Resume
Ronald D. Medlock, PE

January 2025

Vice President – Technical Services, High Steel Structures LLS, Lancaster, PA *and*
President, Medlock LLC, Lancaster, PA

Address	206 Juniper Drive	
	Lancaster, PA 17602	
Education	1987	BS, Architectural Engineering, University of Texas at Austin
	1998	MS, Civil Engineering, Structures, University of Texas at Austin
License	Professional Engineer, State of Texas	

Experience

High Steel

2006 to Present - Vice President, Technical Services, High Steel Structures, LLC (High Steel) in Lancaster, Pennsylvania. High Steel is a fabricator of steel bridges, producing 200 steel bridges per year, including vehicular and railroad girder, arch, truss, and other steel bridge types. Roles at High Steel:

- 2006 to present - Responsible for quality control, including shop inspection (visual inspection, non-destructive testing of welds, coatings inspection and quality documentation); welding procedure development, qualification, and approval; repair procedure development; and fabrication technical advancements, particularly with respect to welding.
- 2006 to present – As primary technology officer at High Steel, facilitate the implementation of new technology for steel bridge fabrication, particularly establishing fabrication tolerances that both satisfy bridge owner specifications and ensure that components built using the technology will fit during erection and perform as intended in service.
- 2006 to present - Provide guidance to bridge owners and designers regarding tolerances and constructability in steel bridge design, weld design, weld detailing, fit, and other steel bridge fabrication topics.
- 2016 to 2021 – Chief of High Steel University, High Steel's in-house training department, comprising training for all shop skills, including welding and other bridge fabrication skills.
- 2006 to 2016 – Responsible for engineering, including shop drawing and CNC program development; detailing software development and maintenance; and design of shop fixtures, shipping procedures, and erection procedures.
- 2013 to 2017 - Project executive for High Steel's Mario M. Cuomo Bridge (Tappan Zee replacement) project.

Medlock, LLC

2017 to present – Founder and President, Medlock LLC, in Lancaster, Pennsylvania, providing consulting services related to steel bridge fabrication, tolerances, constructability, and inspection. Noted (but not all) engagements include

- **FHWA Bridge Welding Reference Manual** – 2017 to 2019. As subconsultant to HDR, lead author of a comprehensive bridge welding manual published September 2019, 346 pages.
- **FHWA Intersecting Welds Task Force** – 2018 to 2020. As subconsultant to HDR, member of task force establishing a policy and recommended practices regarding intersecting welds on bridges.
- **FHWA Bending / Heat Straightening Manual Update** – 2019 to present. As subconsultant to WSP, subject matter expert for entire manual; lead author on new section addressing cold bending

- **FHWA Guide for Standardized Modular Orthotropic Steel Deck** – 2020 to 2021. As subconsultant to Iowa State, subject matter expert in development of guide for constructable, standard modular orthotropic deck for routine bridges (i.e., not signature spans).
- **NCHRP Synthesis 20-05/Topic 53-13 Practices for Steel Bridge Fabrication and Erection Tolerances** – 2021 to 2022. Principal investigator on this project synthesizing practices among state DOT regarding steel bridge fabrication and erection tolerances.
- **NSBA Guide – Accelerated Steel: Achieving Speed in Steel Bridge Fabrication** – 2020 to 2021, first edition; 2024-2025, second edition. In the first edition, as consultant to NSBA, lead author, with help of three subcontractors, on this guide that describes best practices in design, fabrication oversight, and construction for steel bridge projects. In the second edition, as consultant to NSBA, with help of two subcontractors, added a chapter on emergency projects.

TxDOT, Bridge Division
2001 to 2006 - Bridge Technical Services Director, Bridge Division, Texas Department of Transportation (TxDOT), Austin Texas. Responsible for specific structural design areas, including geotechnical, sign and signal support structures, bridge standards, bridge railing, and special bridge design; bridge design software; and bridge geotechnical construction. Responsibilities included support for design and welded details for fatigue in steel bridges.

TxDOT, Construction Division (formerly Materials and Tests Division)
1988 to 2001 - Steel Bridge Fabrication Director, Construction Division, TxDOT, Austin Texas. Responsible for steel bridge fabrication quality assurance, including inspection policies and practices, specifications, and tolerances; welding, fabrication, and repair procedures; and oversight and supervision of inspectors.

