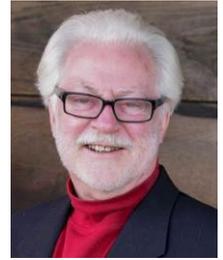**Rick Dove** – Brief Bio
- Independent Operator, Self Employed, Anthem, AZ, 575-770-7101, dove@parshift.com
- Fellow, International Council on Systems Engineering (INCOSE)

Rick is a Fellow of the International Council on Systems Engineering (INCOSE), won the INCOSE Outstanding Service Award in 2018, chairs the working group for Agile Systems and Systems Engineering, the working group for System Security Engineering, leads the project for System Security in the Future of Systems Engineering (FuSE), and leads the project for Agility in the Future of Systems Engineering.

He founded Paradigm Shift International, Inc. in 1991 and dissolved it in 2020. PSI functioned as an agile system and enterprise research, development, and project management firm; providing program and interim executive management for agile systems and enterprise projects; and security applications based on the Kennen IP, with Rick as PI for DHS and then DoD SBIR contracts for large scale immune-system-like anomaly detection and cortical-like hierarchical sense-making.

Rick was associated with Stevens Institute of Technology from 2005-2021 in the School of Systems and Enterprises where he developed and taught upper level courses in the engineering and design of agile systems, and agile systems engineering processes. At Stevens he received the 2013 Navigator Award for "leading the way for students in systems engineering."

Rick was a partner in Kennen Technologies, LLC, which licenses patented IP for a breakthrough VLSI massively-parallel pattern-recognition processor – removing cost/time/accuracy tradeoffs in complex pattern recognition applications. Rick was PI for two DHS SBIR contracts that supported the IP prototyping through production licensing.

He is author of Value Propositioning - Perception and Misperception in Decision Making, Iceni Books, 2005; author of Response Ability: The Language, Structure, and Culture of the Agile Enterprise, Wiley, 2001, and co-author of 21st Century Manufacturing Enterprise Strategy, Diane Pub Co, 1991.

He was co-principal investigator of the 1991 industry-led 21st Century Manufacturing Enterprise Strategy project conducted at Lehigh University that identified Agility as a principle competitive issue. He has facilitated partnership formation strategies, funding, and program management for major consortia projects such as the AIMS Agile Manufacturing Pilot project funded by ARPA (Lockheed, Texas Instruments, Rocketdyne).

In 2002 he accepted a full time change management assignment as President of the ProMetal division of Extrude Hone Corporation, a company with MIT-licensed layered-manufacturing technology that prints three dimensional objects from metal powders. In 12 months he took this R&D-locked organization into commercial operation, selling two different highly-complex machines and services from two shops that provided art-to-part production.

In 1999 he accepted a 7/8-time start-up management assignment at Silterra, a new semiconductor foundry near Penang, Malaysia. Over 2-1/2 years he served as the initial CIO/CSO where he architected and program managed the design and implementation of a unique highly adaptable enterprise IT infrastructure, a unique eBusiness capability featuring active service management and customer relationship interaction, an integrated factory planner/scheduler featuring continuous operation, and an on-line corporate strategic-project portfolio management system. He also led a quarterly management/executive development program.

In 1994 he accepted a 3/4 time assignment at The Agility Forum at Lehigh University, as Director of Strategic Analysis and Chairman of the Strategic Analysis Working Group. Over a two year period he developed and managed the research agenda, organized and managed the industry participation strategy that carried out the agenda, chaired the Agile Operations and the Agile Business Practices focus groups, planned and managed the development of the Best Agile Practice benchmarking reference base, and designing and organized the Forum's acclaimed 1995 conference with over 100 technical papers presented on Agility.

In 1991 he accepted a DoD funded, NSF-channeled assignment at Lehigh University, as co-principle-investigator of the 21st Century Manufacturing Enterprise Strategy project, founding the concept of agile systems and enterprises.

In 1989, as president of Flexis Controls, a manufacturing software firm, Rick chaired the National Center for Manufacturing Science's Technology Review Board, and led the development of this consortia's first research agenda. In adjacent years he also organized and implemented the structure and operating policies for industry participation groups, and chaired the Computer Integrated Operations group.

