

## James R Wixson, CVS-Life, CMfgE

phone (208) 520-2296 alt phone (425) 385-8028 email wix@srv.net

### OBJECTIVE Senior Systems Engineer Consultant

Use a strong working knowledge of DOE and DOD program requirements and processes combined with demonstrated knowledge of systems engineering principles, with emphasis on customer interfaces, mission and needs assessments, and various approaches to conducting alternatives analyses to meet customer needs and insure project success. Experienced in working on a multi-disciplinary integrated product teams and posses a working knowledge of value engineering and lean management disciplines, including multi-attribute utility analyses, uncertainty analyses, probabilistic modeling, and computer simulations principles and practices. Also have a working knowledge of alternative analyses, and multiple decision and uncertainty analysis software tools.

### SKILLS AND ABILITIES

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| <ul style="list-style-type: none"><li>- Systems Engineering</li><li>- Value Engineering</li><li>- Project Management</li><li>- Plant and Facility Layout</li><li>- Risk Management</li><li>- Quality Assurance &amp; Management</li><li>- Training Development and Delivery</li><li>- Root Cause Analysis and Problem Solving</li></ul> | <ul style="list-style-type: none"><li>- Industrial Engineering</li><li>- IT Systems Engineering</li><li>- Manufacturing Engineering</li><li>- Facility and Infrastructure Asset Planning</li><li>- Lean/Six Sigma/Process Improvement</li><li>- New Product/Process Development</li><li>- Maintenance &amp; Reliability Engineering</li><li>- Requirements Definition and Management</li></ul> |
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### EDUCATION

- Master's Certificate in Project Management, Villanova University, Philadelphia, PA, October 2004
- Master's Degree in Systems Engineering, 2003, University of Idaho, Idaho Falls, ID
- Master's of Business Administration, 1986, University of Phoenix, Salt Lake City, Utah, Thesis and Project - "Improving Product Development with Value Analysis/Value Engineering"
- Bachelor of Science in Industrial Engineering, 1977, University of Utah, SLC, Utah

### EMPLOYMENT HISTORY

**Sr. Consultant, Systems/Value Engineer:** Boeing 787 Dreamliner Program, Everett, WA **2/2006 - present**  
**Advisory Systems/Value Engineer** CH2M-WG Idaho, LLC (Idaho National Laboratory), Idaho Falls, ID **5/2005 – 2/2006**  
**Advisory Systems/Value Engineer** Bechtel BWXT Idaho, LLC (Idaho National Engineering Laboratory), Idaho Falls, ID **10/1999 – 5/2005**  
**Advisory Systems/Value Engineer** Lockheed-Martin Idaho Technologies, Inc., Idaho Falls, ID **7/1997 – 9/1999**  
**Staff Engineer** Lockheed-Martin Idaho Technologies, Inc.(Idaho National Engineering Laboratory), Idaho Falls, ID **10/1994 – 7/1997**  
**Engineering Specialist** EG&G Idaho, Inc.(Idaho National Engineering Laboratory), Idaho Falls, ID **6/1993 – 9/1994**  
**Senior Engineer** EG&G Idaho, Inc.(Idaho National Engineering Laboratory), Idaho Falls, ID **2/1990 – 5/1993**  
**Pricing and Contracts Administrator**, Raytheon Aircraft (Formerly E-SYSTEMS, INC., MONTEK DIV.), SLC, UTAH, 2/1987- 2/1990  
**Sr. Industrial/Manufacturing Engineer Value Engineering Team Lead**, Raytheon Aircraft (Formerly E-SYSTEMS, INC., MONTEK DIV.), Salt Lake, UTAH, (5/1983 – 2/1987)  
**Facilities Engineer**, EIMCO Mining Machinery Div., SLC, Utah, (10/1981 – 3/1983)  
**Manufacturing Engineer**, EIMCO Process Equipment Division, SLC, Utah, (10/1980 – 10/1981)  
**Industrial Engineer**, Envirotech, Inc. Rubber Engineering, Div. Salt Lake City, UT (4/1979 – 10-1980)  
**Associate Production Engineer**, Sperry Defense Systems, Inc., SLC, Utah, (7/1978 - 4/1979)  
**Consultant**, Los Alamos Technical Associates, Simulation and Modeling using ARENA software of material handing (4/05 – 5/05)  
**Consultant**, Pillsbury, Inc., Shelly, ID Developed Performance Based Maintenance Training Program. (9/93-2/94)  
**Consultant**, Sorenson Research, Abbot Laboratories, Inc., SLC, UT, Work Measurement and Cost Reduction (3/83 – 8/83)

### TEACHING EXPERIENCE

**Affiliate Instructor, University of Idaho, Industrial Technology Program** **Sept. 2002 - Present**  

- Develop and teach undergraduate and graduate courses in Total Quality Management and Quality Assurance and Management, including Lean, Six Sigma, Value Engineering, and New Product / Process Development

### DOD & COMMERCIAL PROGRAM EXPERIENCE

- AN/TRN-26, portable, dual channel tactical air navigation system (TACAN) system
- AN/TRN-41 TACAN, portable, air droppable, unmanned Tactical Air Navigation (TACAN) system
- DZAAS, Drop Zone Assembly Aid System, developed for DARPA.
- COMPASS EARS – Emergency Airborn Reaction System
- Cruise Missile electro-mechanical flight control systems
- LANCE Missile System, electro-mechanical actuation componentets
- Electro-Mechanical & Electro-Hydraulic flight control actuation systems for various military aircraft including the Advanced Tactical Fighter (ATF) and B2 Bomber and Boeing 737/757 flight control systems.

