

ROBERT W. STAFFORD, P.E.

EDUCATION

1962	University of Arizona	Arizona
	<i>Ph D., (all but dissertation) Engineering Mechanics</i>	
1960	University of Illinois	Illinois
	<i>Master of Science, Civil Engineering (Structures)</i>	
1958	Southern Methodist University	Texas
	<i>Bachelor of Science, Civil Engineering</i>	

PROFESSIONAL EXPERIENCE

2007 to Present	MK & Associates, LLC
	<i>Structural Engineer</i>
	Performs forensic engineering analysis in the area of structural and civil engineering. Work includes analysis of defects in design and construction of buildings and roads and accident reconstruction as applied to buildings, roads and construction safety. Products that rely on the art of applied science of structural and civil engineering for their design functionality and safety are heavily emphasized.
2001 to Present	St. Louis Community College at Florissant Valley, <i>Instructor, Engineering Department, Adjunct Faculty</i>
	Duties include teaching engineering courses in construction methods and materials, statics, strength of materials, dynamics, structural steel design and reinforced concrete design.
2000 to Present	H.L. Yoh, Engineering Contracting Services
	<i>Contract Aircraft Structures Engineer with The Boeing Company</i>
	Develop structural analyses of aircraft airframes and mechanisms using finite element analyses loadings. Resolves problems that occur both in fabrication, assembly and service usage.
1964 to 1999	The Boeing Company (McDonnell-Douglas Corporation)
	<i>Section Chief/Manager, Structural Technology Integrator, Structural Systems</i>
	Retired from The Boeing Co. (formerly McDonnell Douglas Corp., St. Louis) after 34+ years of service. Conducted structural analyses of aircraft airframes and mechanisms, assessed causes of manufacturing and service usage structural issues and developed designs of selective structural modifications to allow continued use of aircraft component, prescribed test loads criteria for element, component and full scale test aircraft to assess material strengths for unique service usage loadings. From 1982 until

retirement served as supervisor, then manager, of structural engineering personnel, directing, evaluating and presenting results of analyses to internal and external customers.

1962 to 1964

General Dynamics

The Astronautics Division, Senior Stress Engineer

Conducted structural analyses on the Atlas rocket airframe, assessing the attachment loads on the interface bulkhead between the liquid hydrogen and oxygen tanks.

1960 to 1962

University of Arizona

Instructor, Civil Engineering & Engineering Mechanics Department

Taught engineering courses in statics, dynamics, strength of materials and materials test lab. Assisted in the testing assessments of epoxy resins as structural adhesives for building structures.

1958 to 1960

University of Illinois

Structural Research Assistant

Performed structural test assessments of A36 steel evaluating the relationships of age hardening to previously strain hardened structural members. Test data were subsequently used in the development of the AISC effectivity factors for tension members.

1957 to 1958

Texas Highway Department

Associate Engineer, Bridge Department

Developed structural analyses of reinforced concrete bridge beams.

CERTIFICATIONS

Missouri P.E. License No. 011417

PROFESSIONAL MEMBERSHIPS

ASTM, American Society of Testing Materials

ASCE, American Society of Civil Engineers

AIAA, American Institute of Aeronautics and Astronautics

Sigma Tau, Engineering Honor Society

Chi Epsilon, Civil Engineering Honor Society

Pi Tau Sigma, Mathematics Honor Society

Society of Sigma Xi, University Research Honor Society