Rick was instrumental in developing initial USA relationships with the Japanese-initiated Intelligent Manufacturing Systems (IMS) international consortia on manufacturing research. His monthly essays on competitive manufacturing and enterprise were published in the USA, China, Korea, and India. He has done business in Malaysia, China, Japan, Italy, France, Germany, and the UK.

Prior to 1991 he was a principal in a variety of corporate start-up and turnaround ventures. He has raised venture funding, led companies, experienced all executive positions, and founded and fixed companies in the computer, office products, systems integration, software, food processing, and food service industries.

Rick's experience base includes the automotive, aerospace/defense, semiconductor, computer, software, and metal-working industries. He holds a BSEE from Carnegie-Mellon University with a minor in economics. His publication list numbers in excess of 200 and is available upon request.
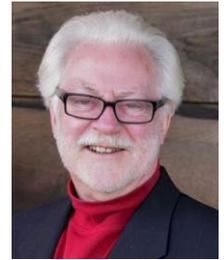
Career Positions

2021-   Independent Operator, SELF EMPLOYED, Anthem, Arizona.
2017-2019 Researcher, SYSTEMS ENGINEERING RESEARCH CENTER, Washington, DC
2009-2021 Adjunct Professor, STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, New Jersey.
2006-2008 Industry Professor, STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, New Jersey.
2005-2022 Partner, KENNEN TECHNOLOGIES, Albuquerque, New Mexico, Co-Founder.
1991-2020 CEO, PARADIGM SHIFT INTERNATIONAL, Anthem, Arizona, Founder.
2002-2003 Assignment--PROMETAL Division of Extrude Hone Corp, Irwin, PA, President (Full time interim position).
1999-2002 Assignment--SILTERRA, Kulim, Malaysia, Strategic Programs and Acting CIO (7/8 time contract position)
1994-1995 Assignment--AGILITY FORUM, Lehigh University, Director Strategic Analysis (3/4 time contract position).
1991-1991 Assignment--IACOCCA INSTITUTE, Lehigh U., co-PI of 21st Century Manufacturing Enterprise Strategy.
1989-1991 Tech Review Board Chair--NATIONAL CENTER FOR MANUFACTURING SCIENCES, Ann Arbor, MI.
1987-1991 CEO--FLEXIS CONTROLS (nee SAVOIR), Hayward, CA, President/CEO, and Chairman.
1982-1987 CEO--THE MARKETING FORUM, Oakland, CA, Founder.
1977-1981 VP--FRIDEN-ALCATEL, Hayward, CA, Director of Engineering, Director of Marketing.
1975-1985 CEO/Winemaker--MONTCLAIR WINERY, Oakland, CA, Founder.
1971-1977 VP--BALL COMPUTER PRODUCTS, Sunnyvale, CA, Director of Marketing.
1969-1971 Staff--BERKELEY COMPUTER CORPORATION, Berkeley, CA, Systems Developer, Mgr of Support.
1965-1969 Staff--CARNEGIE MELLON UNIVERSITY, Pittsburgh, PA, Computer Science, Systems Developer.
1961-1965 Staff--WESTINGHOUSE RESEARCH LABS, Churchill Boro, PA, Computer Science, Systems Developer.

