

Vaughn P. Adams, Jr.  
Senior Consulting Engineer  
Augspurger Komm Engineering  
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### Education

Ph.D. Texas A & M University (Safety Engineering), 1975  
M.S. Arizona State University (Human Factors Engineering), 1970  
B.S. Arizona State University (Engineering Design), 1964

### Principal Areas of Research, Teaching or Consulting

Human Factors Engineering, Systems and Product Design, Man/Machine System Integration, Product and Mechanical Design (including Defect and Patent Analysis), Consumer Product Risk Analysis, Hazard Quantification in Product and Systems Design, Systems Safety Engineering, System Safety Quantification Techniques such as Failure Mode and Effects Analysis, Fault Tree Analysis and Hazard Analysis, Biostereometric Applications to Physical Anthropometry, Forensic Engineering, Occupational Health and Safety Engineering

### Certification/Registration

1983 Certified Land Surveyor (Arizona #16484)  
1977-88 Registered Professional Engineer (California #SF1545)  
1976 Registered Professional Engineer (Arizona #11087)  
1974 Registered Professional Engineer (Texas #36093)  
1973 Certified Safety Professional (#3551)  
1968 Certified Protective Design Analyst (Department of Defense)  
1965 Certified Nuclear Shielding Analyst (#8TT-1703-65)

### Industrial Experience

1980- Senior Consulting Engineer, BTI Consultants, Tempe, Arizona  
1972-80 Engineering Consultant, Biotechnics, Tempe, Arizona  
1963-64 Staff Engineer, Unidynamics, Litchfield Park, Arizona  
1960-63 Director of Research and Development, J.F. Long, Incorporated,  
Phoenix, Arizona  
1958-60 Engineering Designer, Salt River Power District, Phoenix, Arizona  
1957-58 Designer, Hutton & Hutton Architects and Engineers, Hammond,  
Indiana  
1955-57 Engineering Designer, Rockwell Manufacturing Company, East  
Chicago, Indiana

### Consulting Experience (partial listing)

Loss Control Engineering (Mobil Oil of Indonesia, Revlon, Arizona Public Service Co.)  
Human Factors Evaluation of Overhead Door Operations  
Oil Drilling Task Analysis  
Helm Position Visibility Study (Marine Crafts)  
Safety Engineering of Power Press/Shear Equipment

**Consulting Experience (partial listing) (Continued)**

Investigation of Mass/Velocity Relationships of Railroad Engine Involved in Intersection Accident  
Human Factors/System Safety Considerations of Medical Equipment  
Evaluation of Worker Assessment of Risk Taking  
Investigation of Storage Battery Explosions  
System Safety Analysis of Secondary Education Playground Equipment  
System Safety Analysis of a Heavy Duty Concrete Loader/Hauler  
Human Factors Evaluation of Highway/Railroad Intersection Accidents  
Human Factors Evaluation of an Automobile Inertia Restraint Belt System  
Failure Analysis of Header Cap on Ammonia Refrigeration Unit  
Professional Development Coursework for Registered Architects and Engineers (Sponsored by the National Society of Professional Engineers)  
Human Factors Considerations in a Coal Loader Electrocution Accident  
Human Factors/Systems Safety Considerations of a Cotton Gin Accident

**Principal Professional Publications and Presentations**

"A System Safety Analysis of Consumer Exposure to Gasoline Hazards," with Gordon W. Whitaker, 17th International System Safety Conference, Orlando, Florida, August 1999  
"Product Reliability Development," with Gordon W. Whitaker, Medical Device and Diagnostic Industry Conference, Anaheim, California, January 1988  
"Ergonomics in the Workplace," Semiconductor Safety Association Conference, Scottsdale, Arizona, 1986  
"Product Safety Engineering Theory and Practice," Product Safety and Liability Engineering Conference, University of Texas, Austin, Texas, 1983  
"Loss Prevention and Control," Medan, Indonesia: Mobil Oil of Indonesia, 1982  
"Importance of Certification," 5th International System Safety Conference, Denver, Colorado, 1981  
"Certification Requirements of a Safety Professional," 14th Annual Southwest Safety Congress and Exposition, Tucson, Arizona, 1979  
"Systems Safety Engineering," Instituto Tecnológico De Estudios Superiores De Monterrey, Monterrey N.L., Mexico, 1979  
"Public Safety: A Growing Factor in Modern Design," Principal Address at the Invited Forum on Public Safety, Texas A & M University, College Station, Texas, 1979  
"International Requirements for Professional Certification of Safety Professionals," Latin American Safety Symposium, Acapulco, Mexico, 1978  
Presentation at Applied Systems Safety Engineering Techniques Seminar, American Society of Safety Engineers, Phoenix, Arizona, 1977  
"Space Packaging," American Society of Packaging and Handling Engineers Conference, Phoenix, Arizona, 1977  
"Biostereometrics: Determination of Human Body Surface Area and Applications to Thermal Regulation Models of Man in Space," NASA Research Report, Systems Engineering Branch, Crew Systems Division, 1977  
Executive Address at Professional Development Seminar, American Society of Safety Engineers, Tucson, Arizona, 1975  
"Epidemiological Study of Occupational Related Injury and Disease in the State of Arizona," Unpublished Doctoral Dissertation, Texas A & M University, College Station, Texas, 1975  
"Indifax: Preliminary Design of a Facsimile Transmitted Audio-visual Communication System for India," Editor and Contributor, Texas A & M University, College Station, Texas, 1973

