florida Collegiate Hockey Conference Founder and President (2016-Present).
- Guide Dog Puppy Raiser, Southeastern Guide Dogs (2007-2015).
- Spruce Creek High School Advisory Council (2013-2015).
- Volusia County School District Advisory Council (2014-2015).

Consulting:

- American Council on Education (ACE) Evaluator (2016-Present)

Consulting:

- Volusia County School District Advisory Council (2014-2015).
- American Council on Education (ACE), Evaluator (2016-Present).
- Flight Training Audits, Owner (2014-2017).

Media Highlights:

- Pilot shortage (in studio TV interview). News 13 (Orlando). In studio interview on the pilot shortage. November, 2018.
- New program fast tracks ERAU pilots. Daytona Beach News Journal. July 2018.
- Problems in the Pilot Pipeline. Aviation International News (AIN) Online. June, 2018.
- How Temporary Are CFIs? Plane and Pilot Magazine. June, 2018.
- More Jobs Will Be Cleared for Takeoff. Aspiring Pilots Are Ready. NY Times. May, 2018.
- Anticollision calculus. Airplane Owners and Pilots Association (AOPA) magazine. May, 2018.
- Advances in flight training simulation (in depth, on-site special report). FOX 35 News. May, 2017.
- Air Force facing pilot shortage; commercial sector feeling effects. Charleston Business Journal. November, 2017.
- Is America's airline industry headed for a major pilot shortage? FOX Business. October 2017.
- Embry-Riddle Sees Rising Number of Students in Nation's Largest Collegiate Flight Training Program. Daytona Beach News Journal. September 2017.
- A guiding hand. Civil Aviation Training (CAT) Magazine. December, 2016.
- PBS Directors Cut: Pilot Error. <https://www.pbs.org/video/directors-cut-pilot-error-web-extra-ken-byrnes/>. August, 2016.
- Training rule blamed for pilot shortage. Travel Weekly. January, 2016.
- Equip 2020: The Latest on ADS-B Equipage, Pricing, Privacy Issues. Avionics International. April, 2015.
- Shortage of experienced commercial pilots (live interview) CNN. March, 2015
- Demand for airline pilots set to soar. USA Today (front page article). June, 2011.
- More media highlights available upon request.

Projects:

- FAA Fleet modernization study (FAA sponsored)
- Developed Flight Instructor Quality Assurance system to ensure the understanding of teaching methods and human behavior among Flight Instructors to improve teaching performance.
- Developed a scholarship program for flight training that has been funded by the state of Florida (\$2M).
- Completed two nationwide studies of ADS-B knowledge and equipage motivation among aircraft owners for the FAA's Equip 2020 working group.
- Completed Aeronautical Science program marketing study for the ERAU President.
- Completed an internal study on maximizing ERAU student matriculation through the optimization of scholarships using Monte Carlo simulation and optimization

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- Developed a Monte Carlo simulation to create a predictive aviation safety system.
- Developed a Monte Carlo simulation that optimizes flight fees.
- Developed a Monte Carlo simulation of the flight department operation to predict flight hours, revenue, instructor requirements, aircraft requirements, etc.
- Co-developed the first Airline Pilots Association Aviation Collegiate Education (ALPA-ACE) Club (now present at 11 other aviation universities).
- Development of the student organization known as Flight Line Assimilation Program (FLAP) that is focused on student mentorship.
- Development of a safety managements system within the flight department.
- The negotiation and procurement of over 80 aircraft worth \$35,000,000+.
- Development of a Quality Management System (QMS) for the flight department.
- Negotiation and procurement of the only university owned, FAA qualified, full motion simulator.
- Managed the development of the world's first FAA approved Airline Transport Pilot Certification Training Program (ATP-CTP) course.
- Development of an aviation professionalism measurement instrument.
- Planning/coordination of the Wing and Waves Airshows.
- Conceived and managed the development of a free online course (Aviation 101) to assist with target marketing (aviation101.org).
- Managed the initial development of a sub-orbital space flight training device.
- More projects available upon request.

