

R. Kurt Barnhart, Ph.D.

Curriculum Vitae

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 Professor and Aviation Department Head, Kansas State University

I. Recent Teaching

A. Scheduled and arranged classes taught*

Course Name	Prefix and Number	Credit Hours	Semester or Session	Number of Students
General Aviation Operations (Covers: the GA industry and role in the transportation system as well as business principles of FBO management).	AST 205	3.0	FALL 2006	36
Beechcraft King Air 200/B200 Flight (Flight Simulation Course, leading to the High Altitude Endorsement)	AST 315	3.0	FALL 2006	6
Aviation Risk Analysis (Aviation Safety course covering accident investigation/prevention)	AST 425	3.0	FALL 2006	28
General Aviation Operations	AST 205	3.0	SPRING 2006	42
General Aviation Operations	AST 205-301	3.0	SPRING 2006	2
Beechcraft King Air 200/B200 Flight	AST 315	3.0	SPRING 2006	20
Aviation Risk Analysis	AST 425	3.0	SPRING 2006	34

*Other courses taught include: Cessna Citation Ground School (CE 550/1), Aircraft Systems I, Instrument/Commercial Theory, Private Pilot Theory (Aviation Fundamentals), Aviation Topics (undergraduate and graduate), Advanced Navigation, Air Transportation (Airline Operations).

B. Independent study enrollments completed (including course name, prefix, and number; number of students; and date of course completion for each item).

C. Dissertation, professional research project, Educational Specialist, thesis, and master's examination committees served on or chaired (including name of student, name of degree, position on committee, and dates of committee formation and final document approval for each item)

Ph.D. Dissertation Committee Member, CURRICULUM INSTRUCTN AND MEDIA TECH, Title: *Assessing the need for airport board member training in Indiana*, Proposal. (January 10, 2006 - Present). Advised R. Troy Allen through to completion

D. Academic Advising

Advised 50 Undergraduate students during the 2005-2006 academic year.

Advised 59 Undergraduate students during the 2004-2005 academic year.

E. Courses developed (including course name, prefix, and number and date of university approval for each item)

AST 425- Aviation Risk Analysis, January 1997

AST 205- 301, General Aviation Operations- distance education course, May 1999

AST 211- Aircraft Systems I- independent study course, June 1997

II. Research, Scholarship, and Other Creative Activity

A. Articles published (including complete bibliographic information--author(s) in published order, title, journal, volume, issue number, month, year, and pages--and a synopsis of 20 words or less for each item)

What does it take to grow the next generation? *GANews and Flyer*, 2004.

Published results of survey regarding how to get more young people involved in aviation.

Cold Weather Problems. *Flying Magazine*, December 2005

Narrative of an incident while flying

(2004). Adaption and Innovation in Flight Training- The Benefits of Cognitive Diversity. *Journal of Aviation/Aerospace Engineering Review*, 13.

Application of the Kirton Adaption - Innovation Theory of Cognitive Style to the flight instruction environment of higher education

(2004). Mind-set of Safety. *NAFI Mentor*, 2004.

Results of an interview with bush pilot operators and what lessons can be learned for all operators of light aircraft.

Barnhart, R. (2003). Adaption-Innovation Theory of Cognitive Style in Aviation. *International Journal of Applied Aviation Studies*, 3, 105-112.

Study applying the KAI theory of Cognitive Style to an Aviation setting

Allen, R., & Barnhart, R. Influencing Factors in Degree Selection for Aviation Majors at Indiana State University. *Journal of Aviation/Aerospace Education & Research*.

Allen, R., & Barnhart, R. Influencing Factors in Degree Selection for Aviation Majors at Indiana State University. *Journal of Aviation/Aerospace Education & Research*. Vol. 15. No. 3

Reporting the results of surveys of ISU students regarding why they chose to major in aviation. published Spring edition, 2006.

Barnhart, Richard K., An Exploration into the Benefits and Costs Associated with the Implementation of an In-House Parts Acquisition Facility By the Embry-Riddle Aeronautical Univeristy Engine Repair Station.

Graduate Research Project (1994) which was implemented by ERAU resulting in over \$50,000 in cost savings to the University each year- over \$500,000 saved to date.

B. Electronic media materials published (e.g., CD-ROMs, Internet; include author(s) in published order, URL/URN; title, place of publication, publisher, date of publication, and a description of 20 words or less for each item).

Gleim Publications, Gainesville FL/Terre Haute, IN. (February 25, 2004 - May 31, 2005).

Gleim's Online Inspection Authorization Renewal Course (IARC)- Developed first ever online renewal option for aircraft mechanics to renew their inspection authorization. This project positively affected thousands of mechanics around the country.