**Principal Professional Publications and Presentations (Continued)**

"Biomechanical Design at Arizona State University," Arizona Association of Physical Therapists Conference, Phoenix, Arizona, 1971  
"Moonlab: Preliminary Design of a Manned Lunar Laboratory," with Others, Stanford University Press, NASA/ASSE, 1968

**Membership in Scientific and Professional Societies**

Society of Automotive Engineers (Member)  
Human Factors and Ergonomics Society (Member)  
American Society of Safety Engineers (Professional Member)  
National Academy of Forensic Engineers (Fellow, #68F)

**Membership in Scientific and Professional Societies (Continued)**

System Safety Society (Member)  
National Society of Professional Engineers (Member)  
Arizona State Board of Technical Registration (Member)  
Texas Board of Professional Engineers (Member)  
American Society of Testing and Materials (Member)  
American National Standards Institute (Member)  
American Society of Agricultural Engineers (Member)  
International Society for Fall Protection (Member)  
Board of Certified Safety Professionals

**Professional Society Activities**

American Society of Testing and Materials Subcommittee E34.85, Ergonomics (1995-present)  
American Society of Testing and Materials Subcommittee E34.80, Safety Requirements for Products Equipment and Facilities (1990-94)  
American National Standards Institute Standards Committee, Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components - Z359.1 (proposed ANSI revisions through the United States Technical Advisory Group)(1985-1992)  
American National Standards Institute Standards Committee, Requirements for Safety Belts, Harnesses, Lanyards, Lifelines, and Drop Lines for Construction and Industrial Use - A10.14 (proposed ANSI revisions through the United States Technical Advisory Group)(1984-88)  
United States Technical Advisory Group, International Standards Organization/Technical Committee/Subcommittee 4 - U.S. TAG-ISO/TC94/SC4 (1984-1994)  
Education Committee, System Safety Society (1983)  
Appointed Delegate, International Ergonomics Association, Human Factors Society (1983)  
Human Factors Society, Registration/Certification Committee, (1982)  
Human Factors Society, Director, Arizona Section, (1981)  
Board of Certified Safety Professionals of the Americas, Board of Directors (1976-83), President (1981)  
American Society of Safety Engineers, National Education Committee Chairman, (1980)

**Awards, Scholarships and Honor Societies**

1980	ASEE-NASA Faculty Research Fellowship, Stanford University, Ames Research Center
1976-77	ASEE-NASA Faculty Research Fellowship, University of Houston, Johnson Space Center
1973	Alpha Pi Mu (National Industrial Engineering Honor Society), Texas A & M University
1973	Psi Chi (National Psychology Honor Society), Texas A & M University
1968	ASEE-NASA Faculty Research Fellowship in Systems Design, Stanford University, Ames Research Center
1964	Graduation with Distinction, Arizona State University, College of Engineering Sciences

**Academic Experience**

1982-83	Arizona State University, Professor, Design Science (Reduced Load, Tenured Position)
1981-82	Arizona State University, Professor, Design Science
1980-81	Arizona State University, Sabbatical Leave

**Academic Experience (continued)**

1976-80	Arizona State University, Chairman, Department of Design Science
1973-76	Arizona State University, Associate Professor of Industrial Design
1972-73	Texas A & M University (Arizona State University, Sabbatical Leave)
1968-72	Arizona State University, Assistant Professor and Chairman, Department of Industrial Design, College of Engineering Science
1964-68	Arizona State University, Lecturer, Department of Design, College of Engineering Science

**Faculty Summer Institutes**

1980	Stanford University, post Doctoral Coursework in Numerical Analysis and Systems Engineering
1974	Texas A & M University, Advanced Professional Development, Institute for Occupational Safety and Health Professors
1973	University of Washington, Protective Design Institute
1972	Texas A & M University, Occupational Safety and Health Institute for College Professors
1968	Stanford University, Systems Design
1966	Pennsylvania State University, Computer-Aided Design in Architecture and Engineering
1965	Montana State University, Certifying Institute for Nuclear Shelter Design and Analysis