

# Professional Resume Of

JOHN E. KELLY III  
Forensic Engineering Investigator

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## **WORK EXPERIENCE**

- 40 + years Commercial and Naval Engineering Experience
- 20 + years in commercial and government business development
- 20+ years program and project management experience
- 20+ years experience in the operations and maintenance of gas turbine engines used as prime movers (marine & generator sets)
- 35+ years experience in the operations and maintenance of diesel engines (marine & automotive)
- 15+ years experience with spark ignited natural gas fueled engines (co-generation applications)
- 10+ years experience with dual fuel (CNG & LNG), piloted ignition engines (power generation & automotive)
- 15 + years of civilian litigation experience
- 20 years in military engineering investigation
- Experienced in deposition process (both being deposed and assisting)
- 4 years classroom teaching environment 53 & 71 series Detroit Diesel engines
- 10 years experience with shipboard training staff for gas turbine and diesel propulsion systems, including Fairbanks Morse and Colt Pielstick engines
- 4 major military and civilian courses involving developing and managing equipment maintenance programs.
- Courses in reliability and maintainability programs.
- 40+ years hands-on experience
- 4+ years investigation of automotive cooling systems

## **CAREER HISTORY**

Kerberos Solutions, LLC. Founder, CEO & President, April 2003 - Present

Kerberos Solutions was founded as a hobby company in 2000 to develop and sell an automotive "Do It Yourself" Security System via the Internet. After the separating from Clean Air Partners, Kerberos Solutions became an engineering services company. Mr. Kelly and associates are conducting forensic engineering and due-diligence investigative services, and providing engineering damage and loss appraisals. Kerberos is also providing business development services for a variety of clients including identifying state and federal grant money for programs, providing engineering and procurement services for engine test cell equipment, and facilities. Kerberos is also providing technical oversight in the restoration, operation and maintenance of a poorly designed cogeneration system.

Clean Air Partners, Inc. Manager Special Projects, June 2000 – April 2003

Clean Air Partners and BKM merged into one company offering Dual-Fuel™ technology on both heavy duty truck and generator sets (300-2000KW). Responsible for program and project, contract management and facilities security. Conducting reliability and maintainability investigation, conducting failure modes, effects and analysis, providing forensic engineering and investigative services both internally and externally to CAP. The internal investigations conducted included natural gas fuel injection systems and Liquefied Natural Gas (LNG) Storage systems as found in heavy duty truck applications.

BKM, Inc., Manager Special Projects, 1993 – June 2000 (consultant 1983 -1993)

Responsible for program and project management, contract management, new business development and facilities security. Developing new business in Dual Fuel Engines (diesel & natural gas) and direct, high-pressure gasoline fuel injection systems for two-cycle engines for a variety of customers. Directly responsible for over \$8 million in state and federal grants and contract funding from various OEM, s). Conducting reliability and maintainability investigation, conducting failure modes, effects and criticality analysis, providing forensic engineering and investigative services and due diligence studies to a diverse client base (4 major cases). These cases range from rubber tired cranes, aftermarket automotive devices, automotive systems and large power plants. Providing systems engineering expertise on large engineered systems such as cogeneration power plants using large reciprocating and gas turbine engines as prime movers. Program Manager for a US Navy contract for the Shipboard Gage Calibration Program, providing technical and documentation support to US Navy Calibration Teams.

RCI, Project Director, 1991 - 1992

Provided project management and technical expertise in developing and producing highly technical documentation for a new Marine Gas Turbine propulsion system and 2,000 KW diesel generator sets. Provided forensic engineering investigative services to the U.S. Navy and provided recommendations as to Government potential for financial responsibility as claimed by the ship builder.

Advanced Technology Inc., Manager, Systems Engineering Special Projects, 1983 - 1991

Responsible for field office management, marketing, project management and client relations. Development and management of various Marine Gas Turbine, Diesel Engine, Automated Control Systems and cogeneration programs including the RACER cogeneration propulsion system being developed for the US Navy by Solar Turbines Inc. These programs included operations, reliability, maintenance and training programs.

