Joseph H. Berk

Epitome

Technical Expertise: Manufacturing Optimization Failure Analysis

Lean Manufacturing Quality Management

Root Cause Analysis
Industrial Statistics
Risk Management
Cost Reduction
Design of Experiments
Procurement Improvement

Quality Function Deployment
Supervision Development
Project Management
Engineering Economics
Organizational Design
Profitability Improvement

Professional Experience: 35+ Years: United States Army, General Dynamics, Honeywell,

California State Polytechnic University, Aerojet Ordnance, Sargent-

Fletcher Company, Alcoa Composite Structures, Alfa Leisure,

BasinWater, Layne Christensen Company.

Teaching Experience: 20+ Years including University and Professional Training

Experience Highlights: Diverse training, management and consulting experience in high-

technology, engineering, and manufacturing organizations, with a special focus on helping organizations improve their engineering,

manufacturing and process capabilities.

Expert training repertoire includes courses on quality management, statistical applications in industrial environments, cost reduction,

failure analysis, and related topics.

Qualified as an expert witness before the U.S. Armed Services Board of

Contract Appeals on statistics, quality assurance and systems failure

analysis issues.

Widely published in the fields of manufacturing optimization and

assurance technologies, including numerous books, articles and

technical papers.

Academic Degrees

M.B.A. Pepperdine University, 1983

M.S.M.E Rutgers University, 1974

B.S.M.E. Rutgers University, 1973

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Professional Experience

2010 to Present White Eagle Aerospace, LLC

Oro Valley, AZ

Adjunct Instructor/Speaker

1984 to Present: J.H. Berk and Associates

Upland, California President/CEO

Consultant in design and process improvement. Clients include aerospace, electronics, biomedical, recreational vehicle, motorcycle, material handling,

munitions, water treatment, composites, and other industries.

1990 to Present: California State Polytechnic University

Pomona, California

Principal Faculty Member - Mechanical, Civil and Engineering Technology

Senior faculty member in the Mechanical, Civil and Engineering Technology departments, with courses including communications, computer applications, strength of materials, statics, fluid dynamics, and other engineering subjects.

2004 to 2007: Layne Christensen Company

Fontana, California

Branch Manager, Water Treatment Systems

Developed water treatment capabilities in the western United States. Wrote and sold proposals resulting in 57 engineered water treatment systems worth more than \$30 million to clients in Arizona, New Mexico, and California.

2002 to 2004: BasinWater

Rancho Cucamonga, California Director of Manufacturing

Joined company during startup phase. Designed production processes, secured manufacturing facility, and ramped production up to two treatment

systems per month.

Professional Experience (continued)

1998 to 2002: Alfa Leisure

Ontario, California

Director of Manufacturing & Engineering

Managed operations at three facilities for a \$100 million recreational vehicle company. Initiated motor home production startup and increased production to 10 motor homes per week, while attaining a 90% J.D. Powers customer

satisfaction index.

1994 to 1998: Alcoa Composite Structures

Monrovia, California

Quality Assurance Manager & Director of Operations

Directed operations for a \$48 million composites design and manufacturing organization. Improved EBITDA from \$0 to \$7.4 million. Increased shipments 15% while reducing headcount 12%. Eliminated Apache rotor blade disbonds.

Transitioned Boeing 737-700 spoilers to production.

1990 to 1994: Sargent-Fletcher Company

El Monte, California

Director of Quality Assurance, Engineering & Operations

Directed operations for a \$70 million engineering and manufacturing organization. Reduced past due deliveries to zero and took earnings from a loss position to an EBITDA of \$5.6 million. Sargent-Fletcher produced aerial

refueling systems, aircraft fuel tanks, and electronic pods.

1981 to 1989: Aerojet Ordnance

Downey, California

Director of Systems Engineering, Engineering & Value Improvement

Lead reliability and failure analysis. Transitioned Combined Effects Munition (a \$500 million program) and Gator Mine System (a \$100 million program) to production. Developed and sold 21 VECPs with awards exceeding \$15 million. Aerojet's product line included cluster bombs and artillery ammunition.