Selected Professional Activities

- INCOSE Security Working Group Chair, 2007-present
- INCOSE Agility Working Group Chair, 2012-present
- INCOSE Project Lead, Security in the Future of Systems Engineering (FuSE Initiative), 2019-present
- INCOSE Project Lead, Agility in the Future of Systems Engineering (FuSE Initiative), 2022-present
- Theme Editor, INCOSE INSIGHT 6/2023, 6/2022, 9/2021, 9/2020, 6/2018, 7/2016, 7/2014, 7/2013, 7/2012, 7/2011, 7/2009.
- Keynote: "Agile Systems Engineering – A Life Cycle Strategy and Model", Australian Sys. Eng. Workshop, 10/2019.
- Organizer/Program Director, 2016/17/19, Socorro Systems Summit, New Mexico Tech, Socorro NM.
- Plenary speaker, 2016, ISSS, Enabling and Facilitating Engineered Sustainability, U. of Colorado, Boulder, July.
- Keynote and Panelist, 2014, The Technion Gordon Center for Systems Engineering (Israel), Agile and Lean Systems Engineering: Complimentary and Contradictory relationships.
- Principle Investigator, Novel Detection Mechanisms for Advanced Persistent Threat, OSD/Army, 2013-2014.
- Contributing author, 2013. Three sections of IEEE Smart Grid Vision for Computing: 2030 and Beyond. Institute of Electrical and Electronics Engineers, April.
- Plenary presentation, 2012, Introduction to Self-Organizing Adaptive Systems, IEEE International Carnahan Conference on Security Technology (ICCST), Newton, MA, 15-18 Oct.
- Invited participant, 2012 workshop: Computational Cyber Security In Compromised Environments (C3E), Office of the Director of National Intelligence and NSA, West Point, 10-12Sep.
- Chairman, Award winning INCOSE working group on Agile Systems and Systems Engineering, 2012-current
- Invited participant – 2012 workshop: IEEE Computer Society Smart Grid Vision Project Cyber Security Workshop, U. of Illinois, Urbana, IL, June 21.
- Invited participant, 2011 workshop: Computational Cyber Security In Compromised Environments (C3E), Office of the Director of National Intelligence and NSA, Keystone, Colorado, 25-28Sep
- Invited participant – 2011 workshop: Rethinking Cybersecurity, Center for Risk, Management of Engineering Systems and the Institute for Information Infrastructure Protection (I3P), University of Virginia, 16-17Nov.
- Principal Investigator, Self Organizing Resilient Network Sensing, DHS S&T D10PC20039, 2010Oct-2011Apr.
- Keynote: Systems Engineers R Us-Oldest Profession in the World, AFRL La Luz Academy, Kirtland AFB, 2010Jul.
- Invited participant, 2010 workshop: New Approaches to Security Engineering, Systems Engineering Research Center (SERC), Washington D.C., 31Mar-1Apr.
- Chairman, Award winning INCOSE working group on Systems Security Engineering, 2007-current
- Principal Investigator, Hardware Assisted Security Platform, DHS S&T NBCHC070016, 2007Apr-2009Jun.
- Principal Investigator, Secure Security Monitor, DHS S&T NBCHC060044, 2005Dec-2006Jun.
- Keynote, "Agile Enterprise Cornerstones: Knowledge, Values, Response Ability ", IFIP 8.6 Conference, May 2005
- Director, INCOSE Enchantment Chapter, Albuquerque, New Mexico. 2005-2019
- Monthly Column "Agile and Otherwise" in Automotive Design & Production, GardnerHanzer, 1994-2001
- Keynote: "Business As Usual In Unusual Times", Northwest Manufacturing Expo, Portland, 6/99
- Keynote: "Knowthing Happens Until Somebody Learns Something", Knowledge Mgmnt Conf, New York, 4/98
- Keynote: "Education in the Year 2020", CAM-I Educational Advisory Board, 8/97
- Keynote: "Business Practices in 2020", National Research Council, 3/97
- Keynote: "Business Change Proficiency", Centre for Exploitation of Science and Technology, UK, 7/96

Rick Dove – Curriculum Vitae
- Independent Operator (Self Employed), Anthem, AZ, 575-770-7101, dove@parshift.com

Education
B.S. Electrical Engineering, 6/69, minor in Economics, Carnegie Mellon Univ., Pittsburgh, PA.

Awards
<mark>Outstanding Service, INCOSE</mark>
<mark>Fellow, INCOSE</mark>
<mark>Navigator, Stevens Institute of Technology, Systems and Enterprise</mark>
<mark>Fellow, Agility Forum</mark>

Career Activities
2022 – present, INCOSE project lead, Agility in the Future of Systems Engineering

2019 – present, INCOSE project lead, Security in the Future of Systems Engineering.

2012 – present, INCOSE Systems Engineering Agility Working Group Chair

2007 – present, INCOSE Systems Engineering Security Working Group Chair

2005 – 2022: Partner, KENNEN TECHNOLOGIES, LLC, Albuquerque, NM. This company licenses patented IP for a breakthrough VLSI massively-parallel pattern-recognition processor – removing cost/time/accuracy tradeoffs in complex pattern recognition applications. Rick was PI for the two DHS SBIR contracts that supported IP development and prototyping through initial production licensing.

