



Warren G. Hahn, P.E. Chairman of the Board

LICENSED PROFESSIONAL ENGINEERING REGISTRATION:

Florida, 1973 - #18178; Georgia, 1999 - #025598; North Carolina, 1998 - #23417; Wisconsin, 1966 - #E-9816

EDUCATION:

- Engineering/1955-56 Marquette University, Milwaukee, WI
- BS Mechanical and Electrical Engineering/1956-1960 U.S. Naval Academy, Annapolis, MD
- Engineering of Heating and Air Conditioning (short courses)/1966-69; Electrical Estimating/1971;
 Correspondence Courses/1961-64; University Extension Electrical Engineering and Computers/1970-72
 University of Wisconsin, Madison & Appleton, WI
- Business Law, Management & Accounting/1974-77 Hillsborough Community College, Tampa, FL
- Power Engineering/1989 USAF, Air Force Institute of Technology, Dayton, OH
- Master Standard Data & Combat Engineer's Course/1960-61 USMC, Combat Engineer's School, Camp LeJuene, NC
- Effective Speaking and Human Relations/1968 Dale Carnegie Training

SPECIAL TRAINING:

- Company and Professional Training: Sales management, Communications, Building Automation System Engineering, Advanced Business Management, Goal setting and performance review management, Automatic controls and Direct Digital Control Engineering
- Computer Systems: FORTRAN, BASIC, MS and PC DOS, over 30 operating programs such as SMART, word processor, data manager and spreadsheet; MS Word, MS Excel, MS Power Point, and WordPerfect, LOTUS, FORMTOOL, AutoCAD, WIND2 Cost Accounting System
- National Fire Protection Association (NFPA) Fire Systems 1991
- Georgia Tech Resources Institute, Supervision of Asbestos Abatement Projects 1989

PROFESSIONAL EXPERIENCE:

- 60 years of experience as a Mechanical and Electrical Engineer, Manager of a 100+ employee engineering and construction firm, Vice President of a 200+ employee contracting firm, and Owner of a mechanical and electrical consulting engineering firm
- Hahn Engineering, Inc. Tampa, FL, CEO, Mechanical & Electrical Engineer, 1989-2023, Chairman of the Board, 2023-Present
- USAF, Civil Engineering Squadron, MacDill AFB, FL, Electrical Engineer, 1988-89
- USN, Southern Division Naval Facilities Engineering Command, Charleston, SC, Electrical Engineer, 1987-88
- Astron Mechanical Inc., Tampa, FL, Vice President, Mechanical & Electrical Engineer, 1984-87
- Johnson Controls, Inc., Tampa, FL, Branch Manager, 1972-84; Appleton, WI, Sales Engineer, 1964-72
- USMC, Marine Corps Supply Center, Barstow, CA, Maintenance Dept., OIC Engineering, 1962-64
- USMC, Afloat Battalion, Okinawa Home Port, Combat Engineering, 1960-62
- Hillsborough County Florida Electrical Board of Adjustments, Appeals & Examiners, 2002 2010, Chairman 2006-10
- State of Florida Board of Professional Engineers (Mechanical) 2010-17, Vice Chairman 2011-12, Chairman 2013-14
- Trustee US Naval Academy Alumni Association

MILITARY EXPERIENCE:

- United States Naval Academy, 1956-60
- United States Marine Corps, 1960-64
- United States Marine Corps Reserves, 1964-73
- Congressman Gibbon's, Tampa, FL Academy Selection Committee, Member, 1977-94, Chairman, 1993-94

AREAS OF EXPERTISE:

- Extensive involvement in large, medium and small Heating, Ventilating and Air Conditioning (HVAC) systems, such as: chilled water, cold storage and ice storage systems, high temperature hot water systems, Variable Air Volume (VAV) systems, campus type heating and cooling systems, cold storage refrigeration (low temperature) systems, high rise chill water, heat pump and split systems, laboratory air conditioning and ventilating systems, and industrial ventilation systems.
- Instrumental in the introduction and development of Direct Digital Control (DDC) systems in Florida.
 Designed, engineered and installed computerized fire alarm and life safety systems for facilities with 4 zones to 3,000 zones. Designed and engineered building plumbing systems and fire sprinkler protection systems.
- Provided design, engineering, analysis, construction supervision and inspection for electrical systems
 including power distribution, exterior and interior lighting, parking lot and roadway lighting, emergency
 power supply systems, security systems, clock systems, sound systems, computer network and telephone
 raceways systems and closed circuit (CCTV) and Master Antenna/Cable (MATV) television systems,
 intercom systems, lightning protection systems, and data communication and distribution systems.
- Expert witness, forensic engineering in mechanical, electrical, HVAC, plumbing, security, fire alarm and fire sprinkler systems in over 180 buildings and projects.
- Design and engineering experience in Fire Alarm Systems, Smoke Evacuation Systems, Fire Sprinkler Systems, Lightning Protection Systems, Halon and Halon Replacement Agents and Systems, and Smoke Control and Containment Systems

PROFESSIONAL AFFILIATIONS:

- American Society Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Chapter President 1969-71, Life Member, Fellow
- National Society Professional Engineers (NSPE)
- Florida Engineering Society (FES), Chapter President 1980-81
- Illumination Engineering Society (IES)
- National Fire Protection Association (NFPA)
- Association Energy Engineers (AEE)
- American Institute of Plant Engineers (AIPE)
- Institute Electrical & Electronic Engineers (IEEE)
- Building Industry Consulting Service International (BICSI)
- American Society Consulting Engineers (ASCE)
- Southern Building Code Congress International (SBCCI)

PUBLISHED ARTICLES:

- Refrigeration Service Engineer magazine article entitled "Proper Use of Controls Can Make the Energy Difference"
- ASHRAE Journal magazine article entitled "Fast-Track HVAC Conversion"
- Other articles include: "Is Direct Digital Control (DDC) Inevitable in Your Building: Facility Automation,"
 "Management and Control Systems (FAMACS) and DDC," and "Operation and Maintenance of DDC Systems"

