THE EXPERTS
Robson Forensic

ARTHUR W. FAHERTY
Marine Engineer and Mechanical Expert

Experienced in the installation, testing, start-up, safe operation, maintenance, modification, troubleshooting, upgrade and repair of marine and industrial machinery, equipment and systems.

Manufacturing Processes: General machining, welding, brazing, grinding soldering, oxyacetylene cutting, aligning, shrink fitting, liquid and dry filling, dry solids handling, slurry handling, liquid handling paint preparation, painting, hot tapping.

Manufacturing Procedures, Standards, and Specifications: Pressure vessels, power piping, high-pressure air compressors, low-pressure air compressors, pipe welding, structural welding, drawing standards, hazardous area requirements, electrical generation and switchboards, failure analysis.

Test Methods and Specifications: Hydrostatic testing, vibration testing, static and high speed dynamic balancing, material specifications.

Engineered Systems: Steam; condensate-steam and motor plants; condensate-landfill; feedwater; liquid fuel; natural gas; methane collection; potable water; refrigeration; salt water service; ballast; tanker cargo; fire protection; waste water; hydraulic power; pneumatic power; pneumatic controls heating; ventilation and air conditioning; bag houses; sludge; oily water; sewage; cleaning and repair of tank farm pipelines, tanks and pumps.

Machinery: Diesel engines, fuel injection equipment, high speed centrifuges, compressors, heat exchangers, refrigeration compressors, absorption and centrifugal chillers, liquid and gas fired boilers, cooling towers, air handlers, valves and fittings, turbines, turbochargers, jib cranes, monorail cranes and hoists, winches and capstans, cargo machinery, bridge cranes, industrial scales, milling machines, lathes, presses, screw conveyors, belt conveyors, roller conveyors, drive gears, clutches, distillers, reverse osmosis, spreader beams, lifting and rigging gear, horse drawn machinery, farm tractors, vactors and industrial vacuums, elevators (passenger and freight), fuel oil blending, steering gears, hydraulic rams, rotating machinery, pumps (centrifugal, reciprocating, progressive cavity, positive displacement, screw, pneumatic).

Machinery Safeguarding: Safety interlocks, failsafe modes, caution and warning signs, machine guards, drive guards, instruction manuals, controls, damage control and damage control methods.

Safety Procedures and Requirements: Material Safety Data Sheets, right-to-know, confined space entry, lockout/tagout, scaffolding, training policies, inspections, OSHA requirements, industrial cranes – shipboard, shoreside, shipyard.

Tools: Drill press, lathes, milling machines, table and radial arm saws, rotary pneumatic drills, impact wrenches, nail guns, high pressure water blasters, high pressure washers, hand tools.

Wharfinger: Duties and responsibilities.

Products: Bicycles, motorboats - gas and diesel (operation, maintenance, and repair), Alpine and Telemark skis, rope tows.

Regulatory Compliance: American Bureau of Shipping, DnV, IACS, IMO, ISM, Marpol, U.S.C.G., OSHA.

EXPERT NOT RETAINED

ARTHUR W. FAHERTY
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Specialized: Graving docks, floating drydocks, marine railways, shipboard automation, shipyard contracts, assessment of marine operations, U.S.C.G. License Chief Engineer Unlimited Horsepower – Motor, Third Assistant Engineer-Steam, stability/inclining experiments, marine bulkheads.

EXPERT NOT RETAINED

PROFESSIONAL EXPERIENCE

2006 to present **Robson Forensic, Inc.**
Area Manager for Seattle Area 2009-2020
Area Manager for Upstate/Eastern New York and Vermont 2006-2009
Provide technical investigations, analysis, reports, and testimony towards the resolution of commercial litigation cases and personal injury cases involving commercial vessels and pleasure craft.

1996 to present **Arthur Faherty**
Consultant, Port Engineer
Work includes direct involvement with nuclear industry for safe operation of standby generators for shaft alignment, vibration problems and root cause analysis; troubleshooting large centrifugal machines for environmental clean-up in South America and purifier operations. Design work with naval architecture firm including work on installing additional engine on dynamic positioning drill vessel. All phases of shipboard operations – machinery, cargo, regulatory, human resources. Worked with German Engineering firm to market digesters for animal waste to farmers in western United States. Instructed Pipeline Hydraulics for COTCO (Cameroon Oil Transportation Company, a division of ExxonMobil), Pipeline Operators. Field Supervisors, and Pipeline Engineers for 1100 KM pipeline for pumps, pumping, hydraulic surges, system operation, testing and maintenance (Douala, Cameroon; September 2013 – July 2014). Instruction of fishing and tug crews for USCG License, Instruction of Management of Electrical and Electronic Control Equipment, Engine room Management Resources including safety management systems.

