

**ENGINEER: METALLURGICAL/MECHANICAL**

**RICHARD T. EDWARDS, P.E.**

Engineering Design & Testing Corp.  
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**EDUCATION:**

1980 B.S., Materials Science and Engineering  
North Carolina State University, Raleigh, North Carolina  
1980-1983 Post-Baccalaureate Studies, NCSU, Mechanical Engineering Graduate Program

**PROFESSIONAL EXPERIENCE:**

April 1997 to present **Engineering Design & Testing Corp., Birmingham, Alabama**  
Consulting Engineer  
Failure analysis of material, medical and machinery problems and fractures. Metallurgical analysis and processing. Industrial incident investigation and reconstruction. Inspections of structures and foundations. Cause and origin of fuel gas explosions and fires. Corrosion modes analysis and evaluative testing. Marine surveying.

May 1988 to April 1997 **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  
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.  
Continued Reserves participation through July 2003.

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

**REGISTRATIONS:**

Registered Professional Engineer in Alabama (#21951)  
Registered Professional Engineer in Florida (#64862)  
Registered Professional Engineer in Louisiana (#35412)  
Registered Professional Engineer in Mississippi (#19648)  
National Council of Examiners for Engineering and Surveying (#40437)  
Examined and Registered in dual disciplines: Metallurgical and Civil Engineering

**CONTINUING EDUCATION:**

1980-1983	Graduate Work, Mechanical Engineering, North Carolina State University
1983	Naval Nuclear Power School, Officer Program
1989	Instructor, Seminar on Marine Vessel Fire Investigation
2002	Cathodic Protection of Pipelines; Diesel Failure Analysis Investigations
2004-2009	Confined Space Entry Certifications
2006	Cathodic Protection – PDH
2010	Non-Linear Finite Element Analysis

**PROFESSIONAL ORGANIZATIONS:**

American Society for Metals  
Society for Automotive Engineers  
National Association of Corrosion Engineers