C. Conference presentations made (not already listed under section III, letter E; including presenter(s) in published order, title of presentation, organization, location, and date for each item)

Barnhart, R. Kurt, "Non-Verbal communication in the cockpit- implications of team transfer research", Wichita KS. (October 2007).

Major presentation to 500 corporate pilots where flight departments from 84 of the top fortune 500 companies were represented. Presentation dealt with helping pilots set a positive cockpit climate especially when they are faced with an inexperienced copilot in this age of high pilot demand.

Barnhart, R., & Allen, R., "Influencing Factors in Degree Selection for Aviation Majors at Indiana State University", Champaign IL. (September 30, 2005).

Results of survey research into what the influencing factors were in students who chose to major in aviation at Indiana State University

Barnhart, R., "Aiding Classroom Delivery with Guest Speakers at a Distance", Champaign IL. (September 29, 2005).

Using conference telephone technology to bring experts into the classroom

Barnhart, R., "Theory of Adaption-Innovation in flight training", UAA, Dayton OH. (October 24, 2003). Presentation demonstrating the KAI theory of cognitive style in the aviation flight instruction environment. First-ever known aviation application for this theory.

Barnhart, R., & O'Connor, T., "Considering Cognitive Diversity as You Design Learning", ISU, HMSU. (February 2003).

Concepts of designing the measurement of cognitive style in learning

Barnhart, R., Bitzegaio, B., & Fauber, B., "Measuring Impact of Using KAI for Student development", ISU, HMSU. (February 2003).

How the COT plans to Use Kirton-Adaptive- Innovative Theory (KAI)

D. Books and journals edited and/or reviewed

Barnhart, R. Kurt (2005). *Astronauts as Audiences: Characteristics of the First Space Communities.* (pp. 14). Oklahoma City: FAA, International Journal of Applied Aviation Studies.

Reviewer

Barnhart, R. Kurt (2006). *A Case-Based Understanding of Critical Incidents in General Aviation. To be published*

Reviewer

Barnhart, R. Kurt (2006). *The Council on Aviation Accreditation, Part One: Historical Foundation & Part Two: Contemporary Issues. To be published.*

Reviewer

E. Reviews published (including complete bibliographic information--author(s) in published order, title, journal, volume, issue number, date, and pages--and title(s) or description of work(s) reviewed for each item)

Barnhart, R. (2003). *The Field Guide to Human Error Investigations. (Vol. 8, pp. 4). Omaha Nebraska: Journal of Air Transportation.*

Summarized a book relating a new concept in the mindset of aviation safety

F. Other contributions to published works (including complete bibliographic information as indicated above and a brief description of the contribution for each item)

Barnhart, R. (2002). *A threat to Integrity. (Vol. Summer 02, pp. 1). Auburn AL: University Aviation Association.*

A call to more closely examine cheating in term papers for undergraduate courses

Barnhart, R. (2002). *Training and Education. (Vol. 2002 Encyclopedia of Aviation, pp. 2). Pasadena CA: Salem Press, Encyclopedia of Aviation.*

Summary of Aviation training and education

Barnhart, R. (2002). *Emergency Procedures. (Vol. Summer 2002, pp. 2). Pasadena CA: Salem Press, Encyclopedia of Aviation.*

Summary of Emergency Procedures in Aviation

Barnhart, R. (2002). *Flight Plans. (Vol. Summer 2002, pp. 1). Pasadena CA: Salem Press Encyclopedia of Aviation.*

Summary of what flight plans are and what they are used for

Barnhart, R. (2000). *Ascend to Flight Training. (Vol. April 2000, pp. 3). Ann Arbor MI: Tech Directions.*

Article on ISU's new King Air Simulator

G. Research, scholarship, or creativity awards received (including title of award, sponsor, and date for each item).

Dr. Bill Melvin Award for Scholarship Excellence in Educational Administration, ISU, 2001

J. Fred Swalls Award in Educational Administration, ISU, 2001

H. Extramural grants and contracts awarded (including project director(s), other project participants, project title, amount of award, sponsoring agency, date of award, and a statement of purpose of project in 20 words or less for each item)

Wolf Aviation Fund, Spring 2006- Grant to investigate establishing an Indiana Youth Aviation Association- \$1,500.00

I. Extramural grant and contract proposals submitted (including project director(s), project title, receiving agency, and date of submission for each item)

Flight Instructor Institute- March 1998, Proposal before the U.S. House Committee on Transportation & Infrastructure- not funded.

J. Intramural grants awarded (including project director(s), project title, amount of award, and sponsor for each item)

Barnhart, R. Kurt, "ISU Distinctive Programs Grant" Grant resulted in a \$100,000 award and in the department being named as one of 2 programs in the College as "Regionally Distinctive"

**Barnhart, R., \$500 CTL development grant for AST 425, ISU.
Date Awarded: January 2003**

K. Research in progress (indicate start date, nature of research, purpose/goal (e.g., publication, departmental improvements); targeted completion date)

Barnhart, R. Kurt, Fall 2006, working on a project to Launch a *Journal of Flight Instruction*. This project is a joint venture with the National Association of Flight Instructors. Currently compiling the results of 3 national surveys with over 1,000 responses. Data looks promising.