Competencies
- Steel bridge fabrication, quality assurance, and erection
- Structural welding
- Structural engineering
- Job shop manufacturing
- ABC solutions
- Training development and delivery
- Technical writing and editing
- Personnel management and supervision

Professional Affiliations
- AASHTO/NSBA Steel Bridge Collaboration
    - Cofounder, 1997 (w/ Fred Beckmann, then of NSBA, and Krishna Verma, then of FHWA)
    - 1997 to present, chair, main committee
    - Member various task groups (coatings, constructability, erection, fabrication, orthotropic deck bridges, quality assurance)
- AISI Welding Advisory Group (WAG) and Corrosion Advisory Group - Member, 2007 to present
- AISI Bridge Task Force
    - Chair, oversight committee, 2018 to present
    - Member/participant, 2006 to present
- American Welding Society
    - Member, D1 Structural Welding Committee, 2000 to present; 2nd v. chair, 2015 to 2020; 1st v. chair, 2021 to present

    - Member, D1.5 Bridge Welding Code Committee, 1993 to present; chair, 2016 to 2022
    - Member, D1.1 Fabrication Task Force, 2000 to present, including chair, 2000 to 2006
    - Member, D1 Materials Task Force, 1999 to present
- AREMA
    - Committee 15, Steel Structures – member since 2007; Chair, 2014 to 2017
    - Board – member, Director, Structural Group, September 2018 to September 2021
- Engineering Society of Western Pennsylvania, International Bridge Conference Executive Committee
    - Member of the executive committee, 2007 to present (Emeritus since 2019)
    - Chair, exec. Committee, August 2017 through August 2018; general chair, 2018 conference
- National Steel Bridge Alliance - Chair, Technical Committee, 2014 to present
- Research Council on Structural Connections – Member, 2019 to present, Director, 2023 to present
- Texas Steel Quality Council – Founder; Chair, 1995 to 2001
- Transportation Research Board
    - Structures Section – Chair, 2023 to present
    - General Structures Committee - Member, 2003 to 2018; Chair, 2009 to 2015
    - Steel Bridges Committee - Member, 2017 to 2023
    - Bridge Construction Committee - Member, 2006 to 2018
    - Metals Fabrication and Inspection Committee - Member, 1997 to 2015; Chair, 2000 to 2006; Emeritus member, 2020 to present
    - Handling editor, October 2019 to present

Awards and Honors

- 2025 T. R. Higgins Lectureship Award, American Institute of Steel Construction
- 2021 Academy of Distinguished Alumni, Civil, Architectural, and Environmental Engineering, Cockrell School of Engineering, University of Texas at Austin
- 2020 Lifetime Achievement Award for work in steel bridges, American Institute of Steel Construction
- 2013, "The Richard S. Fountain Bridge Task Force Award", awarded by the SMDI Steel Bridge Task Force and the AASHTO Technical Committee for Structural Steel Design, in appreciation for work associated with the AASHTO/NSBA Steel Bridge Collaboration.
- 2010 Special Achievement Award, American Institute of Steel Construction, for co-initiating and leading the AASHTO/NSBA Steel Bridge Collaboration.

Published Works and Select Presentations

Manuals

- "Bridge Welding Reference Manual", Ronnie Medlock, Heather Gilmer, Duane Miller, and Tony Ream; Publication No (Report No.) FHWA-HIF-19-088, September 2019

Research Reports

- "Practices for Steel Bridge Fabrication and Erection Tolerances", National Academy of Sciences (TRB), Ronald D. Medlock, 2023.
- "Performance of Weathering Steel in TxDOT Bridges", TxDOT Research Report #1818-1, Bashar McDad, David C. Laffrey, Mickey Dammann, and Ronald D. Medlock, May 2000

Master's Thesis

- "Qualification of Welding Procedures for Bridges: An Evaluation of the Heat Input Method", Master's Thesis, University of Texas at Austin, May 1998

Guides

- "Accelerated Steel: Achieving Speed in Steel Bridge Fabrication", National Steel Bridge Alliance, First edition in 2022; second edition in 2025.

