

278 KAUFMAN RD, BLDG. 1 HOT SPRINGS, AR 71913 800-436-0697 WWW.RYAN-ENG.COM FAX 479-524-3047 479-524-4090

Vita/Russ Rasnic, P.E.



Director

Mr. Russ Rasnic provides leadership and management for the Ryan Forensics Division and brings a variety of strengths to the RE team. He is a licensed Professional Engineer with 20 plus years of professional experience as a mechanical, plant and manufacturing engineer in industrial process and machine design, failure analysis, engineering and manufacturing management.

Expertise

- ATVs/Motorcycles
- o Automotive Equipment/Engines
- Castings/Extrusions
- o Construction
- o Electromechanical Circuit Design
- Guarding
- HVAC/Cryogenics
- o Hydraulics/Pneumatics
- o Industrial Machinery and Equipment
- Infrared Systems

- Lift Trucks/Aerial Devices
- o Machine Design
- o Materials
- o Material Handling/Loading Dock Equipment
- o Manufacturing Processes/Management
- Natural Gas Pipelines
- o OSHA
- o Powdered Metal and MIM
- Safety Engineering
- Welding and Flame Cutting

Education

M.S. Mechanical Engineering, University of Arkansas, Fayetteville, AR B.S. Mechanical Engineering, University of Arkansas, Fayetteville, AR

1982

1981

Professional Experience

Director -Forensic Division, Ryan Engineering, Inc.

2002 - Present

Mechanical, electromechanical and forensic engineering, industrial consulting and machine design. International machine guarding consultant.

President/CEO/Chairman, Halo Spark Plug, Inc.

1999 - 2002

Took patent concept to viable product to manufacturing and sales over \$200K in less than two years. Duties encompassed all aspects of product design, production startup, plant management, sales, marketing and accounting. Developed international sales and contracts; secured exemption of securities for private sale. Appeared on a segment of the national television series *Auto Trends*.

ROL-LIFT Corporation

1988 - 1999

Operations Manager, (6 years)

P & L responsibility for materials handling equipment manufacturer, including all aspects of manufacturing plant operations.

Engineering and Product Development Manager, (2 years) Duties encompassed all manufacturing support, special product research and development engineering, as well as technical services, warranty, field service and quality assurance.

Engineering and Technical Services Manager – (2 ½ years) Engineering and customer service responsibilities, including parts sales, field service, warranty and technical assistance.

Vita/Russ Rasnic, P.E.

Senior Manufacturing Engineer, Chamberlain Group

1987 - 1988

Manufacturing/plant engineer for aluminum extrusion and storm door manufacturer.

Project Engineer, Texas Instruments, Inc.

1982 - 1987

Design, project engineering and leadership responsibilities for infrared systems and detectors manufactured for US Armed Forces. Worked extensively with exotic materials and alloys.

Graduate Teaching Assistant, University of Arkansas, Fayetteville, AR

1982

Field Engineer, Arkansas Western Gas Company, Fayetteville, AR

1981

Professional Certifications & Memberships

Professional Engineering Licenses:

Alabama, Arizona, Arkansas, California, Mississippi, New York, Tennessee, Texas, NCEES # 42051

Professional Memberships:

- American Society of Mechanical Engineers
- American Society of Metals
- Arkansas Academy of Mechanical Engineering
- Human Factors and Ergonomics Society
- Institute of Electrical and Electronic Engineers
- National Safety Council
- Society of Automotive Engineers

Professional Development – Partial List

- PLC Programming
- Safety Engineering and Hazard Evaluation
- Statistical Process Control
- Traffic Accident Reconstruction
- Ladder Tiplock Analysis Technical Paper
- ADA Compliance
- Certified Forklift Operator/Trainer
- Combustion and Emissions for Engineers
- Machine Guarding/Warnings Technical Paper
- Excellence in Manufacturing
- Hazardous Materials Transportation
- Safety and Risk Analysis

Professional Achievements

- Charter Member of Trade Societies Responsible for Development of Three ANSI Standards
- Co-Author, U.S. Patent Number 6,080,029 and Seven International Patents
- Department of Defense Quality Vendor Award, 1992-1996
- Former Department of Defense Secret Clearance
- OSHA Plant Inspection Exemptions, 1991-1999
- Plant Engineering Magazine "Product of the Year" Design Finalist, 1990
- Former President, Hot Springs YMCA Board of Directors
- Elected to Arkansas Academy of Mechanical Engineering, 2007/ Board of Directors 2008
- Guest Lecturer on Safety In Design University of Arkansas, 2010
- ASME Safety Engineering & Risk Analysis Division Technical Paper Reviewer/Technical Session Chair



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Vita/Ed Beard, P.E.

