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**KEVIN D. BEDSWORTH, CFEI, CFII, CVFI  
SENIOR MANAGING CONSULTANT**

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Mr. Bedsworth is a Senior Managing Consultant and degreed Mechanical Engineer with Engineering Systems Inc. (ESi), located in Miami, Florida. He has over 20 years' experience in all phases of boat manufacturing, including design, testing, plant operations, manufacturing, and new product development. In addition, he has experience in analysis of accidents, environmental regulations, and safety. Included in his expertise are engine design, mechanics, emissions, and related applications.

Prior to joining ESi, Mr. Bedsworth held positions ranging from Plant Manager and Chief Engineer to Vice President of Manufacturing and Development. As Chief Engineer, he was responsible for all phases of design, including prototype development and testing, production implementation, and tooling for all products.

Mr. Bedsworth has investigated and testified in cases involving a variety of specialty equipment including exercise equipment and hydraulic lift systems, as well as vehicle cases involving yacht propulsion system failures, commercial vehicles, experimental aircraft, and specialty vehicles. He has also testified as an expert witness in depositions and qualified as an expert in federal court.

**Areas of Specialization**

Yacht and Vehicle Engine and Driveline Technology  
Design and Performance  
Marine Product Development and Performance  
Automotive and Marine  
Specialty Vehicle and Commercial Vehicle Accident Reconstruction  
Fire Cause and Origin  
Mechanical/Property Loss Investigation

**Education**

B.S., Mechanical Engineering/ Internal Combustion Engines and Exhaust Emissions,  
University of Miami, Florida, 1986

*January 2022*

## **Professional Affiliations/Honors**

ASM International

National Association of Fire Investigators (NAFI)

Society of Automotive Engineers (SAE)

American Boat & Yacht Council (ABYC)

Member of Engine and Powertrain PTC

American Society of Testing and Materials (ASTM)

American Society of Mechanical Engineers (ASME)

United States Power Squadron (USPS)

S.P. Instructor in Boating Safety, Seamanship and Boat Handling

## **Positions Held**

### **Engineering Systems Inc., Miami, Florida**

Senior Managing Consultant, 2015 – Present

Senior Consultant, 2004 - 2015

Associate Staff Consultant, 2002 – 2003

### **Spantel Communications, Inc., Malaga, Spain**

Chief Technology Officer, 2000 - 2002

### **K.C. Breen and Associates Inc., Ft. Myers, Florida**

Affiliated Consultant, 1994 - 2001

### **Hovercraft Concepts, Inc., Miami, Florida**

President, 1991 - 2000

### **Scat Hovercraft, Inc., Miami, Florida**

Vice President of Manufacturing and Development, 1990 - 1991

Plant Manager, 1989 - 1990

Chief Engineer, 1986 - 1989

### **Analytical Technologies, Inc., Miami, Florida**

Dynamometer Technician, 1981 – 1985

### **Automotive Repair Facilities, Tidewater, Virginia**

Service Department/Body Shop Manager, 1979 - 1980

Shop Foreman, 1977 - 1979

Certified Line Technician, 1978 - 1979

Line Technician, 1974 - 1978

Tire Changer, 1973 - 1974

## **Selected Project Experience**

Accidents involving cranes, man lifts, bucket lifts, forklifts and elevators  
Vehicle accidents including commercial vehicles and vehicle roll-over  
Fire investigations including cars, boats, yachts, commercial vehicles, and industrial equipment  
Accidents involving power implements, construction and exercise equipment  
Failures of electromechanical systems and hydraulic systems for lifting and material handling  
Boat building standard of care  
Standard of care in vehicle and boat/yacht repairs including gas and diesel engines and drive train components  
Workplace injuries from mechanical equipment  
Losses involving special purpose vehicles and PTO (Power Take Off) driven equipment  
Boat design including engine and other component selection and installation  
Cause of boat accidents including operator responsibilities  
Failure of ultra-light and experimental aircraft engines

## **Continued Education**

Accessing & Interpreting Heavy Vehicle Event Recorders, Society of Automotive Engineers, May 2015  
Operation & Maintenance of Heavy Air Brake Systems Bendix Corp.  
April 2015  
Crash Data Retrieval Data Analyst  
November 2013  
Certified Fire & Explosion Investigator, Certified Fire & Explosion Instructor, National Association of Fire Investigators, March 2013  
Master Technician Certification, American Boat and Yacht Council  
July 2012  
Marine Electrical Certification, American Boat and Yacht Council  
July 2012  
BOSCH CSI, Crash Data Retrieval Specialist (CDR) Technician Level 1& Level 2  
May 2012  
Diesel Engine Certification, American Boat and Yacht Council  
March 2012  
Standards Certification, American Boat and Yacht Council  
March 2012



