



ENGINEER: MECHANICAL

RICHARD T. EDWARDS, P.E.

Engineering Design & Testing Corp.
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EDUCATION

1980-1983 **Post Baccalaureate Studies, Mechanical Engineering Graduate Program**
North Carolina State University

1980 **Bachelor of Science, Materials Science and Engineering**
North Carolina State University, Raleigh, North Carolina

EXPERIENCE

April 1997
to Present **Engineering Design & Testing Corp.**
Birmingham, Alabama

Consulting Engineer

Failure analysis of materials, including polymers, metals and ceramics. Medical equipment assessment and failure analysis. Machinery problems and fractures. HVAC evaluations. Metallurgical analysis and processing. Industrial incident investigation and reconstruction. Cause and origin of fuel gas explosions and fires. Corrosion modes analysis and evaluative testing. Marine surveying. Crane stability assessments. Crane and lifting equipment evaluations. Wire rope failure analysis. Mechanical systems failure analysis. Product testing for litigation.

May 1988
to April 2018 **Accident Reconstruction Analysis**
Raleigh, North Carolina

Senior Staff Engineer

Failure analysis of materials and structures, including physical, chemical and mechanical testing. Aircraft accident reconstruction and aircraft component failure analysis. Accident reconstruction in all modes of transportation. Technical analysis of machinery accidents in industrial settings. Cause and origin investigation of explosions and chemical/incendiary fires. Marine surveying. Inspection, failure analysis and reconstruction of elevator accidents. Crane and aerial lift accident reconstruction.

March 1983
to May 1988 **United States Navy**

Officer on Fleet Ballistic Missile Submarines

Description Maintenance and repair supervision of shipboard power generation and transmission equipment, atmospheric control equipment including oxygen generators, carbon dioxide scrubbers, carbon monoxide burners and combustible gas indicators. Coordination and supervision of damage control preparation, training and execution during onboard emergencies such as firefighting, flooding, and ship repairs.

Retired from reserves service in June 2004.

May 1979
to September 1979 **Carolina Power and Light Company**
Raleigh, North Carolina

Welding Engineering Assistant

REGISTRATIONS and CERTIFICATIONS

Registered Professional Engineer in Alabama (#21951)

Registered Professional Engineer in Florida (#64862)

Registered Professional Engineer in Kentucky (#29767)

Registered Professional Engineer in Louisiana (#35412)

Registered Professional Engineer in Mississippi (#19648)

Registered Professional Engineer in South Carolina (#31084)

Registered Professional Engineer in Tennessee (#118537)

Registered Professional Engineer in Texas (#115023)

Examined and Registered in dual disciplines: Metallurgical and Civil Engineering

National Council of Examiners for Engineering and Surveying (#40437)

PROFESSIONAL ORGANIZATIONS

American Society for Metals

National Association of Corrosion Engineers

CONTINUING EDUCATION

2015	Glass Fractography Lessons Learned in Large Loss Work
2011	Infrared Spectra® Interpretation; Eastern Analytical Symposium, Inc.
2010	Non-Linear Finite Element Analysis
2006	Cathodic Protection – PDH
2004 – 2009	Confined Space Entry Certifications
2002	Cathodic Protection of Pipelines; Diesel Failure Analysis Investigations
1989	Instructor, Seminar on Marine Vessel Fire Investigation
1983	Naval Nuclear Power School, Officer Program
1980-1983	Graduate Work, Mechanical Engineering, North Carolina State University