CHRISTOPHER P. HERFEL

EDUCATION, TRAINING, LICENSES, AND PROFESSIONAL AFFILIATIONS

MBA, Loyola College of Maryland, Management & Finance, 2004
B.S., Marine Engineering, Minor in Engineering Management, United States Merchant Marine Academy, 1998
Third Assistant Engineer License, Steam & Diesel Propulsion, Unlimited Horsepower, U.S. Coast Guard
Trained Shipyard Competent Person, Confined Space & Marine Chemist Certification as defined in 29CFR1915.7(b)
Trained Welder, Electrode & MIG Procedures
Lieutenant, United States Naval Reserve
Member, Society of Naval and Marine Engineers (SNAME)
Member, American Society of Naval Engineers (ASNE)

UNIQUE OR SPECIAL QUALIFICATIONS

Mr. Herfel serves as Chief Executive Officer (CEO) of McCaffery & Associates, Inc., a maritime and naval consulting firm that specializes in the research and analysis of U.S. Navy, Coast Guard and other federal government agency documents, records, plans, photographs and publications regarding ship design, construction, maintenance, repair and conversion. In addition, the firm also provides research and analysis of similar records and documents regarding naval and merchant marine personnel training, government contracting and purchasing, personnel safety and health, use of asbestos on naval ships, government specifications for the use of asbestos on naval ships and knowledge of the federal government and Navy concerning the hazards of asbestos and other known toxic materials. A key client liaison, Mr. Herfel determines the most cost effective, efficient, and timely means of meeting the research project needs. He directs the research team to locate and analyze historical correspondence documents.

Depending on case specifics, correspondence between the Navy, Maritime Commission, shipyards, design agents, and manufacturers is analyzed. After retrieving all the relevant documents, a historical timeline of any Navy, merchant, or Coast Guard vessel is developed by Mr. Herfel. At that point, a ship's history is developed from initial design through shipyard construction, following the vessel while in service and ending with the final disposition of the vessel. Additionally, he has extensive knowledge regarding the historical use of asbestos in the Navy and Department of Defense, knowledge of the hazards through the decades, and the implementation of asbestos-related safety and industrial health standards, protocols, et cetera, from the 1930s through the 1980s.

Mr. Herfel combines his past experiences in shipyard operations, ship design, marine engineering, naval policies, and employment working on U.S. Navy and merchant vessels to analyze and interpret detailed correspondence, blueprints, specifications, and contracts. Mr. Herfel has participated in the new construction of oil barges and the conversion, overhaul, and repair of more than a hundred merchant and naval vessels. Ships repaired included U.S. Navy ships, merchant ships (both U.S. and foreign owned) as well as U.S. Government owned ships operated by the U.S. Navy Military Sealift Command (MSC) and Maritime Administration (MARAD). While executing ship

repair contracts, he learned the intricate details associated with drydocking, repairing, and overhauling diverse types of ships. He also coordinated with port engineers, owner's representatives, and U.S. Navy surveyors (Supervisor of Shipbuilding, Conversion, and Repair (SUPSHIP)) daily. Finally, he negotiated change orders, credits, and work packages with owner's representatives.

Mr. Herfel was involved in the initial stages of managing the Naval Shipbreaking Program and has overseen the successful scrapping of nine former U.S. Navy vessels built during the 1950s and 1960s. To safely scrap these vessels, he needed to have an intimate knowledge of shipbuilding material. This included identifying and abating all toxic materials on board these vessels, mainly asbestos, lead, and polychlorinated biphenyls (PCB's), before the scrapping could commence. He gained valuable experience with and knowledge of OSHA rules, regulations, and laws associated with working with and around potentially hazardous materials. He also coordinated with industrial hygienists, safety professionals and personnel who were removing friable and non-friable asbestos-containing materials to ensure abatement was being done in accordance with applicable rules, regulations, and policies. His knowledge of the environmental impact of ship construction, repair and scrapping have been used in cases involving groundwater and soil contamination.

WORK HISTORY

McCaffery and Associates, Inc. **September 2003 to present**

Current Position Title: Chief Executive Officer (CEO)

Mr. Herfel manages and works with a team of current and former naval and maritime officers who research naval and commercial ship design, construction, maintenance and repair records in support of asbestos and toxic tort litigation. The majority of the work is conducted at the National Archives or other libraries in the Washington, DC, metropolitan area. Research is done on original correspondence files, microfilm, and original ship plans.

Through his education, training and work experience, he has developed an expertise regarding U.S. Government and commercial ship design, development, maintenance, construction and repair, including applicable ship building specifications; the level of control and supervision exercised by the United States Government over the design, manufacture and installation of equipment and machinery aboard United States Navy and merchant ships; the use of asbestos on United States Navy and commercial ships and in shipyards; and publications by the United States government and the Navy concerning asbestos hazards. This experience has enabled him to perform detailed research and analysis of historical documents on these issues.