2006 – 2021: Industry Professor 2006-2008, Adjunct Professor 2009-2021, STEVENS INSTITUTE OF TECHNOLOGY, Hoboken, New Jersey. Rick developed and taught graduate courses in the engineering and design of agile systems for the School of Systems and Enterprises. Emphasis is on architecture and design of agile systems, systems of systems, and enterprise systems – resilient response, composable response, agile security, system interoperability, and self organization. The School gave him the 2013 Navigator Award for "leading the way for students in systems engineering."

1991 – 2020: CEO--PARADIGM SHIFT INTERNATIONAL, Anthem, AZ. An agile system research, development, and program management firm engaged with new security strategies and technologies, application development for new massive parallel pattern recognition technology, and agile enterprise-systems of all kinds. PSI developed security and other pattern recognition applications based on the Kennen IP, with Rick as PI for DHS and then DoD SBIR contracts for large scale immune-system-like anomaly detection and cortical-like hierarchical sense-making for zero-day security attacks.

2017 – 2019, SYSTEMS ENGINEERING RESEARCH CENTER, Washington DC, RT168 project: Transforming Systems Engineering Through Model-Centric Engineering. Responsible for Use Case 11: Assess AVCE (Armament Virtual Collaboratory Environment) iMBE-E (Integrated Model Based Engineering Environment).

2005 – 2019: INCOSE (International Council on Systems Engineering). Served as 2015 and 2018 President of the New Mexico Chapter, and as Chapter Board Director 2005-2019. INCOSE Fellow in 2014, INCOSE Outstanding Service Award in 2018.

2002 – 2003: President (Interim Exec Assignment)--PROMETAL DIVISION EXTRUDE HONE CORPORATION, Irwin, Pennsylvania, President – ProMetal provides advanced rapid production equipment and production services with MIT-developed technology that prints a three dimensional object one layer at a time from proprietary formulations of metal and ceramic powders and binders. Change management was the assignment. In 12 months he took this R&D-locked organization into commercial operation and production of both highly-complex machines and art-to-part production services: staffed engineering management, a sales department, and a service department; established operating procedures, financial reporting, and business processes for two operational part-production shops, a machine production capability, and development engineering; completed process stabilization and two commercial machine development projects; established a unique and leadership value proposition; identified and opened negotiations with a dominant (confidential) market supplier for 1000+ machines over a 5-year period; and took the first commercial machine order.

1999 – 2002: CIO/CSO (Interim Exec Assignment)--SILTERRA, a semiconductor foundry start-up near Penang, Malaysia. Developed strategic programs and served as acting CIO and CISO. Program Manager and architect/strategist for design and implementation of: (1) a highly adaptable enterprise IT infrastructure integrating ERP applications from Oracle, PeopleSoft, Adexa, and the BEA enterprise bus, (2) a unique eBusiness capability providing active service management and customer relationship interaction built on Oracle 8i, an Epicentric portal, and MicroStrategy Web Server, (3) an integrated Adexa factory planner/scheduler uniquely featuring continuous operation, and (4) an on-line corporate strategic-project portfolio management system. Also provided strategy planning and development for a unique rolling responsibility service practice, an IT process-management organizational structure, and a push-the-state-of-the-art IT security program; and planed and led quarterly management/executive meetings, learning programs, and corporate cultural development.

1991 – 1994, AGILITY FORUM, IACOCCA INSTITUTE, Lehigh University, Bethlehem, PA. Co-PI on the 1991 OSD/NAVY funded 21st Century Manufacturing Enterprise Strategy project conducted at Lehigh University that identified Agility as the next principle competitive issue. He was subsequently Director of Strategy and Research at the DARPA/NSF funded Agility Forum, leading the agenda and engagement of over a thousand people and 250

organizations in the investigation and development of agile system concepts. Developed the research agenda and analytical framework for the Agility Forum; organized the activities and structures that carried out the agenda, developed "self-sufficiency" business plan, chaired the Agile Operations Focus Group and the Agile Business Practices Focus Group, defined industry- participation Focus Group mechanisms, led development of Best Agile Practice benchmarking reference base, and designed and organized the Forum's acclaimed 1995 conference with over 100 technical papers presented on Agility. Rick created the Change Proficiency Maturity Model for analyzing corporate adaptability, Ten Principles of Highly Adaptable Systems for designing agile systems, the Response Ability Analysis process for defining agile system requirements, and the Agile Enterprise Reference Model.