Papers authored/co-authored

- "Sinusoidal Web Plate Girders Using Conventional Girder Fabrication Techniques", Peter Wang and Maria Garlock, Princeton; Ronnie Medlock, High Steel; Ted Zoli, HNTB; and Spencer Quiel, Lehigh; 2020 IBC Conference, virtual event, October 2020.
- "Development of the Design to Fabrication Information Delivery Manual (IDM) for Model-Based Information Exchange", Aaron Costin, University of Florida, Ronnie Medlock, High Steel, NASCC Conference, Atlanta, Georgia, x April 2020.
- **"**Rapid Replacement of CSX Steel Through-Girder Bridge at Alexandria Virginia", Fyiad Constantine, CSX; Roshe Copeland-Volcy, HDR; Ronnie Medlock, High Steel; and Kennedy Kye-Menseah, HDR; 2019 AREMA / Railway Interchange Conference, Minneapolis, MN, 9 – 11 September 2019.
- "Polyaspartic Coatings: Reducing the Cost of Shop Painted Steel Bridges Through Improving Painting Efficiency", Ahren Ohson, Ronnie Medlock, and Todd Williams, World Steel Bridge Symposium, Baltimore, Maryland, 11 – 13 April 2018.
- "Steel Girder Cross Frames – Design, Fabrication, and Erection", Shane Beabes and Patrick Holinda, AECOM; Ronnie Medlock, High Steel; 2016 IBC Conference, 7 – 10 June, Washington DC.
- "The Influence of Cold Cambering on the Toughness of Rolled I-beams", Michael Bresch, High Steel, Frank Chen, Penn State Middletown, and Ronnie Medlock, High Steel; 2016 IBC Conference, 7 – 10 June, Washington DC.
- "How the New *Bridge Welding Code* = Great Steps Forward", [editorial], Ronnie Medlock, p. 6, Welding Journal, March 2016.
- "Roll-in / Float-in Combination Truss Bridge Launch (NY Rte 270 over the Eric Canal)," Robert A. Cisneros, Robert G. Urban, and Ronald D. Medlock, High Steel Structures, 2010 International Bridge Conference (IBC), Pittsburgh, PA, June 2010.
- "The NEXT Beam: A Robust Double-Tee Prestressed Beam", Ken Baur, Michael Culmo, Brad Dillman, Doug Lorah, Ronnie Medlock, 2010 FHWA Bridge Engineering Conference, Orlando, Florida, April 2010.
- **"**"Design and Field Evaluation of a Hybrid FRP/Reinforced Concrete Superstructure System," submitted to the Journal of Bridge Engineering – Ziehl, Fowler, Schell, Ulloa, Medlock, June 2008
- **"**Laser Welding: Suitability for American Steel Bridge Fabrication at the Present State of the Art", White paper funded by FHWA, Bob Cisneros, Scott Kopp, Scott Krause, Ronnie Medlock, Patrick Risser, and Jamie Stock, October 2007.
- "Lean-On Cross-Frame Bracing for Steel Girders with Skewed Supports", Reagan Herman, Todd Helwig, Ronnie Medlock, Michelle Romage, Chong Zhou, World Steel Bridge Symposium, 2 December 2005, Orlando, Florida.
- "Prefabricated Bridges – Current U.S. Practice and Issues", Mary Lou Ralls, Michael D. Hyzak, Ronald D. Medlock, Lloyd M .Wolf, proceeding, 2nd National Prefabricated Bridge Elements and Systems Workshop, September 2004
- "Bridge Collapse Detection System in Texas", James Justin Mercier, Eligio Alvarez, Juan Marfil, Mark J. Bloschock, and Ronald D. Medlock, 6th International Bridge Engineering Conference, Transportation Research Board, 17-20 July 2005, Boston, Massachusetts.