III. Professional Service

On Campus:

A. Organizational offices held (including title of office, professional organization, and dates of service for each item)

Indiana State University, Officer, College of Technology Faculty Council. (September 01, 2005 - May 01, 2006).

Responsibilities: Secretary 2005/2006

Indiana State University, College of Technology Promotion & Tenure Committee. (Sept. 01, 2006 – Present).

Responsibilities: Committee Chair

B. Committee memberships and offices held (including name of committee, professional organization, office, and dates of service for each item)

Indiana State University, Officer, College of Technology Faculty Affairs Committee. (September 01, 2004 - May 01, 2006).

Indiana State University, Member, University Graduate Student Appeals Committee. (Fall 2005 – present).

Indiana State University, Member, College of Technology Promotion & Tenure Committee (School year 2006 -7)

C. Special organizational responsibilities performed, such as contributing, managing, or section editorships or juror duties in a competition (including nature of responsibility, professional organization, and dates of service for each item)

College of Technology “Discover ISU” Department coordinator, Program to introduce Middle School Students to Careers in Technology. Fall 2006.

Department coordinator for “Tech Trek,” program to introduce High School Students to Indiana State University. Coordinator from 1996 - 2003

D. Professional service awards received (including title of award, sponsor, date, and a brief explanation of the basis of the award for each item)

National Association of Flight Instructors- Master Instructor Award, 2003 - Present

Off Campus:

E. Governing body memberships and offices held (including name of body, office, and dates of service for each item)

Regional: President/Elect/Past, Sullivan County Board of Aviation Commissioners. (August 01, 2002 - Present).

Responsibilities: Chair public meetings, assist with grant administration and oversight of airport. Provided oversight of \$1.1 million runway/taxiway/ramp rehabilitation project during 2005. Oversee operating budget.

Comments: appointee

National: Officer, University Aviation Association Distance Learning Committee Chair. (October 01, 2005 - October 01, 2006).

Responsibilities: Organize and oversee the activities of the UAA Distance Learning Committee

Comments: Committee Chair

F. Special responsibilities performed, such as administrative assignments (including title or nature of responsibility and dates of service for each item)

Fall 2006, Department Assignment- assisted with investigation of department acquiring its own flight school.

Fall 2006, Department Assignment- Administered the change of department’s name from “Department of Aerospace Technology” to “Department of Aviation Technology”.

G. Student organizations sponsored (including name of organization and dates of service for each item)

Indiana State University, Flying Sycamores. (December 05, 2004 - May 01, 2005).

Comments: Advisor for Flying Sycamores until May 2005

H. Other Professional Service

Consulting Editor for the Journal of Air Transportation, and the International Journal of Applied Aviation Studies

Indiana State University, Member, College of Graduate Studies appeals Committee. (October 01,

2005 - Present).

Responsibilities: meet to review appeals from graduate students

Comments: current term expires May 2007

Indiana State University, Member, College of Technology Library Committee. (January 31, 2005 - May 01, 2006).

Indiana State University, Member, Speaker Series Committee. (September 01, 2004 - December 01, 2004).

Comments: Apollo 13 Astronaut Jim Lovell

I. Consulting

Dolphin Express Airlines. Consultant to Start-Up Airline, Spring 1994- provided airline maintenance recommendations.

IV. Professional Development

A. For-credit courses and degree programs completed (including course or degree name, credit hours, institution, and date of completion for each item)

Flight Safety International. (June 11, 2003).

Cessna Citation Co-pilot training

King Air B200 PIC training Spring of 1998, Flight Safety International

Certified Flight Instructor Rating (CFII-MEI), Glider/Seaplane Pilot- Certificates continually maintained since the spring of 1990

B. Seminars, workshops, and teleconferences attended (including title, sponsor, location, and dates for each item)

Seeking Funding, Finding Success, Office of Sponsored Programs, ISU. (January 05, 2004 - January 07, 2004).

Initial grant-writing workshop

C. Conferences attended but not mentioned elsewhere in this report (including organization, location, and dates for each item)

Aerospace Industry Advisory Board, Department of Aerospace Technology, College of Technology ATC. (April 30, 2004 - Present).

Re-convened the AST advisory board with good results

Inspection Authorization Renewal, Federal Aviation Administration, Springfield IL. (February 25, 1999 - Present).

Review of Federal Aviation Regulations

FAA Flight Instructor (CFII-MEI)- Continuous Renewal from 1990 to present.