

ENGINEER: NAVAL ARCHITECTURE
MARINE
MECHANICAL

STEVEN M. LINDHOLM, P.E., P.M.P.
Engineering Design & Testing Corp.
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EDUCATION:

1993 B.S., Naval Architecture
University of California, Berkeley, California

EXPERIENCE:

June 2016 to Present **Engineering Design & Testing Corp.**
Oakland, California

Consulting Engineer/Naval Architect. Program Manager for Subchapter M Third Party Organization program. Surveys of towing vessels. Investigation of incidents involving commercial systems, industrial, and marine. Damage evaluation and assessment. Project Management. Condition assessment of structures and machinery. Root cause investigation and analysis of mechanical damage to generators, boilers, piping systems, ventilation, construction components and materials, including fracture and failure analysis. Preparation of repair and replace cost estimates. Specialized consulting in the design, evaluation and inspection of ship construction, stability, propulsion, ballast water treatment, vibrational analyses and ship motion. Application and interpretation of international (International Maritime Organization (IMO), class society, and flag state), United States Coast Guard (USCG/CFR), and regional regulations/guidelines. Assessment and evaluation of photovoltaic installations.

January 2008 to May 2016 **Cobham SATCOM, Maritime Products (Sea Tel brand)**
Concord, California

Mechanical Engineer III. Projects included the analysis of acceleration data from antenna installations to explain damage. Maintained corrosion test chamber (Singleton Model SCCH-22) and conducted corrosion tests of aluminum, stainless steel, and steel with various coating systems. Preparation of antenna installation guidelines, environmental testing of antenna systems, and the repair and upgrade of hydraulic hexapod motion simulator. Subject matter expert for ship

motions, maritime electronic and electrical standards, and corrosion effects. Created environmental test plans in accordance with IEC 60068 for compliance with IEC 60945 and Mil-Std-810.

September 2004
to May 2016

Lindholm Engineering Consultants
Concord, California

Principal Engineer. As an independent consultant, provided Naval Architecture and Mechanical Engineering services to industry and government. Projects include analysis of environmental test specifications for electronics to assist testing of marine antennas, packaging design for water filtration equipment, finite analysis of lattice crane, proposal for use of a novel water filtration system for ballast water treatment, inclining experiments of USCG High Endurance Cutters, cargo damage surveys, machinery damage surveys, design of oily water treatment installation and design of ballast water segregation system.

February 1991
to September 2004

Det Norske Veritas
Various Locales

Station Manager and Senior Surveyor II (San Francisco, California). Financial and operational oversight office activities in Northern California, Nevada, Utah, and Hawaii. Inspection, certification and test of diesel engines, generators, electric motors, switchgear, pumps, steam turbines, power boilers, heating boilers, valves, and materials. Damage assessment and repair oversight. Principal-in-charge of reflagging a passenger ship to U.S. flag. Principal-in-charge of reflagging a high-speed ferry to U.S. flag. Review, inspection and certification of pipe handling equipment, cryogenic gas pumps, computer-controlled dynamic positioning systems, oil rig mooring equipment, and turbo-expanders. Safety/construction inspections of tankers, bulk carriers, container ships, yachts, and other ship types.

Surveyor II (Rotterdam, Netherlands). Responsible for safety and construction inspections of ships. Subject matter expert on USCG regulations for Vapor Collection Systems (46 CFR 39).

Surveyor II (Houston, Texas). Projects include safety and construction inspections of general cargo, bulk cargo, oil tanker, chemical tanker and liquefied gas tanker ships; certification of modifications to comply with USCG Vapor Collection System regulations; certification of

installation of Global Maritime Distress Safety Systems (GMDSS) under SOLAS Part III; structural assessment of RO/RO cargo ship for U.S. reflagging; and certification of materials and components.

September 1989
to January 1991

**Ocean Systems Engineering (Oceaneering International)
Houston, Texas**

Senior Engineer. Managed the design and fabrication of tools and work packages for underwater Remotely Operated Vehicles (ROV). Provided preliminary design and cost estimates for proposals and Requests for Quotations. Acted as support engineer during testing of underwater trenching system delivered to Pacific Bell.

November 1987
to September 1989

**Civil Engineer Support Office, Construction Battalion Center
Port Hueneme, California**

Materials Engineer. Developed, reviewed, revised, and managed product purchase specifications for the U.S. Naval Facilities Command and the Construction Battalion - 'SeeBees.' Specific products include oil isolation booms; mooring bitts, cleats, and chocks; steel sectional pontoon; anchors; and fenders.