Presentations and Panels:

- Pilot Shortage 2.0. Embry-Riddle Speaker Series, Live audience and web broadcast worldwide. <https://www.youtube.com/watch?v=T8lcIPEuLMk>. November, 2018.
- Advances in Flight Training. Session moderator. National Training Aircraft Symposium (NTAS). Daytona Beach, FL. August, 2018.
- Panel session; VR and AR to educate and train during the planning process. TechXLR8, VR AR World Conference. London. June 2018.
- Collegiate Aviation Programs Role in Producing Military Aviators. National Pilot Sourcing Forum. Arlington, VA. November, 2017.
- Flight training industry expert panel member. Aircraft owners and Pilots Association (AOPA) STEM/Aviation Symposium. Dallas, TX. November 2017.
- Early history of aviation. Daytona State College WISE Program. Daytona Beach, FL. October, 2017.
- Professionalism: The challenges of preparing the next generation. National Training Aircraft Symposium (NTAS). Daytona Beach, FL. August, 2017.
- Quantifying the General Aviation Aircraft Owners ADS-B Knowledge and their Motivation to Equip their Aircraft with ADS-B. Conference on Future Aviation Administration (FAA)

- Quantifying the General Aviation Aircraft Owners ADS-B Knowledge and their Motivation to Equip their Aircraft with ADS-B Out follow on study. Federal Aviation Administration's (FAA) Equip 2020 Industry Working Group. Washington, D.C. June, 2017.
- Pilot supply. Aviation Accreditation Board International's (AABI) workshop on the pilot shortage. Atlanta, GA. May 2017.
- Harnessing the power of new learning environments. World Aircraft Training Symposium (WATS). Orlando, FL. May, 2017
- Lift, Off the Page: The Pilot Shortage Is Real – Now, What Are We Going To Do About It? Embry-Riddle Speaker Series, Live audience and web broadcast worldwide
https://www.youtube.com/watch?time_continue=20&v=Mx9Ry4ocy98. April, 2017.
- ADSB Value for General Aviation. National Aircraft Appraisers Association (NAAA) workshop. Ft. Lauderdale, FL. March, 2017.
- Training Safety: Aeronautical Decision Making. CAAC 2016 GA Operations Safety Symposium. Beijing, China (presented remotely). September, 2016.
- The state of Flight Training. Textron Piston Owners Conference. Wichita, KS. May, 2016.
- Developing safety culture in aviation organizations. US/Brazil aviation partnership workshop. Daytona Beach, FL. May, 2016.
- ADS-B FAA resource update. National Training Aircraft Symposium (NTAS). March, 2016.
- Flight training industry expert panel member. Aircraft owners and Pilots Association (AOPA) STEM/Aviation Symposium. Lakeland, FL. November 2015.
- ATP and Commercial Pilot Supply and Demand. Puerto Rico/Americas Aerospace Summit. San Juan Puerto Rico. October 2015.
- Developing a Strong Safety Climate and Culture. Pontificia Universidade Catolica fo Rio Grande do Sul Safety Seminar. Porto Alegre, Brazil. August 2015.
- Pilot Employment Motivation. Regional Airline Association (RAA) Human Resources Seminar. Charlotte, North Carolina. August 2015.
- Quantifying ATP and Commercial Pilot Career Motivations. Aviation Accreditation Board International's (AABI's) annual meeting. Seattle, Washington. July 2015.
- Pilot Employment Motivation. Airline Pilot Shortage? Myths, Facts, and Solutions. Hosted by the Air Line Pilots Association International (ALPA), Washington, D.C., June 2015.
- Automation in Aviation. Department of Energy Training Seminar. Daytona Beach, Florida. June, 2015.
- College to Carrier: Filling the Gap. National Pilot Supply Summit hosted by Ohio State University, Columbus, Ohio. April, 2015.
- Quantifying the General Aviation Aircraft Owners ADS-B Knowledge and their Motivation to Equip their Aircraft with ADS-B Out. Federal Aviation Administration's (FAA) Equip 2020 Industry Working Group. Washington, D.C. April, 2015.
- ATP/Commercial Pilot Labor Distribution. National Training Aircraft Symposium (NTAS). March, 2015.
- Understanding the new ATP-R rule. National Training Aircraft Symposium (NTAS). March, 2014.
- Developing Professionalism in the Aviation Industry. Worlds

- Symposium (NTAS). March, 2014.
- Developing Professionalism in the Aviation Industry. Worlds Aircraft Training Symposium. Orlando, Florida. April, 2013.
- Safety Culture and Accident Prevention. General Aviation Safety: Climbing to the next Level. Hosted by the National Transportation Safety Board in Washington, D.C. June, 2012.
- ADS-B and Flight Data Monitoring for General Aviation. General Aviation Safety: Climbing to the next Level. Hosted by the National Transportation Safety Board in Washington, D.C. June, 2012.
- Safety Culture in Aviation Organizations. Regional Airline Association (RAA) Safety Council Meeting. Daytona Beach, Florida. November, 2012.
- More Presentations available on request.