1991 – 1991: Co-Principal Investigator (Assignment)--IACOCCA INSTITUTE, Lehigh University, Bethlehem, PA, co-principal investigator of 21st Century Manufacturing Enterprise Strategy. Consulted to the DoD on formative nature and location for this strategic program, then partnered with the Director of the Iacocca institute as co-principal investigator, recruited blue-ribbon industry workshop participants, guided the conclusion toward agility as a focus, and authored various sections of final report.

1988 – 1991: Volunteer--NATIONAL CENTER FOR MANUFACTURING SCIENCES, Ann Arbor, MI, member and chairman ('89) of the Technology Review Board and Computer Integrated Operations group ('89-91). Developed and implemented new organizational structure and operating policies for industry participation groups, led the development of first research agenda as Chair of the Technology Review Board. Initiated relationship with international IMS program.

1987 – 1991: Chairman/CEO--FLEXIS CONTROLS (nee SAVOIR), Hayward, CA., President, CEO, and then Chairman of the Board. This company was founded in 1984 to provide an integrated systems engineering environment for the specification, design, development, integration, and maintenance of computer-integrated manufacturing control systems. Dove secured the first two rounds of venture financing for this company and secured a patent on the firm's fundamental software technology.

1982 – 1987: Chairman/CEO--THE MARKETING FORUM, Oakland, California, Founder and President. This management consulting firm specialized in strategic planning and implementation of market-entry and business- development programs for technology-focused firms. Clients that served the manufacturing industries included systems integrators, controls manufacturers, material handling firms, CAD/CAM workstation companies, network systems companies, a super-computer company, and a cell-controller development firm.

1975 – 1985: Chairman/CEO--MONTCLAIR WINERY, Founder and winemaker. Founded and built this award- winning 2,000 case/year "boutique" winery in Oakland, California. Designed specialty processing equipment for small- volume-winery production, including automated 60/minute bottle labeler, raw material transport and handling systems, pressurized wine transfer systems, and cold fermentation facility. This winery made Zinfandel, Cabernet Sauvignon, and French Columbard from grapes grown in Sonoma County, California. Liquidated winery in 1985.

1977 – 1981: Vice President--FRIDEN-ALCATEL, Hayward, California; Director of Engineering and Development, and Director of Marketing. Dove was a member of the turn-around team that bought this organization from Singer Corporation and 2.5 years later sold it to CIT Alcatel. As Director of Engineering & Development he was initially responsible for developing the specifications of the company's electronic products and building the engineering and development departments. As Vice President of Marketing and Sales, he subsequently developed the product strategy and led the company's market introduction of the world's first electronic postage meter, and introduced a family of electronic postal and shipping computing scales.

1971 – 1977: Vice President--BALL COMPUTER PRODUCTS, a division of Ball Corporation, Sunnyvale, California. Director of Marketing and Sales. Originally Decision, Inc, sold to Ball Corporation in 1974. Assimilated two acquisitions. Company was engaged in OEM and end-user sales of disk drives, mini-computer systems, optical character recognition and mark-sense equipment, and remittance processing systems.

1969 – 1971: Technical Staff--BERKELEY COMPUTER CORPORATION, Berkeley, California, System Developer/Analyst and Manager of Systems Support. Involved early after formation of company. Responsible for design and implementation of compilers and portions of the operating system, and managed technical writing. Company pioneered machine architectures for large scale multi-tasking and time-sharing, and built the BCC-500, an early Internet resource at the University of Hawaii.

1965 – 1969: Technical Staff--CARNEGIE MELLON UNIVERSITY, Pittsburgh, Pennsylvania, Computer Science Department, System Developer/Analyst. This position was full-time between semesters and half-time during semesters, and was spent principally developing a compiler-compiler called CABAL and a system for developing artificial intelligence knowledge networks. Published four papers as an undergraduate.