- "Standard Drawings for Short Span Concrete Bridges", John Holt, Ronnie Medlock, 2004 Concrete Bridges Conference
- "A Hybrid FRP Bridge System for Texas", Ulloa, Fowler, Ziehl, Medlock, ACI International, May 2004.
- "Elastomeric Bearings for Steel Trapezoidal Box Girder Bridge", Timothy E. Bradberry, PE, Jeffery C. Cotham, P.E., and Ronald D. Medlock, P.E., Proceedings, ASCE Texas Section Fall 2002 Meeting
- "Prefabricated Bridge National Implementation Initiative", Mary Lou Ralls, Ronald D. Medlock, Sharon Slagle, 2002 Concrete Bridges Conference
- "Prefabrication Minimizes Traffic Disruptions", Kevin R. Pruski, Ronald D. Medlock, and Mary Lou Ralls, HPC Bridge Views, Issue 21, May/June 2002
- "FM 3284 FRP Bridge, San Patricio County, Texas – Background and Design" – Fernando Ulloa, Timothy J. Fowler, Ph.D., PE, Paul Ziehl, Ph.D., PE, and Ronald D. Medlock, P.E. – Spring 2001

Articles

- "Bent on Innovation", Ronnie Medlock, Mike Culmo, Tim Fields, Modern Steel Construction, February 2021. Article about three-I-girder-cap
- "Towards a Data Exchange Work Flow", Ronnie Medlock, High Steel News, Spring 2019
- "Polyaspartic Coatings", Ahren Olson, Todd Williams, and Ronnie Medlock, Modern Steel Construction, October 2018.
- "Composite Steel Cable-Stayed Bridge Fabrication: Constructability Considerations", Ronnie Medlock, Pittsburgh Engineer, Summer 2018 (in conjunction with IBC)
- "Excellent Constructability in Design Facilitated Successful Fabrication of the Greenfield Bridge", Ronnie Medlock, High Steel News, Spring 2018.
- "Steel Bridges and the Date Express", Ronnie Medlock, High Steel, p. 15, *Pittsburgh Engineer*, Summer 2016.
- "What's the Best Way to Show Camber in a Bridge Design?", Ronnie Medlock, High Steel, and Steve Walsh UDI, Bridge Crossings, Modern Steel Construction, March 2014.
- "Skewed Steel Grider bridge Erection: Tricks of the Trade", Bob Cisneros, Ronnie Medlock, Sue Steel, and Bobby Urban, High Steel News, Fall 2013, 9 September 2013.
- "Future Fabrication: Advancing the State-of-the-Art in Steel Bridge Fabrication", Paul Fuchs and Ronald D. Medlock, Modern Steel Construction, April 2013.
- "Web Lay-over is Normal", Ronnie Medlock, *High Steel News*, Summer 2010.
- "IBC 2009: Meeting Bridge Challenges in Challenging Times", Ronnie Medlock, Highway Builder, APC, Summer 2009 Volume 88, Number 2
- "A Skewed Perspective", Fred Beckmann, Bob Cisneros, Ronnie Medlock, Don White, Modern Steel Construction, December 2008 [*article about erection of skewed steel bridges*]
- "Finding a Better Way to Build Steel Bridges", Ronald D. Medlock, Inspection Trends, Fall 2000

Training

- "Effects of Curvature and Skew", 25 July 2016, co-instructed with Dominique Coletti as part of the AISC Steel Bridge Night School; online webinar.
- "Seven Habits of Highly Effective People" – Certified instructor; with one other instructor taught this three-day class within TxDOT from 1997 to 2000.
- "Continuous Improvement" – 1996 – Led the development team and co-taught this half-day training for TxDOT.
- "Cultural Diversity" – 1995 – Co-instructed this half day class on behalf of TxDOT in 1996, including ten classes.

