

Albert Helfrick
2925 Betty Drive
Deland, FL 32720

Professional Experience

1963 – 69 Chief Engineer of radio stations WFMU, WKDN, WKDN-FM, WRTI, WRTI-FM
1969 – 71 U. S. Army Signal Corps, Viet Nam
1971 – 74 Kearfott division of Singer Corp., Research Engineer
1974 – 77 Kay Elemetrics, Senior Engineer
1977 – 84 Avionics division of Cessna Aircraft, Senior Project Engineer
1984 – 88 Dowty RFL Industries, Principal Engineer
1988 – 90 Tel-Instrument Electronics, Director of Engineering
1988 – 92 Self employed consulting engineer
1992 – 2010 Embry-Riddle Aeronautical University
Associate Professor of Avionics
Professor of Avionics
Chair: Mechanical, Civil and Engineering Sciences
Chair: Electrical and Systems Engineering
2010 - 2015 ERAU, Professor, Electrical Engineering
2015 - ERAU, Professor Emeritus

Consulting

Expert Witness: Wrongful Death, Aircraft Crash, 2012-2013
Expert Witness: Patent Infringement Involving Avionics Systems: 2009 – 2010
Expert Witness: Patent Infringement Involving Avionics Systems: 2006 – 2009;
Expert Witness: Deceptive Advertising of Consumer Electronic Item: 2008
Testified before the House Subcommittee on Aviation on matters related to portable electronic devices carried aboard aircraft, Washington D.C. July 2000
Expert Witness: Theft of Intellectual Property: 1990
Various design projects involving fire alarm systems, communications systems, consumer products

Education

B. S., Physics, Upsala College, NJ, 1969
M.S., Mathematics, New Jersey Institute of Technology, 1972
Ph.D., Applied Science, Clayton Univ., 1988

Scholarly and Professional Activity

Text Books

- Principles of Avionics, 8th Ed. 2013
- The Role of Electronics in the Evolution of Flight, Texas A and M University Press, 2004
- Principles of Avionics, Avionics Communications Inc., Special Centennial Edition, 2002
- Principles of Avionics, Avionics Communications, Inc. 2000
- Avionics Test Equipment Handbook and Directory, Avionics Communications Inc., 1997.
- Practical Aircraft Electronics Systems, Prentice Hall, 1995.
- Instrumentacao Electronica Moderna e Technicas de Medicao, Portugese Translation of Modern Instrumentation and Measurement Techniques; Prentice-Hall do Brasil, 1994.
- Modern Aviation Electronics, Second Edition, Prentice-Hall, 1994.

Licenses and Certifications

- Registered Professional Engineer, (retired) in the State of New Jersey.
- FCC Commercial General Radiotelephone License, Ship Radar Endorsement.

Awards:

- Radio Club of America, The Jerry Minter Award for contributions to avionics, 2014
- AIAA Digital Avionics Award, 2013
- IEEE Florida Council, Outstanding Engineering Educator, 2006
- ERAU Outstanding Faculty Award, 2006
- ERAU Outstanding Researcher, 2001
- ERAU, Department of Technology, Outstanding Faculty Member, 1997-1998
- ERAU Department of Technology, Outstanding Faculty Award, 1996
- Listed: Who's Who in Science and Engineering, Who's Who in America, Who's Who in The World

U. S. Patents

- A Method of Erasure of Magnetic Media, 1986
- A Method of Frequency Synthesis, 1988
- RF Coupler for Measuring RF Parameters in the Near Field, 1994
- Apparatus and Method for Coupling Satellite Navigation Signals to a VOR System, 1997
- Three others pending

Membership:

- Associate Fellow, American Institute of Aeronautics and Astronautics
- Life Senior Member of the Institute of Electrical and Electronic Engineers
- Life Fellow of the Radio Club of America
- Life Member of Quarter Century Wireless Association