1961 – 1965: Technical Staff--WESTINGHOUSE RESEARCH LABORATORIES, Pittsburgh, Pennsylvania, Computer Science Department, System Developer/Analyst. Developed a proprietary event-based simulation language and modeled the ingot processing area at the J&L Steel Rolling Mills. Developed testing programs for Westinghouse's Prodac line of process-control computers. Developed improved method for determining optimum valve cracking points in a power generation facility.

Inventions
- Electronic Postage Meter, Patent #4,484,307, 11/20/84, with Quatse and Dodge.
- Improved Valve Cracking Algorithm for Economic Power Generation, proprietary to Westinghouse Research Laboratories, 1965.

Books
- Value Propositioning - Perception and Misperception in Decision Making, Iceni Books, 2005
- Response Ability: The Language, Structure, and Culture of the Agile Enterprise, Wiley, 2001
- Co-author of 21st Century Manufacturing Enterprise, Diane Pub Co, 1991.

Webinar Series (downloads at http://www.parshift.com/publications.htm)
- Dove, R. 2023. Agile 206: Agile SE … It's Not Your Father's Oldsmobile. INCOSE Webinar, September
- Dove, R. 2022. Agile 205: Agile SE in the Future of Systems Engineering (FuSE). INCOSE Webinar, September.
- Dove, R. 2021. Agile 204: Agile Systems Engineering Life Cycle Model. INCOSE Webinar, September.
- Dove, R. 2020. Agile 203: Agility as a System. INCOSE Webinar, September.
- Dove, R. 2019. Agile 202: Mixed Discipline Continuous Integration. INCOSE Webinar, September.
- Dove, R. 2018. Agile 201: Problem Space Derived Solution Requirements. INCOSE Webinar, September.
- Dove, R. 2017. Agile 106: Risk Management & Mitigation. INCOSE Webinar, September.
- Dove, R. 2016. Agile 105: Operational Awareness. INCOSE Webinar, September.
- Dove, R. 2015. Agile 104: Engagement Quality. INCOSE Webinar, September.
- Dove, R. 2014. Agile 103: Design Principles. INCOSE Webinar, September.
- Dove, R. 2013. Agile 102: Design Requirements. INCOSE Webinar, September.
- Dove, R. 2012. Agile 101: Architecture Pattern. INCOSE Webinar, September.