Presentation 2024

- 7 January 2024 – "Industry Guidelines for Identifying Redundancy on Contract Plans and Submittal Requirements", with Justin Ocel, 2024 TRB Annual Meeting, Washington, DC.
- 10 January 2024 – "Proposed Changes to the Bridge Welding Code for Addressing Variations in Acoustic Velocity", 2024 TRB Annual Meeting, Washington, DC.
- 7 February 2024 – "Bridge Welding Code Updates", 2024 Quality Assurance Workshop, Washington, DC.
- 20 March 2024 – "In Case of Emergency, Call the Steel Industry: Fabricator Perspective", 2024 World Steel Bridge Symposium, San Antonio, Texas.
- 20 March 2024 – "Best Practices for Galvanized Steel Bridges", 2024 World Steel Bridge Symposium, San Antonio, Texas, with Alanna Fossa of AGA and Gary Wisch of DeLongs.
- 20 March 2024 – "NSTM, IRM & SRM: Pragmatic Practices for Project Performance", 2024 World Steel Bridge Symposium, San Antonio, Texas.
- 21 March 2024 – "COBOT Impact on the QMS", 2024 QualityCon, San Antonio, Texas.
- 24 April 2024 – "Redundant Three I-Girder Straddle Bents", co-presented with Mike Culmo, CHA; NSBA / ACEC – VA Steel Bridge Forum, Richmond, Virginia.
- 24 April 2024 – "Emergency Repair and Replacement", co-presented with Randy Harrison, WWAFCO; NSBA / ACEC – VA Steel Bridge Forum, Richmond, Virginia.
- 27 June 2024 – "Fabrication Aspects of Redundancy", paper 209, IABMAS 2024, Tivoli Congress Center, Copenhagen, Denmark.
- 26 August 2024 – "Weld Quality Assessment Technology Opportunities", NCHRP Domestic Scan meeting, Lancaster, Pennsylvania.
- 16 October 2024 – "Fabrication Aspects of Redundancy", AISC Flash Conference, virtual.
- 22 October 2024 – "Best Practices in Steel Fabrication", Local Bridge Conference – Bridge Engineering, Albany, New York.
- 5 November 2024 – "PAUT in Steel Bridge Fabrication", FHWA NDE Workshop, Turner Fairbanks Highway Research Center, Washington, DC.
- 20 November 2024 – "Emergency Steel Bridge Projects" and "Best Practices in Steel Bridge Fabrication", NSBA Bridge Forum, Ames, Iowa.

Presentations 2023

- 8 February 2023 – "Hot Bending versus Cold Bending", 55th Annual Mid-Atlantic Quality Assurance Workshop, Charleston, WV
- 22 February 2023 – "High Steel Structures", High Companies spotlight presentation, virtual
- 22 March 2023 – "Bridge Welding Practices", ASCE Central PA Section, virtual.
- 11 April 2023 – "Steel Bridge Welding Quality", Bridge Welding Workshop, Charlotte, NC
- 12 April 2023 – "Cold Forming in Steel Bridge Fabrication", World Steel Bridge Symposium / NASCC, Charlotte, NC
- 12 April 2023 – "Bridge Geometry – from Theory to Reality: The 'Reality' of Making Connections", World Steel Bridge Symposium / NASCC, Charlotte, NC
- 4 May 2023 – "Three I-girder Bent Cap", ASCE Structures Congress, New Orleans, LA
- 23 May 2023 – "Bridge Welding Code Committee Update", T-17 meeting, Kansas City, MO
- 22 June 2023 – "Fabricator's Perspective on Steel Bridge Coating Systems", 2023 NSBA Steel Bridge Workshop, co-sponsored by T-9, NJ DOT, NJ Turnpike, NYS DOT

Presentation 2022

- 23 February 2022 – "Achieving the Best Possible Schedule in Steel Bridge Fabrication", Quality Assurance Workshop, Virtual.

- 9 March 2022 – "Innovative Three-I-Girder Straddle Bent – Fabrication Considerations", NJ DOT Seminar, virtual.
- 24 March 2022 – "Achieving Speed in Steel Bridge Fabrication", World Steel Bridge Symposium, Denver, Colorado.
- 18 June 2022 – "Use of Weathering Steel in Bridges – Fabricator's Perspective", Northeast Bridge Preservation Partnership (NEBPP) Meeting, Harrisburg, PA.
- 28 July 2022 – "Fabrication of Three I-Girder, Non-Fracture Critical Bent Caps", AISC webinar.
- 14 September 2022 – "Fabrication, Fit, and Assembly of Cross Frames", SEA of I workshop, Chicago, Illinois.
- 27 October 2022 – "Durability Solutions for Steel Bridges", Statewide Conference on Local Bridges, Syracuse, NY.
- 3 November – G12.2 Guidelines for Steel Bent Caps – Texas Steel Quality Council, Austin, Texas
- 7 December 2022 – "Best Practices in Fabrication", Steel Bridge Design Workshop, Accelerated Bridge Construction Conference, 7 – 9 December, Miami, Florida.

