FALL 2008
VOL. 18, NO. 1

The Journal of Aviation/Aerospace Education & Research

Published by Scholarly Commons, 2008
Editorial Staff of the
Journal of Aviation/Aerospace Education and Research

William A. Kohlruss, Editor
Tim Brady, Embry-Riddle Aeronautical University
James Schultz, Embry-Riddle Aeronautical University

Deborah L. Burke, Assistant Editor
Thomas Connolly, Embry-Riddle Aeronautical University

Editorial Board

Brent D. Bowen
University of Nebraska
Chuck Moren
Embry-Riddle Aeronautical University

Thomas Q. Carney
Purdue University
David A. NewMyer
Southern Illinois University

Gerald N. Cook
Spirit Airlines
Marvin Smith
Emby-Riddle Aeronautical University

Gerald Fairbairn
Embry-Riddle Aeronautical University Jackie Luedtke
Emby-Riddle Aeronautical University

Phillip S. Woodruff
Federal Aviation Administration

Editorial Board

Greg Aaron
United Parcel Service

R. Troy Allen
Indiana State University

Dee Andrews
Air Force Research Laboratory

David Arch
Ohio University

Shawn Areana
Embry-Riddle Aeronautical University

Alan Bender
Embry-Riddle Aeronautical University

Elizabeth Bjerke
University of North Dakota

Joe Clark
Embry-Riddle Aeronautical University

Jule Massie Clark
Middle Georgia College

Eddie L. Diehl
Embry-Riddle Aeronautical University

Wayne Dorman
Middle Tennessee State University

Adrian Doss
Belhaven College

Atef Ghabrial
Georgia State University

Thomas Hagovsky
Purdue University

Mark Hewitt
Embry-Riddle Aeronautical University

Philip Ikomi
Prairie View A & M University

Jeffrey A. Johnson
St. Cloud State University

Robert W. Kaps
Southern Illinois University

Stephen Kniffen
Embry-Riddle Aeronautical University

Kenneth J. Kovack
Embry-Riddle Aeronautical University / University of Maryland

Roger D. Lee
Salt Lake City Community College

Nickolas Macchiarella
Embry-Riddle Aeronautical University

Gary Northam
Embry-Riddle Aeronautical University

Sherry Parshley
Embry-Riddle Aeronautical University

C. Daniel Prather
Middle Tennessee State University

William Rantz
Western Michigan University

Bruce A. Rothwell
Embry-Riddle Aeronautical University

José R. Ruiz
Southern Illinois University

Michaela Schaaf
University of Nebraska

Marian Schultz
University of West Florida

Mark Sherman
Farmingdale State College

Guy M. Smith
Embry-Riddle Aeronautical University

Alan Stolzer
Embry-Riddle Aeronautical University

Michael E. Thorn
Globalink Consulting

Brison Torbert
Embry-Riddle Aeronautical University

Dale R. Wilson
Central Washington University

Graphics Design: Browning Press, DeBary, FL

Published three times annually (Fall, Winter, Spring) at Embry-Riddle Aeronautical University,
600 S. Clyde Morris Blvd., Daytona Beach, FL 32114-3900
TABLE OF CONTENTS

The Editor's Forum
William A. Kohlruss ........................................................................................................ 7

Forum:
Challenges and Opportunities in Recruiting
Middle School Students into Aviation Careers
Angela R. Olson ............................................................................................................. 9

Forum:
Virtual Air Traffic Flight Training Device
Automated Air Traffic Control
Nickolas D. Macchiarella and Christian D. Meigs ....................................................... 13

Student Approaches to Learning in
Aviation Contexts
Mary Niemczyk ............................................................................................................. 19

The Perceived Need for Training and
Potential Training Topics for Indiana
Airport Board Members
R. Troy Allen ............................................................................................................... 29

Learning Theoretical Concepts Through
Community Problem Solving: Service-Learning
in Flight Safety Courses
Antonio I. Cortés ......................................................................................................... 39
EDITORIAL FOCUS

The Journal of Aviation/Aerospace Education and Research (JAAER) is a scholarly publication for educators and researchers as well as for professionals in the aviation and aerospace industry. The focus is how the educational process is influenced by various segments of the aviation and aerospace community and how education affects the industry. Although the basic focus is toward colleges and universities, manuscripts concerning secondary and elementary education are encouraged.

The Journal is interested in a wide range of scholarly submissions concerning aviation/aerospace curriculum development and/or innovative methods of instruction (for any/all levels of education), significant research relating to aviation/aerospace education, to industry research, and to industry and education partnerships. The Journal welcomes submissions reflecting the latest industry and academic thought concerning current issues of interest to JAAER readers, and is interested in well-researched and documented stories concerning aviation history, both in the past and in the making.

A refereed publication, manuscripts are blind-reviewed by members of the editorial board as well as by a limited number of professionals in that field. From time to time a non-refereed article may be included in a Forum section.

AUTHOR'S GUIDELINES

Preparation of Manuscripts The most current edition of the Publications Manual of the American Psychological Association (APA) is used as the style guide for submissions. However, authors are instructed to include all tables in the body of the manuscript.

☐ JAAER does not accept multiple submissions. (If pending acceptance elsewhere do not submit to us.)
☐ Submit five copies of the manuscript using standard, white, bond paper.
☐ Double space the text. Use wide margins (1.5"-2") on both sides and top and bottom.
☐ Do number the pages

Title The title of the manuscript should be clearly indicative of its subject and of the author's intention, and should not be unnecessarily long or convoluted.

Documentation Manuscripts are to conform to APA reference documentation. Text reference citations and reference list entries must be identical.

Autobiography On a separate sheet of paper, include a brief autobiography stating your qualifications for writing this article. If multiple authors, give a brief autobiography for each author.

Publication Policy With your initial manuscript submission JAAER requires a full statement that this manuscript has not been previously published elsewhere, is not submitted and pending acceptance elsewhere, and will not be submitted for publication elsewhere in its present form.

If you have questions about submitting an article or subscribing to the Journal, please call (386) 226-6855 or visit our website at: http://www.erau.edu/research/jaaer/home_page.html