## Carter W. Terry, P.E., C.W.I.

Property Practice Leader

313 Congress Street
Boston, MA 02210





(617) 330-9390

ExpertWitness@rimkus.com


## Background

Mr. Carter Terry has a bachelor's degree in Small Vessel Operations from Maine Maritime Academy and a Master of Science degree in Civil Engineering from the University of New Hampshire. He is a registered professional engineer in multiple states with experience in structural analysis and design, project management, construction administration, building condition assessment, and forensic engineering.

As a practicing structural engineer, Mr. Terry has experience in new and existing structural building systems including the design and detailing of new structures in timber, masonry, concrete, and steel, and the assessment of existing historic structures. His background in traditional wooden vessels while working as a professional merchant marine provides a broad experience in wood-framed construction and analysis of wood deterioration. He has been the structural engineer of record on several projects in a variety of sectors including industrial manufacturing facilities, mental health care facilities, federal infrastructure facilities, and residential structures. Prior to becoming an engineer, Mr. Terry worked as a professional merchant marine on traditional sail vessels, tugboats, and research ships. Mr. Terry also spent time working as a structural iron worker, welder, and fabricator. At Rimkus, Mr. Terry performs a broad range of inspections and cause and origin analyses of storm-related damage, water damage, structural fire damage, construction defects and accidents, design defects, and building code evaluations.

## Professional Engagements

- **Heavy Industrial**
  - Confidential Project - Structural Engineer of Record for the expansion of an existing pharmaceutical clean manufacturing facility. Project scope included the addition of multiple mezzanines, design, and coordination of a new narrow aspect multi-level structure to be built within the footprint of an existing single-level structure, design, and coordination of structural framing and lateral system alterations to support a modular mechanical penthouse built off-site and placed on the existing roof, design, and coordination of extensive modifications to the existing roof structure to raise elevation, and house hoisting beams and mechanisms.
  - Insulet Manufacturing Facility **-** Lead Structural Project Engineer for the design and detailing of a 135,000-square-foot clean manufacturing facility and warehouse built immediately adjacent to an existing multi-story office building. Project scope included investigation and analysis of existing structure for new loading from mechanical equipment as well as design and detailing of new composite steel-framed manufacturing and

storage facility. Building was designed and coordinated on an accelerated schedule requiring extensive design coordination and rapid response construction administration.

- **Healthcare**
  - Edith Nourse Rogers VA Medical Center **-** Lead Structural Engineer for the design and detailing of new elevator and stair structures in an existing reinforced concrete building. Project scope included evaluation of existing structure based on the American Society of Civil Engineers Seismic Evaluation and Retrofit of Existing Buildings code to determine possible deficiencies in the existing building seismic restraint system.

- **Residential**
  - Maynard Multi-Family Development - Lead Structural Project Engineer for the design of three multi-level, wood-framed buildings. Structural systems consisted of wood-bearing walls with wood-framed shear walls. Floor and roof framing consisted of open web prefabricated wooden trusses. Project scope also included several single-story garage structures and common space structures.
  - Cardin Residence - Lead Structural Project Engineer responsible for design and detailing of a new 12,000-square-foot, wood-framed residential structure. Roof framing layout required design and detailing of custom fabricated heavy timber trusses to support long-span ridge beams. Scope also included the design of a reinforced concrete safe room and vault.

- **Federal**
  - Portsmouth Naval Shipyard Building 177 - Structural Project Engineer responsible for investigation and modeling of a historic heavy timber truss warehouse. Project scope included existing structural condition assessment, field measurement, and analysis of historic heavy timber trusses for load rating of existing rail crane. Project scope included preparation of construction documents detailing required repairs to correct existing structural deficits.

## Forensic Engagements

- **Structural Defect Evaluations**
  - Searle's Castle - Structural Project Engineer responsible for conducting and documenting existing conditions of historic stone masonry structure and surrounding retaining walls. Structure was built in the early 20th century using unreinforced stone and mortar construction. Site includes several hundred linear feet of stone site retaining walls. Degradation over time of structures and retaining walls was evident due to water ingress and freeze-thaw. Detailed structural investigation was conducted to determine degree of repairs required to stabilize site retaining walls and exterior structural load-bearing walls.
  - Welding Construction Defect Analysis – Provided expert testimony in deposition regarding the quality of workmanship done by welding contractors in a newly constructed food manufacturing plant.

## Professional Experience

- **Rimkus** **2020 – Present**
  - Property Practice Leader

    Responsible for a broad range of inspections and cause and origin analyses of storm-related damage, water damage, structural fire damage, construction defects and accidents, design defects, and building code evaluations.

- **Wunderlich-Malec Engineering** **2019 – 2020**
  - Lead Structural Engineer and Engineering Manager
    Responsible for project management of multidisciplinary federal utilities and building upgrade projects. As the lead structural engineer, also responsible for oversite and quality control of all structural scope work. As engineering manager, responsible for management oversite of junior engineers and effective task distribution to a multi-disciplinary engineering staff.

- **Summit Engineering** **2014 – 2019**
  - Project Structural Engineer
    Responsible for structural design and detailing of new and existing structures. Responsibilities included conducting condition assessments of existing structures and analyzing for new loading based on proposed alterations, design and detailing of new structures in steel, wood, concrete, and masonry, conducting site inspections of ongoing construction, interfacing with design team and owners to achieve desired design objective, supervising teams of engineers to achieve successful design of large scale building projects including multi-family housing and pharmaceutical manufacturing facilities.

- **United States Merchant Marine** **2000 – 2010**
  - Licensed 500-ton Mate/100-ton Master
    Various engagements throughout the maritime sector on the eastern, western, and gulf coasts of the United States. Worked at all levels from deckhand to captain on research vessels, traditional sail vessels, tug and barge vessels, and hydrographic charting vessels.

- **Structural Steel Worker** **2004 – 2006**
  - Welder and Fabricator
    Employed as a fabricator, welder, and ironworker installing structural steel framing on low-rise residential and commercial structures. Also employed as a fabricator and welder constructing bronze and stainless-steel marine hardware for traditional sailing vessels.

## Education and Certifications

- **Small Vessel Operations, B.S.:** Maine Maritime Academy (2004)
- **Civil Engineering, M.S.:** University of New Hampshire (2014)
- **Registered Professional Engineer:** Alabama, Arkansas, Connecticut, Delaware, Florida, Louisiana, Maine, Maryland, Massachusetts, New Hampshire, New York, New Jersey, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, Virginia, Washington, D.C., and West Virginia
- **American Welding Society (AWS):** Certified Welding Inspector
- **Society of Professional Rope Access Technicians (SPRAT):** Level 1 Rope Access Technician
- **Infrared Training Center:** Level 1 Certified Thermographer

## Continuing Education

- **Regular classes to maintain professional licensure**

## Publications

- **“Structural Analysis Integration as an Aid to Segmental Bridge Deck Replacement”**, University of New Hampshire Master’s Thesis, 2014.