Presentations 2021

- 11 February – "Innovative Approach to Steel Straddle Bents, Fabrication Considerations", Bridge Task Force Meeting, virtual.
- 12 February – "Best Practices in Bridge Welding", NJDOT/NSBA Steel Bridge Workshop, virtual.
- 18 February - "Steel Bridge Fabrication for Cable Bridges", presented to the HDR cable bridge group, virtual.
- 2 March – "Welding Procedure Approval Guidelines", Gannett Fleming NJ and NY offices, virtual.
- 12 March - "Innovative Approach to Steel Straddle Bents, Fabrication Considerations", Texas Steel Quality Council, virtual.
- 25 August – "Use of Technology in Steel Bridges", Pennsylvania House of Representatives Transportation Committee Informational Meeting.

Presentations, pre 2021

- "FHWA Bridge Welding Reference Manual", IBC 20-13, Ronnie Medlock, High Steel Structures LLC, Lancaster, PA; Tony Ream, HDR, Weirton, WV; 2020 International Bridge Conference (virtual).
- "Bridge Welding", 2 May 2020, part of April-May 2020 Basics of Bridge Design Workshop; was to be at NASCC in Atlanta; done virtually due to COVID-19 pandemic restrictions.
- "FHWA Bridge Welding Manual", 2019 NYC Bridge Conference, New York, NY., August 2019.
- "Weld Termination Alternatives", Ronnie Medlock, Bridge Task Force Meeting, 23 January 2019, Orlando, Florida.
- "Steel Girder Cross Frames – Design, Fabrication, and Erection", Shane Beabes and Patrick Holinda, AECOM; Ronnie Medlock, High Steel; 2016 IBC Conference, 7 – 10 June, Washington DC.
- "Data Exchange and Modeling in Steel Bridge Fabrication, Fabricator Perspective", NCHRP 20-07 Task 377 Workshop, Baltimore, MD, 10 May 2016.
- "Data Exchange: Steel Bridge Fabrication", World Steel Bridge Symposium, Orlando, Florida, 14 April 2016.
- "Steel Bridge Technology Improvements and Needs", AASHTO SCOBS T-14 Meeting, Saratoga Springs NY, 21 April 2015.
- "Behavior of Skewed and Curved Steel I-girder Bridges", with Mike Grubb, NASCC, Nashville, 26 March 2015.

