



# BIOGRAPHY

UNITED STATES AIR FORCE

## DR. JOSEPH P. GALLAGHER

Retired July 31, 2007.

Dr. Joseph P. Gallagher, a member of the Senior Executive Service, is Technical Adviser, Aircraft Structural Integrity, Engineering Directorate, Aeronautical Systems Center, Air Force Material Command, Wright-Patterson Air Force Base, Ohio. The directorate provides leadership and support at senior government and industry levels in structural design, airframe safety and durability, and aircraft certification. Dr. Gallagher leads the Air Force structures community by establishing a clearly defined Aircraft Structural Integrity Program that is documented by a Department of Defense standard which provides the framework for managing the structural integrity of aircraft weapon systems. He corrects key problems associated with policy, technical approaches and oversight of this critical integrity program. He uses Air Force, national and international forums and workshops to develop a consensus-based ASIP standard to effectively address key safety, performance, reliability and availability issues.



Dr. Gallagher holds a doctorate in theoretical and applied mechanics from the University of Illinois. He has more than 39 years experience developing, promoting and applying damage tolerant, durability and structural integrity design methods to airframes, aircraft engines and mechanical subsystems. Dr. Gallagher has led teams of engineers and scientists in solving critical problems that have ensured the safety of aerospace structures. He is recognized as a leader for his structural integrity expertise in the areas of fatigue and fracture of engineering structures.

Dr. Gallagher is also recognized for his organizational ability in building consensus between diverse and sometime opposing, technical groups, primarily as a result of his activities with ASTM International, and in support of the joint Department of Defense, Federal Aviation Administration, and the National Aeronautics and Space Administration Aging Aircraft Planning. ASTM International is the American Society for Testing and Materials. Dr. Gallagher has served as chair of numerous conferences that highlight advances in structural integrity technology. He has written more than 100 papers and technical reports that address the development and application of durability, damage tolerant, and structural integrity concepts and methodologies.

### EDUCATION

1964 Bachelor of Science degree in civil engineering, Drexel University  
1965 Master of Science degree in theoretical and applied mechanics, University of Illinois  
1968 Doctor of Philosophy degree in theoretical and applied mechanics, University of Illinois

### CAREER CHRONOLOGY

1. 1968 - 1972, assistant professor of theoretical and applied mechanics, University of Illinois, Urbana

2. 1972 - 1978, aerospace engineer, Air Force Flight Dynamics Laboratory, Wright-Patterson AFB, Ohio
3. 1978 - 1984, group leader for service life management, University of Dayton Research Institute, Dayton, Ohio
4. 1984 - 1996, head, Structural Integrity Division, UDRI, Dayton, Ohio
5. 1996 - 1998, lead for aging aircraft technology, Air Force Research Laboratory, Wright-Patterson AFB, Ohio
6. 1998 - 2002, Director, Sustainment Center, UDRI, Dayton, Ohio
7. 2002 - present, Technical Adviser, Aircraft Structural Integrity, Engineering Directorate, ASC, Wright-Patterson AFB, Ohio

#### **AWARDS AND HONORS**

1973 and 1978 Science and Engineering Achievements Award, Air Force Systems Command  
1973 Engineering - Second Place, AFSC  
1975 General Benjamin D. Foulois Award for technology achievements in damage tolerance analysis  
1975 Award of Appreciation, American Society of Mechanical Engineers  
1975 Sam Tour Award for best paper of the year on corrosion, American Society for Testing and Materials  
1982, 1995 and 1999 Award of Appreciation, ASTM  
1988 Award of Merit and ASTM Fellow, ASTM  
1992 Fracture Mechanics Metal Award, ASTM  
1993 Fellow, ASM International  
1996 - 1999 Board of Directors, ASTM  
1998 Fatigue Lecturer, ASTM  
2002 Fatigue Achievement Award, ASTM  
2003 and 2005 USAF Civilian Achievement Award  
2007 F.J. Plantema Memorial Lecturer, International Congress of Aeronautical Fatigue

#### **PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS**

1968 - present, Sigma Xi  
1968 - present, American Society for Testing and Materials  
1968 - present, American Society of Mechanical Engineers  
1976 - present, ASM (Materials Information Society)  
1980 - 1981, Chairman, ASME Materials Division Executive Committee  
1981 - 1984, Associate Technical Editor, ASME Journal of Engineering Materials and Technology  
1985 - present, SAE International (Engineering Society for Advancing Mobility in Land, Sea, Air and Space)  
1993 - 1995, Chair, ASTM Fatigue and Fracture Committee  
1997 - 1999, Board of Directors, ASTM  
2001 - present, Associate Technical Editor, "Journal of Fatigue and Fracture of Engineering Materials and Structures"

(Current as of July 2007)