Senior Engineer

Mr. Ed Beard is a licensed Professional Engineer with 10 years of professional experience as a mechanical engineer in the areas of manufacturing, research and development, and product design. His manufacturing experience includes knowledge of punch presses, press brakes, shears, roll formers, computer numerical control (CNC) machines and all types of metal fabricating machinery. His manufacturing experience also includes training employees and ensuring plant compliance with Occupational Safety and Health Administrations (OSHA) rules and regulations.

Mr. Beard also has vast experience in the development and design of school buses to ensure they are compliant with Federal Motor Vehicle Safety Standards (FMVSS). Mr. Beard's engineering experience with school buses includes engineering analysis of structural steel members, weld failure, failure of rivets, screws, and adhesives, and side impact and roof crush testing. His experience also includes accelerated corrosion testing on metals and non-metals.

Mr. Beard has specific experience with the design of material handling products such as pallet jacks, scissor-lift tables, and stacker products. His engineering experience includes analysis of structural steel members and bearing failure. Mr. Beard has also been involved with the design of heat exchangers used in commercial heating and air-conditioning (HVAC) systems.

Expertise

o Industrial Machinery and Equipment	o Vehicle Braking/Steering/Suspension Failures
o Product Design	o Farm Equipment
o OSHA	o Commercial Vehicle DOT Compliance
o Material Handling Equipment	 Vehicle Theft Analysis
 Manufacturing Processes/Management 	o School Bus Design
o Machine Guarding	o Vehicle Accidents
 Hydraulics/Pneumatics 	o Lift Trucks

Education

B.S. Mechanical Engineering, Arkansas State University, Jonesboro, AR	1998
B.S. Agricultural Engineering, Arkansas State University, Jonesboro, AR	1998
M.B.A, Webster University, Little Rock, AR	2003

Professional Experience

Senior Engineer, Ryan Engineering, Inc.

Provide consulting services for legal, insurance, and corporate clients. Responsibilities include mechanical equipment and machinery analysis, industrial accident analysis, product design and safety analysis.

Senior Consultant, Rimkus Consulting Group

2008 - 2012

Provide consulting services for legal, insurance, and corporate clients. Responsibilities include mechanical equipment and machinery analysis, industrial accident analysis, product design and safety analysis.

Plant Manager, Industrial Component Supply

2006 - 2008

Responsibilities included managing all plant operations including production, quality, engineering, inventory control, and maintenance. Developed procedures and manufacturing processes, ensured OSHA compliance within facility, implemented all safety procedures/plans, and ensured all required resources are available. Developed heat exchangers for commercial HVAC units.

Vita/Ed Beard, P.E.

IC Corporation 2000 - 2006

Engineering Supervisor, (3 years)

Responsibilities included managing a group of engineers and drafters in addition to releasing all personal projects into production. Ensured all new designs or design changes to buses were compliant with Federal Motor Vehicle Safety Standards. Performed engineering analysis on structural members, bearings, and welds. Conducted roof crush and side impact tests on buses. Also conducted corrosion testing on metals and non-metals. Redesigned seats and crash barriers for buses.

Design Engineer, (3 years)

Worked within the new product group, where responsibilities included development of new models/products. Each project included developing a design concept, prototyping the concept, developing costing, and ensuring the design was ready for production. Worked with tooling suppliers if the design build required new or modified tooling. Supported pilot builds and worked with research and development to ensure parts were made for build events and prototyping.

Product Engineer, Rol-Lift Corporation

1998 - 2000

Duties encompassed all engineering and manufacturing support for pallet truck and stacker product lines. Responsibilities included reviewing special customer orders to create design changes based on the request. Released new drawings to the shop floor, created bills of materials, and ordered any special parts needed. Performed engineering calculations for pallet jacks, scissor lifts and forklift attachments.

Farm Laborer, Bowman Farms

1992 - 1997

Specialized in tilling soil for planting crops, precision land leveling, herbicide applications, and harvesting crops. Operated and helped repair farm equipment such as tractors, combines, and chemical applicators.

Professional Certifications & Associations

Professional Engineering Licenses:

Arkansas, Oklahoma, Mississippi, Missouri, Texas

Professional Associations:

National Council of Examiners for Engineering and Surveying (NCEES) #36595 American Society of Mechanical Engineers Society of Automotive Engineers National Safety Council

Specialized Courses:

- Certified Self-Propelled Scissor-Lift Aerial Platform and Aerial Lift Operator
- Certified Class 1 through 7 Lift Truck Trainer and Operator
- Detroit Diesel DDEC Reports Training Program Detroit Diesel
- Crash Data Retrieval (CDR) Technician Course Vetronix/Bosch
- Accident Investigation 1 & 2 Courses Northwestern University Center for Public Safety
- Traffic Accident Reconstruction 1 & 2 Courses Northwestern University Center for Public Safety
- Design Failure Mode and Effect Analysis (DFMEA) Facilitator Eastern Michigan University Center for Quality