

ACCIDENTS and CRASHES

Walter Laird, PE, CMI, CFI
Paul Kamen, PE
Thomas Zarek CFEI/CVFI

- * Small craft accident reconstruction
- * Marine accident reconstruction
- * Marine collisions
- * Boat crash and collision analysis
- * Pleasure boat accidents analysis
- * Advanced boating investigations
- * Allisions
- * Human factors in traffic reconstruction
- * Coast Guard nautical rules

BATTERIES

Mike Eskra, CFEI

- * Battery systems and design
- * Battery systems failures
- * Battery fires and explosions

BIOMECHANICS

John Laughlin, M.Eng., P.E.

CONTROL SYSTEMS

Thomas Zarek, CFEI, CVFI
John Certuse, PE, CFEI
Mike Pinion, PE, CFEI

- * Outboard, inboard and I/O systems
- * Telemetry, navigation, sonar, fuel delivery and cooling systems
- * Marine systems operations
- * Electrical control systems

CRANES/LIFTING EQUIPMENT

Allen Palmer, PE
Alan Grossman, PE, MBA, JD

- * Cranes (overhead and mobile)
- * Lifting equipment

ELECTRICAL

Mike Pinion, PE, CFEI
Thomas Zarek, CFEI, CVFI

- * Electrical shock/electrocutions
- * Electrical fires and failures
- * Stray electrical current
- * On-board electrical systems

FIRE ORIGIN and CAUSE

Gene Bullington, CFC, CFEI, CFII
Paul Eason, PhD, PE, CFEI
Walter Laird, PE, CMI, CFI
John Certuse, PE, CFEI
Loren Griswold, CFI, CFEI, CVFI, CMI
Thomas Zarek CFEI/CVFI

MARINE ENGINEERING

Walter Laird, PE, CMI, CFI
Paul Kamen, PE
Dave Gerr, CEng, FRINA
Brian Davis, PE

- * Boat hulls and performance
- * Boat structures
- * Ergonomic and safety features
- * Engine and propulsion systems
- * Vessel mechanical systems
- * Stability review and analysis
- * Rigs and rigging
- * Sailboat keel structures and form
- * Structures and foundation
- * Site improvements
- * Utility systems
- * Marine designs

MARINE STRUCTURES

Brian Moody, PE
A.J.P. "Sonny" Launey, PE

- * Structural design defect of waterfront structures, buildings and foundations
- * Underwater and above water marine construction inspection
- * Marine and shipyard facilities
- * Building renovations and structural and foundation analysis and design

MATERIALS/ METALLURGY

Paul Eason, PhD, PE, CFEI
Walter Laird, PE, CMI, CFI
Roy Crooks, PhD, PE
Charles Prewitt, PE
Brian Davis, PE

- * Metals, plastics, glass and ceramic defects
- * Material selection, corrosion, fatigue and overload
- * Welding, soldering and brazing failures
- * Materials and metallurgy failure analysis
- * Failure, product defect and safety issues of metals
- * Metallurgical failures of steel components
- * Material handling systems

MECHANICAL ENGINEERING

Walter Laird, PE, CMI, CFI
Alan Grossman, PE, MBA, JD
Charles Prewitt, PE
Brian Davis, MSME, PE
Brian Davis, PE

- * Mechanical maintenance and engineering
- * Mechanical engineering
- * Mechanical equipment failures
- * Marine propulsion systems.

NAVAL ARCHITECTURE

Walter Laird, PE, CMI, CFI
Paul Kamen, PE
Dave Gerr, CEng, FRINA

- * Boat hulls and performance
- * Boat structures
- * Ergonomic and safety features
- * Engine and propulsion systems
- * Vessel mechanical systems
- * Stability review and analysis
- * Rigs and rigging
- * Sailboat keel structures and form
- * Structures and foundation
- * Site improvements
- * Utility systems
- * Marine designs

PRODUCT FAILURES

Alan Grossman, P.E., MBA, JD
Walter Laird, PE, CMI, CFI
Brian Davis, PE
Thomas Zarek CFEI/CVFI

- * Vessel equipment failure analysis

SAFETY and MAINTENANCE

Walter Laird, PE, CMI, CFI
John Certuse, PE, CFEI
Joseph Touchton
Alan Grossman, PE, MBA, JD
Brian Davis, PE
Thomas Zarek CFEI/CVFI
Dara Thomas, P.E.
John Leffler, P.E.

- * Combustion, propulsion, power generating, ships systems and maintenance programs
- * Coast Guard safety regulations
- * ABYC safety standards
- * Rules of the road/U.S. Inland Rules
- * Small boat operations (planning/navigation repair)
- * Explosive ordnance disposal
- * Coxswain and boat handling
- * Ship's underwater hull inspections and husbandry
- * Coast Guard navigation and collision avoidance requirements
- * Premises Liability