Publications and Presentations (downloads at http://www.parshift.com/publications.htm)
- Dove, R., M. Winstead, H. Dunlap, M. Hause, A. Scalco, A. Williams, B. Wilson, K. Willett. Democratizing Systems Security. 2023. Democratizing Systems Security. International Council on Systems Engineering, International Symposium. Honolulu, HI, USA, July 15-20.
- Dove, R., K. Lunney, M. Orosz, M. Yokell. 2023. Agile Systems Engineering – Eight Core Aspects. International Council on Systems Engineering, International Symposium. Honolulu, HI, USA, July 15-20.
- Dove, R. 2023. Setting Current Context for Agility in the Future of Systems Engineering. *Insight* 26 (2): 8-10, International Council on Systems Engineering, June.
- Dove, R. et al. INCOSE Systems Engineering Handbook, Version 5. 2023. Chapters 3.1.3 Agility Engineering, 2.2.2 Incremental Engineering, 4.2.2 Agile Systems Engineering, 6.3 Case 3: Cybersecurity Considerations in Systems Engineering−The Stuxnet Attack on a Cyber-Physical System. International Council on Systems Engineering.
- Dove, R., K. Lunney, M. Orosz, M. Yokell. 2023. Systems Engineering Agility in a Nutshell. *Insight* 26 (2): 11-14, International Council on Systems Engineering, June.
- Dove, R. 2022. Capability-Based Security Engineering for Strategy Formulation and Stakeholder Alignment. NDIA Mission & Systems Engineering Conference. Orlando, FL. 1-3 November.
- Dove, R. 2022. Chapter 69, Cross-Cutting Systems Engineering Methods, Agile Systems Engineering. *Maynard's Industrial Engineering Handbook*, 6th ed. Bidanda, B. M. (ed). New York, NY, USA: McGraw-Hill. October.
- Dove, R. 2022. Security in the Future of Systems Engineering (FuSE) – A Roadmap Review of Foundation Concepts. ISSS conference, International Society for the System Sciences. Virtual, 7-11 July.
- Dove, R. 2022. Agility in the Future of Systems Engineering (FuSE) – A Roadmap Review of Foundation Concepts. ISSS conference, International Society for the System Sciences. Virtual, 7-11 July.
- Dove, R. 2022. Setting Current Context for Security in the Future of Systems Engineering. *Insight* 25 (2), International Council on Systems Engineering, June.
- Dove, R. 2022. Editor, Security in the Future of Systems Engineering - Starting the Journey with Eleven Strategies and Six Objectives. *Insight* 25 (2), International Council on Systems Engineering, June.
- Dove, R. 2021. Security in the Future of Systems Engineering (FuSE), a Roadmap of Foundation Concepts. NDIA Systems & Mission Engineering Conference. Virtual, 6-8 December.
- Dove, R., E. Palmer. 2021. Editors, Social Dimensions of Systems. *Insight* 24 (3), International Council on Systems Engineering, September.
- Dove, R., K. Willett, T. McDermott, H. Dunlap, D. P. MacNamara, C. Ocker. 2021. Security in the Future of Systems Engineering (FuSE), a Roadmap of Foundation Concepts. International Council on Systems Engineering, International Symposium. Honolulu, HI, USA, virtual conference, July 17-22.
- Willett, K., R. Dove, A. Chudnow, R. Eckman, L. Rosser, J. Stevens, R. Yeman, M. Yokell. 2021. Agility in the Future of Systems Engineering (FuSE), a Roadmap of Foundation Concepts. International Council on Systems Engineering, International Symposium. Virtual conference, 17-22 July.
- Dove, R. 2020. Security Issue Detection and Mitigation Patterns for Product Line Resource Variation. *Insight* 23 (3): 22-25, International Council on Systems Engineering, September.
- Dove, Rick, Keith Willett. 2020. Techno-Social Contracts for Security Orchestration in the Future of Systems Engineering. International Council on Systems Engineering, Virtual International Symposium, Proceedings: key reserve

Paper. Cape Town, South Africa, Virtual conference, July 20-23.