United States Navy, Gas Turbine Systems Chief, Senior (GSCS), 1963 - 1983

A very successful 20-year career, serving on various ships and shore stations, including a three-year tour as Senior Member of the Gas Turbine Mobile Training Team, evaluating ship's Engineering Department readiness and conducting in-depth material condition inspections on both diesel and gas turbine powered ships. Other noteworthy duties included a four-year tour teaching diesel engine propulsion systems and a brown water tour in Viet Nam with Coastal River Division 113.

### **Forensic Engineering Investigation Experience**

- Principal investigator in a Class Action Suit (certified January 07) against a Marine Diesel Engine Manufacturer. The case involves failure(s) of the marine engine aftercooler assemblies and the ingestion of metal contaminants and sea water by the engines resulting in premature failure..

Kerberos Solutions conducted the investigation that was directly responsible for uncovering the latent defects leading to these failures.

- Currently investigating a 3 engine, 1,125kW natural gas fueled cogeneration power plant that has failed to meet contract performance specifications. Kerberos Solutions was directly responsible in determining a number of installation, operations and maintenance defects in the systems. This case went to arbitration and was found in favor of the plaintiff. Kerberos has been retained to provide technical oversight in the restoration and operation of the cogeneration system.
- Currently conducting an investigation on two MAN 1,300 HP diesel engines that the owner has claimed numerous problems including broken oil pan bolts on one of the engines. Kerberos has arranged to place the engines on a dynamometer for complete testing and will provide a technical report to the vessel owner.
- Currently conducting a due-diligence investigation for an investor group regarding a cogen device using waste heat to power a thermal device in order to generate electricity.
- Currently investigating a failed 8.2 Detroit Diesel engine that has a connecting rod through the engine block. The vessel owner is in a dispute with his insurance company. The vessel is a 51', twin engine motor yacht
- Mr. Kelly and Kerberos Solutions associates are conducting a due-diligence investigation for a group of investors. The technology under investigation is a diesel fuel and gasoline enhancing technology. Kerberos Solutions is directly responsible for approving test protocols and securing proper engine testing facilities and services as well as laboratory services for chemical analysis of the fuel after it passes through the device. Kerberos is then tasked to provide a comprehensive technical report of its findings.
- Mr. Kelly is currently conducting an investigation involving a 16V-92 Detroit Diesel Engine used as a main propulsion engine in a 100' motor vessel. The engine has suffered a broken crankshaft after 150 operational hours of being rebuilt. This case settled in favor of the plaintiff and Kerberos solutions was retained to provide technical oversight during new engine assembly and installation. Kerberos also developed and implemented a propulsion system maintenance program including establishing a lube oil analysis program.
- Mr. Kelly was the designated engine expert for the plaintiff in a case involving excessive engine vibration in two CAT 3406Es installed in a 61' motor yacht. This case settled in September 04. Mr. Kelly participated in the settlement conference on behalf of the plaintiff.
- Mr. Kelly conducted a loss analysis for client in dispute with an insurance carrier regarding the total loss of a large natural gas fired CAT 3512/chiller compressor package involved in a roll over accident while being transported by a commercial carrier in New Jersey.
- Mr. Kelly was the primary investigator and case manager in the case of Evan's Cooling Systems vs. General Motors. The case included Patent Infringement and Trade Secret Misappropriation (black box agreement). Mr. Kelly was instrumental in the discovery of tampered evidence and bogus test results. Mr. Kelly developed and carried out numerous tests to demonstrate Evan's trade secret.
- Mr. Kelly was one of the designated experts in Fernandes vs. Case Equipment Company. This case involves the death of an operator of a large piece agricultural equipment that the steering system was allegedly improperly designed and that there is no emergency steering in the event of complete loss of hydraulic pressure. Mr. Kelly's area of responsibility is for the Plaintiff in evaluation of the automated diesel engine control system.
- Mr. Kelly the designated expert in Possinger vs. Power Source a civil matter whereas the allegations include unlawful discharge of fuel in to San Diego Bay and breaches of the Standard Of Care by contracted maintainers of the vessel's two Detroit Diesel Engine engines during an onboard overhaul.
- Mr. Kelly was the designated engine expert for the defense in Gough vs. Halton Marine, a Maritime case in Federal court. The allegations included improper Cat 3408 diesel engine repair

to a commercial fishing vessel. Mr. Kelly was the Primary Investigator and case manager. The case ended in favor of the defense.