- Occupant and Vehicle Kinematics in Rollovers, Society of Automotive Engineers  
January 2009
- Advanced Commercial Motor Vehicle Crash Investigation, Institute of Police Technology  
and Management, December 2008
- Investigation of Commercial Vehicle Accidents  
Ft. Myers, Florida - September 2007
- Marine Electrical Certification, American Boat and Yacht Council  
January 2007
- Vehicle Accident Reconstruction Methods, Society of Automotive Engineers  
October 2006
- Inspection and Investigation of Commercial Vehicle Crashes, Institute of Police  
Technology and Management, University of North Florida, June 2006
- Product Liability for Yacht Designers and Engineers, New Product Development and  
Composite Construction, The Marine Surveyor as Expert Witness, The Three  
Cable Boat Investigating Fire Damaged Boats, International Boatbuilders'  
Conference, October 2005
- Propeller Injury Avoidance Task Force, United States Coast Guard Office of Boating,  
Safety, February and October 2005
- United States Coast Guard Carbon Monoxide Seminar, United States Coast Guard  
February and October 2005
- Special Problems in Traffic Accident Reconstruction, Institute of Police Technology and  
Management, 2005
- Marine Survey, Working with Insurance Claims Departments, Understanding Fiberglass  
Failure, Composites-Engineering Basics, International Boatbuilder's Conference,  
October 2004
- Propeller Injury Avoidance Task Force, United States Coast Guard Office of Boating  
Safety, February and October 2004
- United States Coast Guard Carbon Monoxide Seminar, United States Coast Guard  
February and October 2004
- Traffic Crash Reconstruction, Institute for Police Technology and Management  
October 2004

National Safe Boating Council and National Safe Boating Congress International Boating and Water Safety Summit, April 2004

Forensic Composite Research, Testing Metals for Marine Applications Evaporative Emissions and Fuel Systems Integrated Onboard Computer Systems Introduction to Infusion Solutions, Sound-Emissions Regulations, Styrene: Toxicology, Epidemiology and Regulations, Evaluating Secondary Bond Characteristics, International Boatbuilder's Conference, October 2003

Propeller Injury Avoidance Seminar, United States Coast Guard Office of Boating Safety February and October 2003

United States Coast Guard Carbon Monoxide Seminar  
February and October 2003

Special Problems in Traffic Accident Reconstruction, Institute of Police Technology and Management, 2003

Marine Accident Reconstruction, American Boat and Yacht Council  
2003

The Clean Air Act Fabricator Strategies under Title V, Presented by GLS and the U.S. EPA, Tampa, Florida, 1995

Hazardous/Toxic Waste Management for the Boating Industry Workshop, MACT Tier II Study, Presented by NMMA, Tampa, Florida, 1995

Joint Conference on Air Cushion Technology, Annapolis, Maryland, Conference sponsored by the U.S. Hovercraft Society and the ASNE, 1988

## **Publications/Presentations**

**Bedsworth, K., Butler, R. Rogers, G., Breen, K., and Fischer, W.**, "Commercial Vehicle Skid Distance Testing and Analysis," SAE International 2013-01-0771, Detroit, MI, April 2013

Presentation - **Bedsworth, K.D., Butler, R.J.**, "Commercial Vehicle Skid Distance Testing and Analysis," SAE World Congress, Detroit, MI, April 17, 2013

"Driver and Occupant Dynamics in a Staged Transit Bus Crash" IPTM – University of North Florida, Jacksonville, Florida, April 2007

"The Investigation and Analysis of Off-Road Recreational Vehicle Accidents" IPTM – University of North Florida, Jacksonville, Florida, April 2006

“Developments in Alternate Marine Transportation,” Society of Automotive Engineers

March 1995, 1995-08-01

“Summary of Recent Developments in the Recreational and Commercial Light Hovercraft Industry,” Intersociety High-Performance Marine Vehicle Conference, June 1992

Speaker: Fourth Annual Light Hovercraft Design Conference

Troy, Ohio, 1990

Chairman/Speaker: Third Annual Light Hovercraft Design Conference, Terre Haute,

Indiana, 1989

“Alternate Fuels Performance and Emissions Characteristics”

January 1984

“Methane Fueled Engine Performance and Emissions Characteristics,” The 18<sup>th</sup> Intersociety Energy Conversion Engineering Conference, August 1983

“Hydrogen Engine Performance Analysis, Final Report,” DOE Contract EC-77-G-03-1212

August 1982

## **Miscellaneous**

Recipient, Hoverclub of America Design Innovation Award, 1996 and 1997

Vice President, Hovercraft Manufacturers Association of North America, 1991 - 1992

Manager and Racer, Scat Hovercraft Factory Race Team, Three-time National

Champion in Formula S.

Third place Formula S in World Championship, 1991

Second place in Formula S in European Championship, England, 1991.

First place Formula S, Sorpete International, Portugal, 1992