December 1985
to July 1987

**AMETEK Offshore Research and Engineering Division
Goleta, California**

Systems Engineer. Projects included principal design engineer for a towed underwater diver training platform, project engineer for an underwater submersible launch/recovery mechanism, hydrodynamic analyses of forces on towed underwater structures at 3 knot operational speed, hydrodynamic analyses on free-flooding submersible to validate test results, and stability/propulsion design of a free-flooding submersible.

December 1984
to September 1985

**IMODCO Marine Engineering
Los Angeles, California**

Naval Architect. Finite element analyses of foundations, mooring, and under-deck support for conversion of an oil tanker to a Floating Production, Storage and Offloading (FPSO) barge. Survey of candidate ship at shipyard to evaluate required repairs/conversion.

September 1982 **Todd Pacific Shipyard**
to November 1984 **San Pedro, California**

Junior Marine Engineer. Projects include design and analysis of steel supporting structural system to stabilize Destroyers and Frigates during elevation by new dry-docking system (Syncrolift™); structural analyses of various lightweight stiffened plate bulkhead systems; assisted in preparation of new Destroyer (DDG-51) construction bid response; and acted as engineering liaison to shipyard shops.

CONTINUING EDUCATION:

Project Management Course, University of California, Santa Barbara, 1988
Fire Safety and Suppression, Construction Battalion Center, Port Hueneme, 1988
ISO 9001 Fundamentals, Det Norske Veritas, 1993
Photovoltaic System Design and Installation, Diablo Valley College, 2005
Vibration and Shock, American Society of Mechanical Engineers, Houston, 2011
Hazardous Energy Control (Lock-out/Tag-out), Safety Services Company, Concord, 2013
Project Management Professional Exam Preparation, Sacramento, 2014
Power Industrial Truck Safety, Cintas First Aid and Safety, Concord, 2015
Overhead Crane Safety and Operation, Allied Crane, Concord, 2015
Project Management Workshop, Fred Meyer, Concord, 2016
OSHA Permit Required Confined Space Entry, eTraining, on-line, 2016
Principles of Failure Analysis, ASM International, on-line, 2016
Mechanical and Electrical Cost Estimating, RS Means, San Diego, 2016
Fundamentals of Arctic Engineering, University of Alaska – Anchorage, on-line, 2017

PUBLICATIONS

Fuel Oils: Handling, Mis-handling, and Contamination (3 part blog); EDT Website, October-November 2018; www.edtengineers.com
“Subchapter M – What it is and how it is useful to you;” *Stress Point*, December 2018, EDT, Columbia, South Carolina

PRESENTATIONS

Actors in a Maritime Casualty, San Francisco Marine Claims Association, March 2017
Inspected versus Uninspected Vessels, Marine Insurance Association of Seattle, April 2018

PROFESSIONAL ORGANIZATIONS:

American Society of Mechanical Engineers (ASME)
 ASM International
 National Fire Protection Association (NFPA)
 National Association of Fire Investigators (NAFI)
 Society of Naval Architects and Marine Engineers (SNAME)
 San Francisco Marine Claims Association (SFMCA)

REGISTRATIONS and CERTIFICATIONS:

✘ - Mechanical Engineering Discipline

⊗ - Naval Architecture and Marine Engineering Discipline

[blank] – No engineering discipline specified by Board

Registered Professional Engineer in Alaska (124768) ✘
 Registered Professional Engineer in Arizona (64187) ✘
 Registered Professional Engineer in California (M25488) ✘
 Registered Professional Engineer in Florida (83691)
 Registered Professional Engineer in Hawaii (17306-M) ✘
 Registered Professional Engineer in Louisiana (PE.0041872) ✘ ⊗
 Registered Professional Engineer in Mississippi (28523)
 Registered Professional Engineer in Nevada (24967) ⊗ ✘
 Registered Professional Engineer in Oregon (80245) ✘ ⊗
 Registered Professional Engineer in Texas (124337)
 Registered Professional Engineer in the Commonwealth of Virginia (402058298)
 Registered Professional Engineer in Washington (54030) ✘ ⊗

National Council of Examiners for Engineering and Surveying (NCEES) Record
 (#16-789-53)

Project Management Professional (1719679)

North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic Entry Level
 Certificate of Knowledge (E1005-7)