2013 to 2014 **Robert Allan, Ltd.**
Lead Marine Engineer
Lead Engineer for conversion of tanker to FSO for Gulf of Thailand.

1988 to 2006 **U.S. Merchant Marine Academy, Global Maritime and Transportation School**
Visiting Professor
Areas of expertise and instruction include vibration training for nuclear power plants, shipboard propulsion systems (steam and diesel), rotating machinery (reciprocating and centrifugal pumps, centrifugal and reciprocating air compressors, centrifugal and reciprocating AC compressors, purifiers), piping systems, refrigeration, including ammonia, HVAC systems, low pressure and high pressure boiler control systems, waste treatment systems, evaporators and reverse osmosis units, Marpol regulations, Classification Society rules and regulations, electrical distribution and switchboards systems (480 and 5kV), shipboard management, shipyards, shipboard automation systems, simulation training, and failure analysis.

Programs include Ship of the Future for the U.S. Navy, MARAD Inspectors, ABS Surveyors, Diesel Engine Training for Exxon, Military Sealift Command, ARCO, License Upgrade, Diesel Generator performance for public utilities, U.S. Army Reserve Training for vessel operations, shipyard course for U.S. Navy reserve units, National Sealift Training for Engineers (both for Superintendent Engineers and for operating personnel) for hull surveys, engine room surveys and breaking out the plants and QMED program for MSC. Courses are developed using the IMO model for classroom instruction. Co-authored assessment of Staten Island Ferry System resulting in reorganization of system to reflect shipboard safety and operating standards. Developed wrote, and taught Shipyard Course for OSHA.

2004 to 2005 **M.V. Cape Horn, Marad ROS RO/RO, 22,000 BHP**
Chief Engineer
Responsible for safety of main engine room and crew, main propulsion engine, diesel generators, all rotating machinery including pumps, air compressors, purifiers, reciprocating AC and refrigeration compressors and all hydraulics for ramps, car decks and winches, 40 ton electro-hydraulic crane, sewage treatment plant, evaporators, interior communications and electrical switchboard and distribution. Refurbished Bridge Control system and put it in use for the first time in more than 6 years.

1998 to 1999 **Cresmont Technical Services**
Program Manager
Program Manager to design, build and operate a 3 megawatt methane-to-energy plant in Puyallup, Washington. Consultant to develop a West Coast facility for NAVSEA and MARAD vessel scrapping. Project Manager for tugboat acquisition and vessel conversion program to convert vessels into hospital ships. Consultant to bunker suppliers for fuel problems encountered on board.

1996 to 1998 **CBS Engineering, Inc.**
Senior Consulting Engineer
Construction of barges, marine issues, plant operations and plant review. Oversaw construction and delivery of $3.8M barge (400'X 100') for production platform. Responsible for operational review of 80 megawatt gas turbine power plant, centrifuge operations and mooring of barges to API specifications including design review and selection of fendering system, and strength of the docking system. Work included Navigation lighting for FSO barge while docked, as well as operation manual for barges and Safety system for the marine facility to meet PDVSA (Petroleos de Venezuela, S.A.) and ISGOTT/IMO specifications. Performed analysis for FPSO operations and cost for conversions in shipyards around the world.

1994 to 1996 **Wehran Energy**
Plant Manager
Ran all aspects of 2.5 megawatt methane gas to energy plant including investment to upgrade and plant expansion to 5 megawatts. Operation consisted of field expansion, field maintenance, compressing gas, flaring, condensate separation, electrical generation, pollution control and interfacing with town, county, and utility officials for upgrade and expansion.

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1992 to 1994 **Fore River Shipyard & Iron Works, Inc.**
Owner
Shipyard repair and steel fabrication business. Drydocked vessels from barges to 860' SeaBee class LASH vessel. Experienced in blasting and painting of hulls and tanks, engine work, piping renewal, steel replacement, superstructure work, welding, brazing, oxyacetylene cutting and welding, machining (lathes, milling machines). Workforce of up to 128 people. Also accomplished steelwork for bridge sections and construction of barges for public authority. Accomplished design work for steam driven power barges for international power plant developer for use in South America and in the Middle East. Solved issues on delivering these plants to the various areas; this included surveying various rivers in Colombia for future installations. Safety Director for yard was a direct report to me and was actively involved in all aspects of safety in the yard and on the ships and barges that we worked on.

1988 to 1992 **AK Engineering, Inc.**
Founder, Stockholder and Vice President
Company specialized in marine and industrial engineering projects. Responsibilities included overhaul of 6 X 6.1 Megawatt diesel generators, large oil/water separation project for utilities, ultra-high water pressure technologies for utilities and U.S. Post Office (cutting into a building in NY city while mail was being processed for expansion), very fast track construction of co-generation plant (gas driven engines with absorption and centrifugal chillers, boilers, pumps and cooling towers all controlled by pneumatic controllers). Vessel activation and deactivation for Operation Desert Storm (13 vessels).