- Dove, Rick, Keith Willett. 2020. Contextually Aware Agile Security in the Future of Systems Engineering. International Council on Systems Engineering, Virtual International Symposium, Proceedings: key reserve Paper. Cape Town, South Africa, virtual conference, July 20-23.
- Dove, Rick, Keith Willett. 2020. Contextually Aware Agile Security in the Future of Systems Engineering. *2020 IEEE Systems Security Symposium (SSS)*, Crystal City, VA, USA, 1 July-1 August, pp. 1-8.
- Dove, Rick. 2019. Overcoming the Male Leadership Culture. *Insight* 22 (3): 34-37, International Council on Systems Engineering, October.
- Dove, Rick. 2019. Keynote: Agile Systems Engineering – A Life Cycle Strategy and Model. Australian Systems Engineering Workshop, Melbourne, Australia, October 28-29.
- Dove, Rick. 2019. Agile Systems Engineering Life Cycle Model for Mixed Discipline Systems Engineering. INCOSE Western States Regional Conference. Los Angeles, CA. September 13-15.
- Dove, Rick, Bill Schindel. 2019. Agile Systems Engineering Life Cycle Model for Mixed Discipline Systems Engineering. INCOSE International Symposium IS2019, Orlando, FL, USA, July 20-25.
- Dove, Rick, Mark Blackburn. 2019. Operational Needs of Model Centric Engineering. IEEE SysCon 2019, Orlando, FL, April 8-11. Wasn't presented, not in proceedings, but in IEEE Xplore at https://ieeexplore.ieee.org/document/8836783.
- Dove, Rick. 2018. Agile Systems Engineering. Keynote presentation, San Diego INCOSE Chapter Mini Conference, San Diego, CA, December 1.
- Dove, Rick. 2018. Agile Systems Engineering – Fundamentals Learned from Analyzing Successful Mixed Discipline Practices. INCOSE Western States Regional Conference. Ogden, UT, September 20-22.
- Dove, Rick, Bill Schindel, Ken Garlington. 2018. Case Study: Agile Systems Engineering at Lockheed Martin Aeronautics Integrated Fighter Group. INCOSE International Symposium IS2018, Washington, DC, USA, July 7-12.
- Dove, Rick. 2018. Enabling and Practicing Systems Engineering Agility – Prelude. *Insight* 21 (2): 8-12, International Council on Systems Engineering, June.
- Dove, Rick. 2018. Synergy: Agile Systems Engineering and Product Line Engineering at Rockwell Collins. *Insight* 21 (2): 43-46, International Council on Systems Engineering, June.
- Dove, Rick. 2017. On Defining Agile Systems Engineering. *Insight* 20 (3): 75-76, International Council on Systems Engineering, September.
- Dove, Rick, Bill Schindel. 2017. Case Study: Agile SE Process for Centralized SoS Sustainment at Northrop Grumman. INCOSE International Symposium IS2017, Adelaide, AU, July 15-20.
- Dove, Rick. 2017. CASE Exchange Panel Position Statement: Incremental/Agile Methods—Fit for Demands of Complex Aerospace Systems? AIAA Aviation Forum, Denver, CO, Jun 6.
- Dove, Rick, Bill Schindel, Will Hartney. 2017. Case Study: Agile Hardware/Firmware/Software Product Line Engineering at Rockwell Collins. IEEE SysCon 2017, Montreal, Quebec, CA, April 24-27.
- Dove, Rick. 2017. Agility in Systems Engineering – Findings from Recent Studies. Unpublished working paper. April 15.
- Dove, Rick, Bill Schindel. 2017. Case Study: Transition to Scaled-Agile Systems Engineering at Lockheed Martin's Integrated Fighter Group. Unpublished working paper. March 6.
- Dove, Rick. Systems Summit ConOps for Chapter Use – By Example. INCOSE IW17 Joint Workshop by Agile Systems & SE and Systems Science Working Groups, Torrance, CA, 31 Jan 31.
- Dove, Rick. 2016. Enabling and Facilitating Engineered Sustainability. Plenary presentation at ISSS 2016. International Society for the Systems Sciences. University of Colorado, Boulder, CO, July 23-30.
- Dove, Rick, Bill Schindel, Chris Scrapper. 2016. Agile Systems Engineering Process Features Collective Culture, Consciousness, and Conscience at SSC Pacific Unmanned Systems Group. INCOSE International Symposium IS2016, Edinburgh, Scotland, UK, July 18-21.
- Schindel, Bill and Rick Dove. 2016. Introduction to the Agile Systems Engineering Life Cycle MBSE Pattern. INCOSE International Symposium IS2016, Edinburgh, Scotland, UK, July 18-21.
- Willett, Keith, Rick Dove, Robert Cloutier, Mark Blackburn. 2016. On System Dynamics Modeling of Human- Intensive Workflow Improvement – Case Study in Cybersecurity Adaptive Knowledge Encoding. INCOSE International Symposium IS2016, Edinburgh, Scotland, UK, July 18-21.
- Leroux, Chris and Rick Dove. 2016. Merit of Adaptable Pairing as an Agile Systems Engineering Knowledge Management Practice. INCOSE International Symposium IS2016, Edinburgh, Scotland, UK, July 18-21.
- Dove, Rick. 2016. Agile System-Security: Sustainable Systems Evolve With Their Environment. Insight 19 (2):8-12. International Council on Systems Engineering, July.
- Dove, Rick. 2016. Presentation: Agility as a Win-Win Game, and the Rules of Play on Any Board. Conference on Agile Systems in Healthcare. International Council on Systems Engineering. Schaumburg, Illinois, May 23-24.
- Dove, Rick. 2016. Presentation: Discovering Agile SE Process Fundamentals at INCOSE. INCOSE Southern Arizona Chapter. University of Arizona, Tucson, AZ, February 23.
- Dove, Rick. 2015. Needed: Practitioner Attention to Systems Engineering Delivery of Sustainable Value. Insight 18 (2): 59-62. International Council on Systems Engineering, 1-August.
- Dove, Rick, et al. 2015. INCOSE Systems Engineering Handbook, Version 4. Chapters 3.6.4 Case 4: Cybersecurity Considerations in Systems Engineering–The Stuxnet Attack on a Cyber-Physical System, 9.9 Agile Systems

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