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### SECURITY CLEARANCE HISTORY

**Top Secret/CRYPTO Access:** 8/1967 – 7/1971, OSI, US Air Force, Communications Specialist, AF18813979

**Secret:** 8/1978 – 4/1979, DISCO, Sperry Defense Systems, SLC, UT

**Secret:** 12/1983 – 12/1988, DISCO, E-Systems, Inc., Montek Div, SLC, UT.

**Secret/SCI:** 12/1988 – 2/1990, DISCO, E-Systems, Inc., Montek Div, SLC, UT.

**DOE L: 6/1991 – Present,** DOE, Idaho National Engineering Laboratory, Idaho Falls, ID (**Active Clearance**)

### ACCOMPLISHMENTS/SKILLS

- Certified Value Specialist (CVS – Life) through the Society of American Value Engineers
- Certified Manufacturing Engineer, Society of Manufacturing Engineers (SME)
- Certified in Six Sigma through Six Sigma Qualtech
- Certified MOST and Maxi-MOST Predetermined Time Standards Applicator, Maynard Management Institute
- Skilled facilitator, presenter, and consultant able to lead interdisciplinary teams to creative solutions of complex problems in design, management, organization, construction, and other areas critical to company's success.
- Trained and experienced in SLATE, CORE, RequisitePro and RDD-100 requirements management tools.
- Trained and experienced in ARENA, Extend, and SmartER modeling tools. Familiar with VENSIM and STELLA/I-THINK systems dynamics tools.
- Skilled in Microsoft products including MS Word, Excel, Access, PowerPoint, Visio, TurboCad and MS Project

### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Senior Member of SME and ASQ, member PMI, SAVE, IIE, and INCOSE.
- SME National Members Council, 2004 - 2005
- Chairman, ASQ Section 0603, 2004 - 2005
- Chairman SME Chapter 85, '86-87 and 2002, and other executive positions.
- Chairman, SME, Region 7, Zone 1, '90-91., Region 13 Secretary 1995-96
- Chairmen SME Region 13 1997-1998, and other region executive positions.
- Guest lecturer on Value Engineering and Concurrent Engineering in undergraduate and graduate courses in Mechanical Design and Manufacturing Engineering courses at universities in Idaho, Utah, and California, SME and IIE technical meetings and conferences, and for the Society of American Value Engineers (SAVE).
- Published and presented original papers on Value Management and Value Engineering at international conferences for the SAVE. (1987, 1991, 1992, 1997, 2002 and 2005) and INCOSE '99.
- Guest presenter/facilitator at the Space Operations Technical Subcommittee of the American Institute of Aeronautics and Astronautics Third Annual Workshop on Reducing the Cost of Space Operations, 7-8 May, 1997, Washington, DC.
- Invited speaker at Utah State University, Partners in Business, Shingo Prize Operational Excellence Conference, 10/1 –2/2003, topic: Building Value into Design and Operations with Value Engineering.

### PUBLICATIONS

- [A Value Management Approach to Improving Quality Performance](#), Society of American Value Engineers, 2005 SAVE International Conference.
- [A Systems Dynamics View of the Theory of Constraints](#), Systems Dynamics Society, 2003, 23rd Annual Systems Dynamics Society Conference,
- [How Root Cause Analysis can Improve the Value Methodology](#), Society of American Value Engineers, 2002 SAVE International Conference.
- [Functional Analysis and Decomposition using Function Analysis Systems Technique](#), International Council on Systems Engineering (INCOSE) 1999 Annual Symposium, Brighton, England, 1999 Conference Proceedings, p. 963 – 968
- [Development of the Environmental Management Integrated Baseline at the Idaho National Engineering Laboratory Using Systems Engineering](#), International Council on Systems Engineering (INCOSE) 1997 Annual Symposium, Los Angeles, CA, 1997 Conference Proceedings, co-authors, James A. Murphy, Robert M. Caliva, James R. Wixson
- [Value Managed Failure Analysis and Product/Process Improvement](#), Society of American Value Engineers, 1997 SAVE International Conference Proceedings, p 276 - 283
- [The Development of an ES&H Action Plan using Management Oversight and Risk Tree Analysis and Function Analysis Systems Technique](#), Society of American Value Engineers, 1992 SAVE International Conference Proceedings, Pgs 29 -36.
- [The Human Side of Value Engineering](#), Society of American Value Engineers, 1991 SAVE International Conference Proceedings, p 30. (co-author with Harold J. Heydt)
- [Improving Product Development with Value Analysis/Value Engineering, a Total Management Tool](#), Society of American Value Engineers International, 1987 SAVE International Conference, p. 51 – 66
- MILITARY EXPERIENCE: U. S. Air Force, SGT, E-4, Honorable Discharge (1967 - 1971)