1983 to 1988 **Various U.S. Shipping Companies**
Consultant and Chief Engineer/Fleet Engineer
Chief Engineer for three re-flaggings – two vessels were from Swedish flag to U.S. flag and one vessel was from Liberian flag to U.S. flag. As Chief Engineer was responsible for Safety of crew during the re-flag period and worked with shipyards on safety management while work was accomplished on board the vessels. Installed generator control systems to make generators fully automated. Surveyed vessels for owners to meet various RFP's with regard to budget and operational characteristics. Supervised the dry-docking of ships, accomplished troubleshooting of automation on board and provided corrective procedures, taught crews how to perform under limited manning schedules. Assumed Chief Engineer duties on poorly running vessels and returned vessels to maintenance status and in class while maintaining low overtime. Vessels included dry cargo, RO/RO, car carrier and tanker. Experienced in all types of diesel engines, generators, cranes-monorail, jib, electro-hydraulic, overhead; galley equipment including dishwashers, fryers, potato peelers, potato mashers, ovens and ventilation systems for the galleys, elevators for both people and cargo, winches, anchor handling and heat exchangers. Also experienced with impact wrenches, Sweeney wrenches, hydraulic stretching for cylinder and bearing bolts.

1978 to 1983 **Pacific Gulf Marine**
Chief Engineer on Motor Vessels
Several shipyard periods and class surveys accomplished. Vessel always remained on charter.

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1971 to 1983 **Various Shipping Companies**
Various Engineering Capacities from Third Engineer to Chief Engineer
Worked on German, Japanese and American vessels. Built ships in two U.S. yards and in one Japanese yard for various owners. Officer in Charge of Ammonia Refrigeration System (2 years).

1983 **Reflag of M/V American Eagle**
Chief Engineer
Responsible for the paperwork and physical work to convert the vessel from Swedish flag to American Flag including engine room and structural steel including fabricating and welding on the aft car decks.

1978 to 1983 **Pacific Gulf Marine**
Chief Engineer on Motor Vessels
Several shipyard periods and class surveys accomplished. Vessel always remained on charter.

1976 to 1978 **Zapata Bulk Transport 4 x 40,000 Product Tanker**
Machinery Inspector/Hull Inspector/Cargo Inspector
Responsible for signing off all machinery and piping in Engine room, cargo systems including pumproom and environmental trough for Class as well as machinery, cargo systems, pump room and controls for Zapata Courier.

1974 to 1975 **New Construction, Tsuneishi, Japan for Sanko Lines, 80,000 dwt Crude Oil Tanker**
2nd Engineer
Responsible for signing off fueling stations, cargo piping and environmental trays, HFO Purifiers and main engine

1973 **New Construction of M/V Sugar Islander**
3rd Engineer
Responsible at yard for sign-off on fueling stations including environmental wells, purifiers, boiler, and evaporator at Lockheed Shipbuilding, Seattle.

PROFESSIONAL CREDENTIALS

Chief Engineer, Unlimited Horsepower-Motor
Third Assistant Engineer
Unlimited-Steam 8th Issue, Current through April 2010

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EDUCATION

B.S., Marine Engineering, United States Merchant Marine Academy, Kings Point, NY

Additional Continuing Education:
BOAT GPS Forensic Course, National Association of State Boating Law Administrators (NASBLA), November 2018
International Association of Marine Investigators 28th Annual Training Seminar, Norfolk, VA, March 2018
ABYC (American Boat and Yacht Council) Marine Law Symposium, Charleston, SC, January 2017
Education Day with Marine Insurance Association of Seattle, 2016
Achieving Safe Permit-Required Confined Space Entries, Prospering Safely (Fred Straub), October 2013
Current Issues in Maritime Law, WSBA, October 2011
Maritime Personal Injury CLE (Lorman), Seattle, WA, July 2011
Sulzer Brothers Diesel Program, Winterthur, Switzerland

CERTIFICATIONS

ABYC (American Boat and Yacht Council) Certified Master Marine Technician, expired 04/30/21
ABYC (American Boat and Yacht Council) Certified Technician – Diesel Engines – Issued 04/30/2016, expired 04/30/2021
ABYC (American Boat and Yacht Council) Standards Certification – Issued 06/30/2016, expired 06/30/2021
Universal Refrigeration Certification

PRESENTATIONS

Tools of the Trade, ABYC Annual Law Symposium, Seattle, Washington, January 8, 2019

CO Poisoning: Silent, Deadly and with Us All the Time (Lessons Learned from Litigation), Western Trial Lawyers Association Convention, Maui, HI, June 13, 2013

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