MWI Services, Inc. **July 2003 to September 2003**

Mr. Herfel worked with a team of current and former naval and maritime officers who researched naval and commercial ship design, construction, maintenance and repair records in support of asbestos and toxic tort litigation. The majority of the work was conducted at the National Archives and other archival libraries in the Washington, DC, metropolitan area.

Baltimore Marine Industries **July 1998 to July 2003**

Position Titles: Project Manager, Ship Disposal Program (Final Position)
Project Manager, Ship Repair and Construction
Ship Superintendent, Ship Repair
Production Manager, Joint Modular Lighterage System
Welding and Fabrication Supervisor, Ship Repair
Machinery Supervisor, Ship Repair
Project Planner/Scheduler, Critical Path Methodology

During Mr. Herfel's time at Baltimore Marine Industries he was involved with the new construction of barges and industrial products, the repair and conversion of commercial vessels, and the scrapping of former U.S. Navy vessels. Mr. Herfel held many positions of increasing responsibility in the ship repair and construction field. Having shipboard engineering experience, Mr. Herfel also frequently participated in the operation and troubleshooting of shipboard mechanical components. Mr. Herfel successfully activated the engine room of several "Ready Reserve" vessels that were laid up in the James River Reserve Fleet.

Mr. Herfel also served as production manager for the Joint Modular Lighterage System (JMLS) demonstration program, the precursor to the Improved Navy Lighterage System (INLS) currently used by the Navy and Army to move equipment and supplies from ship to ship and from ship to shore. Most (75 percent) of this $20 million government contract was fulfilled at the Baltimore Marine Industries facility.

Mr. Herfel developed an intimate knowledge of shipbuilding materials and techniques used on many vessels while working for Baltimore Marine Industries. Mr. Herfel's last position served was as project manager responsible for the abatement, remediation, and scrapping of nine former U.S. Navy vessels.

U.S. Naval Reserve **1998 to 2006**

Position Title: Lieutenant (Final Rank)

After graduating from the Merchant Marine Academy, Mr. Herfel served as an Officer in the United States Naval Reserve for eight years, obtaining the rank of Lieutenant. He was designated as a Marine Engineer (1675 designator) and was assigned to the United States Naval Reserve, Merchant Marine Ready Reserve (USNR MMR). During his Naval Reserve career, he gained valuable experience and expertise in maintenance, upkeep, activation, and deactivation of U.S. Navy and merchant ships located in Ready Reserve Fleet. Mr. Herfel also gained valuable first hand experience with the Navy/Federal Supply System. Additionally, while assigned to Active Duty Training, he successfully completed the National Sealift Training Program for Engineers training course. During this training, students received advanced training about shipboard systems and typical problems that occur while activating and maintaining Reserve Operating Status (ROS) 4 and ROS 5 ships as well as Ready Reserve Fleet (RRF) 10, 20 and 30 ships. During Active Duty Training, he also successfully completed several U.S. Navy correspondence training courses which focused on ship maintenance and repairs, marine engineering economics, and management of time and cost in shipbuilding projects.

U.S. Merchant Marine Academy **1994 to 1998**

Position Title: Midshipman/Cadet

The United States Merchant Marine Academy is a federal service academy known for its rigorous academic program. USMMA required more credit hours for a baccalaureate degree than any other federal service academy. This course load is supplemented by "Sea Year." While a Midshipman at the U.S. Merchant Marine Academy at Kings Point, Mr. Herfel sailed during his Sea Year on various commercial and former U.S. Navy vessels, outfitted with both steam and diesel propulsion plants. As an engineering cadet, Mr. Herfel participated in the daily maintenance and operation of the engineering plants of these ships. Mr. Herfel worked with superheated boilers of 1,200 psi, diesel engines of 35,000 shaft horsepower, turbines, generators, purifiers, compressors and other critical shipboard components.

Mr. Herfel graduated from the United States Merchant Marine Academy in 1998 with a Bachelor of Science degree in Marine Engineering with a minor certificate in Shipyard Engineering Management. This major required Mr. Herfel to take many specialized marine and naval courses, including courses that specialized in: marine engineering, marine steam, diesel, and gas turbine plants, electrical engineering, marine refrigeration, material sciences, welding, other specialized classes. For his minor, he was required to take a unique subset of academic courses that focused specifically on the ship construction and ship repair industry, including classes in advanced naval architecture, process and workflow operations, marine economics, critical path methodology scheduling, ship construction and repair techniques, and advanced welding and metallurgy theory. A year long capstone project was also required for his minor certificate, during which he recreated the shipyard overhaul and repair availability of a U.S. Navy ship from preliminary planning through sea trials. Mr. Herfel incorporated real-life experiences into this project that he gained during a six-week-long internship, where he participated in the overhaul of USS Supply (AOE 6).

Updated 7/17/2019