- "Advances in Steel Bridge Fabrication", Maryland Quality Initiative conference (MdQI), Baltimore, Maryland, 5 February 2015.
- "The Latest in Steel Bridge Fabrication for the Bridge Design Engineer", Structural Engineering Institute of Maryland (SEI-MD), Engineer's Society of Baltimore, 11 W. Mt. Vernon Place, Baltimore, MD 21201, 20 January 2015
- "NSBA's New Guide to Skewed and / or Curved I-girder Bridge Fit," 2014 NSBA World Steel Bridge Symposium, Toronto, Canada, March 26-28, 2014.
- "BrIM – Alternatives to Shop Assembly for Steel Bridges", 2014 NSBA World Steel Bridge Symposium, Toronto, Canada, March 26-28, 2014.
- "Steel Bridge Technology: Welding and Assembly Issues the Designer Needs to Understand", TRB Annual Meeting, Session 173, Washington, DC, 12 January 2014
- "Design controls Fabrication / Fabrication controls Design: It's a 2 Way Street", Steel Bridge Forum, Albany, New York, 17 September 2013
- "Future Fabrication for Bridges – and All Structures: Phased Array Ultrasonic Testing", North American Steel Construction Conference, St. Louis, Missouri, 17 – 19 April 2013
- "Advancing the Steel Bridge State-of-the-Art", Structural Engineering Education Reunion (STEER) 2013, The University of Texas at Austin, 4-5 April 2013
- "Top Ten Things HDR Bridge Designers Should Know about Steel Bridge Fabrication", HDR Webinar, 9 January 2013.
- "Skewed Bridge Detailing and Fabrication", Workshop 10, Effective Skewed Bridges, IBC, 10-13 June 2012, Pittsburgh.
- "Steel Bridge Fabrication," Steel Bridge Forum, 27 April 2012, Concord NH.
- "Top Ten Things You Should Know about Steel Bridge Fabrication", World Steel Bridge Symposium, 19 April 2012, Grapevine, TX.
- "Accelerated Steel Bridge Fabrication," AREMA Committee 15 Meeting, Kansas City, 4 October 2011 (presentation based on Gauley Bridge paper submitted to AREMA and published as an alternate presentation for the 2011 AREMA annual meeting in Milwaukee).
- "Steel Fabrication and the Cleveland Innerbelt", ABCD Northeastern Ohio Chapter Meeting, 29 September 2011, Cleveland, Ohio.
- "Steel Bridge Welding," Student Steel Day, sponsored by High Steel, 22 September 2011, Lancaster PA.
- "Structural Steel Fabrication for Bridges – Latest Trends and Technologies", ABCD Susquehanna Chapter, 2011 Fall Technical Conference, 30 August 2011, Sheraton Harrisburg Hershey Hotel, Harrisburg, PA 17111.
- "Steel Bridge Fabrication", provided as part of the LRFD steel design class, Baltimore, Maryland, 20 December 2010.
- "What the EOR Needs to Know about Bridge Fabrication," 2011 NASCC Conference, Pittsburgh, PA, 12 May 2011.
- "Skewed Bridges," Winter AISI DAG meeting, Orlando, Florida, 19 January 2011.
- "NEXT Beam", 2010 APC/PennDOT Fall Seminar, 17 – 19 November, 2010, Hershey Lodge, Hershey PA.
- "Tubular Flange Bridge Design & Construction", 2010 APC/PennDOT Fall Seminar, 17 – 19 November, 2010, Hershey Lodge, Hershey PA. With Bob Bondi of Michael Baker, Jr., Inc.
- "Steel Railroad Bridge Fabrication: Keys to a Successful Project", 2009 Annual Conference & Exposition Program, September 20-23, 2009, Chicago, IL.
- "Orthotropic Deck Bridges", co-presented with Brian Kozy, HDR, AGC/DOT Technical Conference, Saratoga Springs, NY, 9 December 2008.

- "Steel Bridge Constructability", provided as part of the LRFD steel design class, Baltimore, Maryland, 5 December 2008
- "Steel Bridge Constructability", graduate student seminar, John Hopkins University, Baltimore, MD., 15 October 2008
- "Erection of Skewed Bridges: Keys to an Effective Project", NSBA World Steel Bridge Symposium, 5 December 2007, New Orleans, Louisiana.
- "Decked Girders for Rapid Bridge Construction", NSBA World Steel Bridge Symposium, 4 December 2007, New Orleans, Louisiana.
- "Fabrication, Transportation, and Erection of Curved Girders", ASCE North Jersey Branch Structures Group, Spring 2007 Meeting, 19 April 2007, New Brunswick, New Jersey.
- "Effective Structures Engineering", Fall Graduate Seminar, Lehigh University, 21 September 2007, Bethlehem Pennsylvania.
- "Bridge Replacement Options", 79th Annual Transportation Short Course, 11-12 October 2005, College Station, Texas.
- "Vessel Impact Risk Assessment by the Texas Department of Transportation", on behalf of Mark McClelland, 6th International Bridge Engineering Conference, Transportation Research Board, 17-20 July 2005, Boston, Massachusetts.
- "Rapid Substructure Construction", presented at the 2004 FHWA Steel Bridge Conference, Accelerated Bridge Construction Workshop, 15 December 2004.
- "Prefabricated Bridges International Scan", 78th Annual Transportation Short Course, 12-13 October 2004, College Station, Texas.
- "Fiber Reinforced Polymer (FRP) Bridge Developments at TxDOT", executive summary presentation to the TxDOT D/D/O.
- SSFNE Steel Bridge Forum, 31 October 2002, Boxborough MA, "NSBC Collaboration Documents: Are You Using Them?"
- Bridge Workshop #8, Shop Drawings for Steel and Concrete Bridges, Kansas State – October 5, 2001, "AASHTO/NSBA Steel Bridge Collaboration"; overview session with Walter Gatti and Gary Wisch.