Professional Experience (continued)

1979 to 1981: Honeywell

Reliability & System Safety Engineer

1977-1979 General Dynamics

Reliability & System Safety Engineer

1973-1977 United States Army

Officer

Teaching Experience

2010 to Present: White Eagle Aerospace, LLC

Oro Valley, Arizona

Adjunct Instructor/Speaker

1990 to Present: California State Polytechnic University

Pomona, California

Principal Faculty Member

1984 to Present: J. H. Berk & Associates

Upland, California

Instructor/Short Course Lecturer

Technical Courses Developed and Taught

Cost Reduction

Delivery Performance Improvement

Effective Technical Presentations

Engineering Drawing Interpretation

Engineering Economics

Failure Analysis

Industrial Statistics

Technical Courses Developed and Taught (continued)

Lean Manufacturing

Manufacturing Leadership Training

Project Management

Quality Function Deployment

Quality Management

Quality Management for the Technology Sector

Rapid Cost Reduction

Risk Management

Root Cause Analysis

Root Cause Failure Analysis

Statistical Process Control

Books

- 1. <u>Cost Reduction and Optimization for Manufacturing and Industrial Companies</u>, Scrivener Press/Wiley (2010)
- 2. Systems Failure Analysis, ASM International (2009)
- 3. Engineering Digital Computations, California State Polytechnic University (2001)
- 4. Military and Police Motorcycles, Paladin Publishing (2001)
- 5. Quality Management for the Technology Sector, Butterworth-Heinemann (2000)
- 6. Engineering Communications, California State Polytechnic University (1997)
- 7. <u>Total Quality Management</u>, Sterling Publishing Company (1993)
- 8. The Gatling Gun From Yesterday to Today, Paladin Publishing (1991)
- 9. Managing Effectively, Sterling Publishing Company (1991)

Books (continued)

- 10. Financial Analysis on the IBM PC, Chilton Book Company (1984)
- 11. Financial Analysis on TI Computers, Chilton Book Company (1984)

Technical Publications and Magazine Articles

- 1. "Managing Multiple Water Treatment Projects"; East Valley Water District Annual Symposium, California (2005).
- 2. "Arsenic Treatment Technology Selection Factors"; East Valley Water District Annual Symposium, California (2005).
- 3. "Delivery Performance Improvement"; Nepcon West '98 Conference, Anaheim, California (1998).
- 4. "Systems Failure Analysis"; Nepcon West '95 Conference, Anaheim California (1995).
- 5. "Laser Reliability Modeling Challenges"; U.S. Army Predictive Technology Symposium (1990).
- 6. "Value Engineering and Complex Munition Systems"; Society of American Value Engineers Symposium (1989).
- 7. "Ordnance System Failure Analysis"; Reliability and Maintainability Symposium (198).
- 8. "Warranting Conventional Munitions"; Reliability and Maintainability Symposium, Aerojet Technology Magazine (1986).
- 9. "Safety in Ordnance Testing"; System Safety Society Symposium, U.S. Department of Defense Explosives Safety Symposium, Test Engineering Magazine (1985).
- 10. "Contractor Cluster Munitions Testing"; Reliability and Maintainability Symposium, Test Engineering Magazine (1988).
- 11. "The Combined Effects Munition System A Systems Approach to Munitions Procurement"; National Defense Magazine.
- 12. "Delegating Effectively"; Inland Business Magazine, Manage Magazine.
- 13. "Interviewing Effectively"; Inland Business Magazine, Rental Business Review, Manage Magazine, Business Woman, Tidewater Virginian.

Technical Publications and Magazine Articles (continued)

- 14. "Taking Stock with the IBM PC"; PC World Magazine.
- 15. "Configuration Management and Complex Weapon Systems"; Contract Management Magazine.
- 16. "The Inland Empire Defense Industry"; Inland Business Magazine.