- In the matter of TEMSCO vs. TW Fleet Mr. Kelly was retained to investigate allegations of premature component failure involving a General Motors V-8, 7.6-Liter Diesel engine installed in a commercial street-sweeping vehicle. During the initial investigation, Mr. Kelly determined that the engine parts being presented were in fact not the engine parts in question. Furthermore, the investigation revealed that some of the vital parts that were reported to be main contributors to the engine failure had been used in subsequent repairs to another engine without any apparent adverse effects. Mr. Kelly's defendant client, T.W. Fleet was released from the suit.
- Moss vs. U-Haul, in a recent case Mr. Kelly was designated to serve as a diesel engine maintenance expert on behalf of U-Haul Rental where an allegation of hearing loss due to a defective truck diesel engine was alleged. Mr. Kelly conducted a truck inspection, which included over the road testing and was preparing trial exhibits when the case settled in favor of U-Haul.
- Mr. Kelly developed a test protocol, conducted testing and prepared a performance report as a trial exhibit involving an automotive electric fuel pump for the plaintiff in a consumer fraud case. The defendant is an automobile dealership accused of over-charging for troubleshooting and unnecessary repair work.
- Ayers vs. Atomic Investments, Hyster Corporation. BKM was retained by the law firm representing Hyster, who was being sued by an operator of a mobile hydraulic crane built by Hyster. Briefly, the operator was injured when the crane rolled down a hill and ended upside down at the bottom of the hill. The operator alleged the crane engine had failed due to a failure of the engine governor, therefore, the crane was uncontrollable. This case originally started as a \$10 million lawsuit. BKM was in the process of developing a demonstration that would have proven the allegations false and preparing specific questions for the opposing expert when the case settled in favor of Hyster, as the result of the plaintiff becoming aware of the results of BKM's compelling analysis. Mr. Kelly was the primary investigator and case manager.
- For the Naval Sea Systems Command (NAVSEA), provided engineering investigation services concerning main propulsion and electrical power generation and distribution system issues for a new construction ship building program. Mr. Kelly provided NAVSEA with recommendations as to Government potential financial responsibility for claims filed by a major ship builder.
- San Diego County vs. Ch2M Hill - This case involved "Breaches of the Standard of Care for Design Engineers". Briefly, Ch2M Hill designed co-generation facilities for the county of San Diego using large reciprocating natural gas fueled engines to generate electric power and waste heat for cooling. The system failed to perform to the county's expectations. Ch2M Hill and others were sued. Mr. Kelly was retained as the primary investigator. Mr. Kelly was responsible for finding the root cause of the systems poor performance (operations personnel), the key witness, research of over 3 years worth of maintenance records and the development of the trial exhibits. The jury found 100% in favor of the defense.
- From 1980 to 1983, GSCS Kelly served as the Officer In Charge of the US Navy's Marine Gas Turbine Inspection and Training Team. The primary function of the team was to evaluate material condition and personnel performance onboard the Navy's newest class of destroyer's and frigate's utilizing the LM2500 and Allison K501-17 gas turbine engines. The frigate's utilized series 149 Detroit Diesels as the prime movers for ship's electrical power. A secondary role was to evaluate material condition and personnel performance on various diesel powered ships. This work included forensic engineering investigation into the cause of failure for both propulsion and power generation and auxiliary equipment.

## **PROFESSIONAL ACTIVITIES**

Forensic Expert Witness Association ([www.forensic.org](http://www.forensic.org))

## **EDUCATION**

### *Military Course Work:*

Thirteen major Naval engineering courses involving operations and maintenance of Diesel, Marine Gas Turbine and Steam propulsion and electrical generation systems, including ancillary equipment and their highly automated control systems.

### *Civilian Course Work:*

Detroit Diesel Corporation Diesel Engine Instructors Factory Course

Various College Courses

Program and Project Management

Proposal Writing

Planned Maintenance Management

## **PUBLICATIONS**

Numerous Technical Reports, Studies, Successful Bids and Proposals