

6/11

**DAVID P. HALL
PROFESSIONAL MECHANICAL ENGINEER**

Registered Mechanical Engineer – California (25715) and New Jersey (24GE02629900)

EDUCATION

Widener University, Chester, Pa. Mechanical Engineering, BSME, 1966
Widener University, Chester, Pa. Mechanical Engineering, MSME, 1978

PROFESSIONAL HISTORY

MECHANICAL ENGINEER

9/88 to Present

Provide consulting services to legal, business, and industry. Performed work in remediation of environmentally contaminated sites. This included preparation of permit applications, analysis of data and preparation of reports. Assist attorneys in HVAC and Plumbing system litigation.

MAJOR ACCOMPLISHMENTS:

- * Designed vapor extractions systems to remediate fuel contaminated oil/groundwater Experience with residential/commercial HVAC and residential plumbing systems.
- * Invented improved DNA test equipment.

SENIOR MECHANICAL ENGINEER, Amphibious Vehicle Test Branch, Camp Pendleton, California 92055-5217

9/88 to 1/07

Responsible for the test and evaluation of Amphibious Vehicles for the United States Marine Corps. Prepare test procedures including subtests, instrumentation and data requirements. Direct execution of the test, collect and evaluate data, prepare test reports, make recommendations.

MAJOR ACCOMPLISHMENTS:

- * Directed test of test bed for next generation Amphibious Assault Vehicle.
- * Directed test to acquire and analyze vibration data for ride quality.
- * Conducted several tests of vehicles with upgraded diesel engines
- * Prepare and execute test plans, analyze data, make conclusions and recommendations.
- * Prepare final reports for various tests of amphibious vehicles and their sub-systems.
- * Designed test and equipment related components.

SENIOR MECHANICAL ENGINEER, VSE Corporation, San Diego, California

9/87 to 9/88

Led team to acquire, store, and evaluate machinery vibration data on U.S. Navy Ships. Directed placement of sensors and transducers, interpreted data, prepared report.

MAJOR ACCOMPLISHMENTS

- * Developed computer program to acquire, process, display, print, and store vibration data.
- * Developed computer program to store 10-year history of vibration data on shipboard machinery.

SENIOR MECHANICAL ENGINEER, LOCKHEED-MARTIN, Moorestown, New Jersey

1/84 to 8/87

Project coordinator on design and production projects utilizing phased array radar systems. Performed mechanical design of system components, conducted meetings with engineers from other groups to discuss progress/problems/issues.

MAJOR ACCOMPLISHMENTS

- * Responsible for installation and start up and operation of environmental test laboratory.
- * Coordinated mechanical design and manufacture of rotating phased array radar system on schedule.
- * Designed and coordinated installation of mechanical systems (HVAC, potable water, demineralized water, etc.) in Radar Production Test Centers.

ENGINEERING CONSULTANT, Marlton, New Jersey

1/84 to 8/87

Provide consulting services to business and industry. Prepared site plans for commercial and residential development. Designed HVAC, plumbing, storm water, and sanitary drain systems for commercial and residential projects. Presented expert testimony at public hearings.

SUPERVISORY MECHANICAL ENGINEER Naval Ship Systems Engineering
Station, Philadelphia, Pennsylvania

6/66 to 12/83

Team leader responsible for the design, manufacture, and installation of prototype submarine antenna systems. Coordinated the efforts of engineers and technicians doing that work. Supervised engineers and technicians working on the testing, and providing engineering assistance to modify and repair gas compressor, diesel engines, and providing engineering assistance to modify and repair gas compressor, systems and components on U.S. Naval Ships.

MAJOR ACCOMPLISHMENTS

- * Invented quiet ice scraper for submarine antenna mast
- * Led team to develop installation package (drawings/calculations) for prototype submarine antenna and towed array systems.
- * Investigated failures of submarine direction finding antenna
- * Performed structural and shock analysis of antenna and buoy systems
- * Tested prototype diesel engine for FFG-7 Class Ships. Discovered Heat rejected was 20% less than expected. This required a fifth engine to be installed in the ships.
- * Identified and resolved many machinery problems in the U.S. Navy Fleet.

PROFESSIONAL MEMBERSHIPS

Registered Mechanical Engineer – California (25715) and New Jersey (24GE02629900)

Member – American Society of Mechanical Engineers

San Diego Forensic Consultants Association

American Society of Heating, Refrigeration, and Air Conditioning Engineers

ADDITIONAL INFORMATION

Recipient of many letters of appreciation and awards including the Packard Award

TECHNICAL PUBLICATIONS

Mathematical Modeling of an Automobile Engine – Thermochemica-Acta 1974

Crankcase Distortion in Air Compressor – Fleet Machinery Maintenance Notes – 1977

Gas Compressor Temperatures – Fleet Machinery Maintenance Notes – 1979

Experimental Determination of Moment of Inertia – Machine Design – 1984

Developmental Testing of Combined Recoil Booster- NDIA 1998