

WALTER S. LAIRD, PE, CMI, CFI

Professional Engineer

Naval Architect and Marine Engineer

Mechanical Engineer

Materials Engineer

Merchant Mariner Credential

Certified Marine Investigator

Certified Fire Investigator

Transportation Worker Credential

EDUCATION

B.S. Naval Architecture and Marine Engineering, Massachusetts Institute of Technology

M.S. Materials Science and Engineering, Johns Hopkins University

M.S. Ocean Systems and Shipbuilding Management, Massachusetts Institute of Technology

Naval Nuclear Power School

Command and Staff Management Diploma, United States Naval War College

Naval Surface Warfare Officer's School

Naval Surface Ship Department Head School

PROFESSIONAL REGISTRATIONS & CERTIFICATIONS

- Registered Professional Mechanical Engineer in Maryland, Virginia, West Virginia, North Carolina, Georgia, Alabama, and District of Columbia.
- Certified Marine Investigator
- Merchant Mariner Credential
- IAAI Certified Fire Investigator
- NFPA Certified Fire and Explosion Investigator
- NFPA Certified Fire Investigation Instructor
- ABYC Certified Marine Technician
- ABYC Certified Technician in Marine Systems
- Transportation Worker Credential
- American Welding Society Certified Weld Inspector
- United States Sailing Association Offshore Safety Certificate

FIELDS OF SPECIALTY

Marine accident reconstruction; boat crash and collision analysis; vessel and equipment failure analysis; fire origin and cause; corrosion failures; mechanical maintenance and engineering; marine engineering; mechanical engineering, metallurgy and materials engineering.

MAJOR MARINE EXPERIENCE

Retired Naval Officer and Lead Engineer for FORCON International in charge of Mid-Atlantic region for over 18 years conducting accident, personal injury, property damage, and product failure analysis and providing expert testimony in areas of noted expertise.

Provided engineering services for Reduced Ship's Maintenance programs for U.S. Navy including systems analysis and evaluation, material compatibility evaluation, corrosion and failure analysis, test program development. Development of advanced underwater hull maintenance tool for U.S. Navy.

Program engineer for U.S. Coast Guard vessel construction cost analysis.

Operations Officer, USS CONNOLLE (FF-1056). Developed ship's operational and training schedule. Directed operation and maintenance of all electronic Combat Information Systems. Developed ship's overhaul and maintenance programs. Watch stations included Tactical Action Officer, Officer of the Deck (underway), and Command Duty Officer.

Chief Engineer for Mechanical Systems, USS TEXAS (CGN-39). Directed overhaul of nuclear reactor, steam propulsion, and electrical plant mechanical systems during three-year complex overhaul. Managed division responsible for reactor plant chemistry, personnel monitoring and exposure control, reactor plant waste management, and radiological casualty response.

Machinery Division Officer, USS Texas (CGN-39). Directed the operation, maintenance, and repair of all mechanical systems related to nuclear reactors, ship's propulsion and power production. Watch stations included Engineering Officer of the Watch, Officer of the Deck (underway), and Combat Information Center Watch Officer.

U.S. Naval Academy Faculty. Taught Midshipmen mechanical and materials engineering courses. Materials laboratory director and manager.

Officer In Charge of Yard Patrol Craft. Directed Midshipmen seamanship training that included ship handling, Rules of the Road, and coastal navigation.

Professional sailing and seamanship instructor at the Boston Sailing Center. Sailboat racing skipper and assistant coach for USNA Dinghy Racing Team.

Personally re-powered and rebuilt a 42 foot Bristol Trawler.

50 years direct experience with all types of watercraft operation, maintenance, and repair.

OTHER MAJOR PROFESSIONAL EXPERIENCE

Directed the maintenance of electrical and engineering infrastructure for Six Flags Great Adventure, the second largest amusement park in the US. Developed improved maintenance and corrosion control procedures; conducted engineering feasibility analyses for new ride installations and modifications.

Program engineer for multi-million dollar amusement ride development and installation at Universal Studios Florida and attractions at the MGM Grand Hotel Theme Park in Las Vegas. Conducted engineering development and reviews regarding materials and systems integration.

Materials research engineer for establishing new research programs that carried out contracted engineering testing and development of materials and processes that minimize corrosion. Managed entire research programs - metastable thin film development and testing, fastener protection systems evaluation and development; materials development and testing; welding analysis; and marine corrosion training programs.

PROFESSIONAL MEMBERSHIP

National Society of Professional Engineers

International Association of Marine Investigators

American Boat & Yacht Council

AWARDS

National Defense Science and Engineering Fellow at Johns Hopkins University providing scholarship to attend The Johns Hopkins University and conduct materials applications research.

Graduate Fellowship funded by the U.S. Coast Guard at Massachusetts Institute of Technology for conducting research in oil spill response, containment, and clean up.