



# Maritime Controls, Inc.

## OVERVIEW

In 1981, a group of highly experienced steam plant combustion control engineers started a high-technology field service company, Maritime Controls, Inc. (MCI), to service the liquefied natural gas (LNG) shipping industry. MCI's staff has a vast range of in depth experience in the gas sector ranging from vessel operations, repair, technical support, system design, installation and implementation.

Since 1981 MCI and its affiliates have provided technical/engineering assistance and field service to LNG carriers in conjunction with designing, installing and commissioning numerous upgrades and modifications as follows:

- Inert Gas Generator (IGG)
- Boiler Burner Management Control Systems, gas and oil fired
- Boiler Analog Control Systems, gas and oil fired
- Steam plant monitoring and Controls System
- Integrated Throttle control systems
- Boiler Chemical Dosing Control Systems
- Fuel Gas and Fuel Oil Flow Monitoring and Control Systems
- Gas Detection Systems
- Cargo Capacitance Measure Systems
- Ballast and Cargo Control and Monitoring Systems
- Cargo and Cool Down Pumps control and monitor system
- Cargo Gas Compressors and associated control and monitoring systems
- Electronic navigation and communication systems
- Electrical power generation and control and monitoring systems
- Electrical Power Switch Gear

In addition MCI has serviced numerous other types of vessels including container, crude oil and Floating Production Storage and Offloading (FPSO) vessels. MCI has also done work in the food processing industry, chemical recycle industry, petrochemical and aircraft manufacturing industry.



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MCI has extensive experience with designing, building and installing state-of-the-art process control systems to replace and/or enhance older control systems as well as building new systems from the ground up. MCI's experience includes the fabrication and pre-installation testing of four complete boiler control systems used in a major USA aircraft manufacturing facility.

In conjunction with engineering services, MCI has extensive field service capabilities which include on-site surveys, service and calibration of instrumentation, process control systems, pneumatic and electronic primary/secondary control system elements. MCI maintains an in-house service facility to handle complete equipment overhauls when field repairs are not feasible. This facility is maintained by experienced and highly trained technicians and is equipped with state-of-the-art calibration equipment traceable to NIST for guaranteed accuracy when calibrating instrumentation and gauges.

MCI's parts department specializes in procuring high quality, cost-effective Original Equipment Manufacturer (OEM) parts, direct replacement parts and equipment for obsolete systems suitable for maritime and other industrial applications that require extreme reliability. MCI understands the maritime environment and the importance of reliability, so MCI is careful to supply only parts and equipment that are approved by the Ship Classification Societies, i.e., American Bureau of Shipping (ABS), Det Norske Veritas (DNV) and Lloyd's Register (L R).

MCI's training staff is US Coast Guard approved and have extensive experience with design, installation, service and upgrade of a wide range of power generation, industrial control, measurement and monitoring systems utilized in maritime, LNG/LPG, petrochemical and manufacturing industry. MCI's trainers have conducted numerous training courses at Merchant Marine Union schools as follows:

**Steam Plant** - Comprehensive, practical hands-on training course for marine engineers and industrial engineers, focusing on the operation, safety controls and maintenance of control and monitoring systems typically employed in oil and gas fired steam propulsion, district steam and electrical power generating plants.

**Instrumentation** – Comprehensive, practical hands-on training course for marine engineers and industrial engineers, focusing on principles of operations, maintenance and calibration of general instrumentation. Understanding of intrinsically safe instrumentation utilizes in Hazardous environments to measure, monitor and control critical processes in the maritime, LNG/LPG, petrochemical and manufacturing industry.



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MCI has been providing specialized on board training courses on dual fuel steam propulsion LNG vessels since 1985. These specialized courses cover specific systems in detail, ensuring that the operating engineers fully understand the propulsion plant controls so that they can effectively conduct routine maintenance and perform emergency operations.

MCI's extensive experience with automation, combustion controls, electronics, electro-mechanical, instrumentation, measurement, process control, power generation, propulsion control systems and vessel operations allows MCI to offer clients cost-effective, commercially viable solutions to their automation, control system and training needs.