



**Curriculum Vitae
Stephen A. Knox, P.E.**

Broad experience in boat survey, design, construction, repair, and operation:

- Tour of duty on USN submarine, including one year in overhaul. Qualified Command Duty Officer, Officer of the Deck, and Engineering Officer of the Watch.
- Engineering degree, Registered Professional Engineer (Emeritus).
- Worked at J.J. Henry, a large naval architecture office, as Design Engineer and Project Manager.
- Experience in vessel repair and overhaul as Production Superintendent in a repair shipyard.
- Published a series of technical articles on yacht appraisal for the American Society of Appraisers.
- Member of the National Association of Marine Surveyors since 1989 (CMS). Technical Vice President 1991 - 1995. Retired status.
- Member of the American Boat and Yacht Council since 1987. Technical Board of Directors, 1992 – 1999. Technical Vice President 1997 - 1999. Navigation Lights Project Technical Committee 1995 - 2017. Fuel and Ventilation Project Technical Committee 1997- 2001. Boat Services Project Technical Committee 1994 - 1996. Chairman, Product Interface Committee, 2007 – 2017.
- Member of the American Society of Appraisers since 1995. Accredited Senior Appraiser. One of four surveyors/appraisers in the United States to hold this designation.
- Member of the International Association of Marine Investigators since 1991. Certified Marine Investigator since 2004.
- Charter Member of the Society of Accredited Marine Surveyors (SAMS) 1987 (AMS).

Currently a Principal in Knox Marine Consultants, Inc. The company offers a range of services:

- Accident investigation.
- Litigation support services.
- Appraisals and damage surveys for pleasure craft.
- Training for marine surveyors, underwriters and claims handlers.

Summary of Experience at Knox Marine Consultants
1987 - Present

1. Accident investigation for yachts and small commercial craft. Litigation support services. Qualified as an expert in the following subjects/courts:

Subjects -

Accident reconstruction - collision, loss of steering control, falls overboard, operator and/or passenger ejection

Design, construction, repair of yachts and small commercial craft. Warranty issues.

Vessel appraisal

Boat operations, standard of care, Rules of the Road

Boatyard operations, standard of care

Sinking – cause and origin

Fire – cause and origin

Salvage

Falls and other injuries

Courts -

Federal District Court – Norfolk and Newport News, Virginia; Eastern North Carolina, Baltimore, Maryland; Washington, District of Columbia; Tampa, Florida.

State courts – Virginia, North Carolina, South Carolina, Florida, Georgia, Ohio

2. Appraisal of yachts and commercial vessels.

3. Presentation of seminars on small craft construction. Seminars cover marine surveying in general, and fiberglass construction in particular.

4. Presentation of seminars on yacht insurance claims. Seminars cover all aspects of insurance claims. Knox Marine has held twenty-five two-day annual yacht claims seminars.

5. Pre-purchase surveys, condition and value surveys, and damage surveys on yachts of all sizes and materials. Performed for owners, buyers, lending institutions, and insurance companies.

6. Hull, machinery, and electrical surveys on commercial vessels. Performed at the request of insurance companies or potential buyers to evaluate the condition and value of the vessel. Vessels include pilot boats, fishing boats, barges, and tugs.

7. Member of the BOAT/US Salvage Arbitration Panel since 1995.

Summary of Experience at ANA Shipyard
1983 - 1987

1. Ship Superintendent and Production Superintendent. First line supervisor and manager of the overhaul of various government auxiliary and small commercial craft:

- Research vessels - NOAA
- Tugboats - commercial, Navy, Army
- Barges - commercial, Navy, Army
- Landing craft - Navy, Army
- Mine sweepers
- Fishing boats
- Yard oiler - Navy
- Torpedo retriever - Navy
- Sludge barge - Navy
- Sewage barge - Navy
- Patrol boats - Navy
- Pusher boats – commercial
- Inspected passenger vessels, including several sailboats

2. Complete overhaul for the above vessels, including the following systems:

- Hull structural work - steel, wood, fiberglass, Kevlar hulls
- Coatings systems
- Steering - electrohydraulic, manual, electric
- Capstans - electrohydraulic, electric
- Diesel main engines and generators - overhaul, replacement
- Fuel and lube oil
- Propulsion shafting - removal, installation, inspection, optical alignment
- Auxiliary boilers and heating equipment
- Potable water systems
- Switchboard overhauls
- Valves of all types
- Motor, controller, and generator overhaul
- Hydraulics
- Impressed voltage cathodic protection systems
- Compressed air
- Various auxiliary systems, including piping, valves, and pumps
- Identification and removal of asbestos insulation

3. Familiar with NAVSHIPS Tech Manual, Standard Items, Repair Specifications, General Specifications. Dealt with the Supervisor of Shipbuilding surveyors on a daily basis.

Summary of Experience at J.J. Henry Company

1979 - 1983

1. Project Manager for large engineering projects. Last one was the development of approximately 90% of the engineering package for the overhaul of USS Nimitz at Newport News Shipbuilding. Dealt with clients daily. Coordination of work between departments, monitored schedule and budget.

2. Project Manager and Lead Engineer for the development of in-stream offloading capability for RO/RO ships. Developed three methods to offload military cargo from RO/RO ships to lighterage while the ships were anchored. Extensive work in characteristics of military vehicles and lighterage, anchoring, and mooring.

3. Calculation of shaft bearing reactions for former USN destroyer. Deduced from data that shaft was bent.

4. Feasibility study to determine which class of U.S. flag container ship would best be suited to carry a modular helicopter hangar/flight deck assembly. Researched and wrote the final report.

5. Study of upgrading a ship terminal. Investigated modifications required to upgrade an existing mooring facility to accommodate larger ships. Performed about half the calculations and wrote the final report.

6. Shaft alignment procedure. Wrote detailed procedure for the installation of shafting in a Corps of Engineers dredge.

7. Astern refueling feasibility study for merchant ships. Developed the marine engineering aspects of providing cargo ships with the capability of refueling Navy escort vessels. Designed the fuel delivery system, including selection of the refueling pump and prime mover and the design of associated piping. Performed all engineering design and wrote the final report.

Summary of Experience in U.S. Navy 1974 - 1979

1. Sea duty aboard nuclear submarine. Qualified Officer of the Deck, Engineering Officer of the Watch, Command Duty Officer. Served as Electrical Officer and Main Propulsion Assistant. Two years operating, one year in overhaul.
2. Twelve month nuclear power school and prototype training. Equivalent to a Master's Degree in Nuclear Engineering. Qualified to supervise the operation and maintenance of Navy nuclear power plants.
3. Submarine School.
4. Guided Missile School.
5. Officer Candidate School.

Note: Annual evaluations always in top 5%. Graduated in top 10% of every Navy school attended.

Education

1. Texas A&M University, May 1974, BS in Nuclear Engineering, graduated with high honors.
2. College level courses in business and management.
3. Various Navy schools listed above. The twelve month nuclear power school and prototype training was equivalent to a Master's Degree in Nuclear Engineering.
4. Continuing education seminars in the marine field. 30-40 hours per year in various seminars. Teaches one or two such seminars each year.

Miscellany

1. Registered Professional Engineer (Emeritus) in Virginia.
2. 69 years old, married.
3. Aircraft Pilot (Private Pilot Certificate with Instrument Rating. Single engine land and single engine sea).
4. Member of the BOAT/US Salvage Arbitration Panel since 1995.