Kent L. Gee – Curriculum Vitae

Associate Professor of Physics
Brigham Young University Dept. of Physics and Astronomy
N243 ESC Provo, UT 84602 (801) 422-1544 kentgee@byu.edu

ACADEMIC APPOINTMENTS

Brigham Young University – Provo, UT
- Associate Professor, August 2011 – Present
- Assistant Professor, January 2006 – August 2011
- Visiting Assistant Professor, August – December 2005

EDUCATION

The Pennsylvania State University – State College, PA
- Ph.D. in Acoustics, August 2005
- Dissertation title: Prediction of Nonlinearity in Jet Noise Propagation

Brigham Young University – Provo, UT
- M.S. in Physics, August 2002
  - Thesis title: Multi-channel Active Control of Axial Cooling Fan Noise
- B.S. in Applied Physics, *Magna Cum Laude*, April 2001
  - Emphasis in Acoustics, minors in Mathematics and Spanish

RESEARCH GRANTS

- National Science Foundation (PI, *2015-2018*)
  - Developing new methods for obtaining energy-based acoustic quantities
- Air Force Research Laboratory/Blue Ridge Research and Consulting (PI, *2015-2016*)
  - Investigation of jet source characteristics leading to subjective evaluation
- Office of Naval Research (PI, *2014-2017*)
  - Wavepacket-based characterization of high-performance military jet aircraft noise
- Air Force Research Laboratory/Ball Aerospace (PI, *2013*)
  - Measurements of F-35A flyover data
- Air Force Research Laboratory/Blue Ridge Research and Consulting (PI, *2013-2014*)
  - Measurements and analysis of the F-35 A and B aircraft
- Office of Naval Research (PI, *2011-2014*)
  - Analysis of high-amplitude jet noise data
- Office of Naval Research/NAVAIR (Consultant, *2012-2014*)
  - Development of uninstalled jet engine measurements standard
- National Science Foundation (Co-PI, *2011-2014*)
  - Development of a global active structural acoustic control strategy
- Blue Ridge Research and Consulting and NASA Stennis (PI, *2010-2014*)
  - Development of energy-based acoustic probes and processing for rocket noise
- Intel Corporation (Co-PI, *2009-2011*)
  - Investigation of laptop fan noise active control
- CCI, Inc. (Co-PI, *2010-2011*)
  - Analysis of baffle plates for pipe flow
- Insitu, Inc. (Co-PI, *2010*)
  - Acoustic testing and analysis of the ScanEagle UAV
- ATK Space Systems (PI, *2009-2010*)
  - Sensor characterization in laboratory and full-scale rocket motor testing

- MuRata Corporation (Co-PI, *2009-2010*)
  - Characterization of piezoelectric blowers
- National Science Foundation (Co-PI, *2008-2010*)
  - Study of reduction of noise and vibration of structures using energy-based concepts
- Blue Ridge Research and Consulting and Air Force Res. Lab. (PI, *2007-2010*)
  - Investigation of near-field acoustic holography for aeroacoustic sources
  - Separate project involving extensive measurements of F-35 Joint Strike Fighter
- HHI Corporation (PI, *2007,2008-2009*)
  - Measurement and analysis of blast noise from 30mm artillery gun
  - Design and analysis of absorptive treatments for indoor gun test range
- Technofirst Corporation (Co-PI, *2007-2008*)
  - Development of active noise control concepts
- STI Technologies, Inc. and NASA Stennis (PI, *2005-2009*)
  - Development of energy-based acoustic probes for use near rocket plumes

EDUCATIONAL GRANTS

- BYU GE Matched Funds Grant (PI, *2014*)
  - Enhancement of Physics 167 assessment materials and teaching laboratories
- BYU College of Physical and Mathematical Sciences High-Impact Teaching Award (PI, *2014*)
  - Upgrading of research facilities for teaching-laboratory use
- BYU Mentoring Environment Grant (PI, *2007-2008, 2010-2011, 2013-2014*)
  - Establishment of a physical acoustics research and mentoring environment
- BYU Graduate Mentoring Award (*2011*)
- City of Eagle Mountain, UT (PI, *2009*)
  - Measurement and analysis of skate park noise as a Physics 313R class
- BYU Mentoring Environment Grant (Co-PI, *2008-2009*)
  - Funding for interdisciplinary research of Balinese gamelan acoustics and musicology
- National Instruments Academic Grant (*2006*)
  - Awarded three data acquisition systems for use in advanced acoustics laboratories and undergraduate projects leading to senior theses and capstone reports
- BYU GE Matched Funds Grant (*2005*)
  - Enhancement of Physics 167 assessment materials and teaching laboratories

MENTORED RESEARCH

Current Mentored Research

- Aeroacoustic source characterization of jet and rocket noise
  - Multiple jet and rocket noise field measurements, including ARES DM-1, SLS QM-1, F-16, F-22, F-35AA, A, and B, GEM-60, Orion-50 XLT, and KEI solid rocket motors.
  - Development of acoustical holography for characterizing military jet aircraft sources
  - Intensity and energy-based characterization of rocket and jet noise fields
  - Wavepacket analyses of military jet aircraft noise
  - Ground reflection model for rocket noise
- High-amplitude noise propagation
  - Characterization of nonlinearity present in military jet aircraft and rocket noise, including F-22 and F-35 aircraft and solid rocket motors
  - Laboratory and numerical experiments studying shock formation and evolution
  - Investigation of metrics suitable for quantifying jet noise crackle

Past Mentored Research

- Active noise control
  - Advanced system modeling for fan noise reduction, including desktop computers, multifan server trays, and laptops.

- Mentored undergraduate students on various projects, including
  - Musical acoustics studies of the hammered dulcimer and Balinese gamelan gongs and metallophones
  - Measurements and analysis of acoustics from impulsive chemistry demonstrations
  - Design of automated microphone positioning systems for BYU anechoic chamber
  - Measurements of near and far-field noise from 30mm guns in reverberant environments
  - Analysis of various physical acoustics demonstrations

COURSES TAUGHT

- Physical Science 100 – Taught two special topics on science and religion: Theory of relativity and LDS theology, and evidences of explosive volcanism in 3 Nephi
- Physics 105: Introduction to Physics – Introduced Just-In-Time-Teaching to the course
- Physics 167: Descriptive Acoustics of Music and Speech – Introduced Applications Papers, new course organization
- Physics 461: Introduction to Acoustics – **Developed course** including full curriculum and notes, labs, homework assignments
- Physics 513R: Laboratory Methods in Acoustics – **Developed** advanced laboratory course for seniors and new graduate students
- Physics 561: Fundamentals of Acoustics – Taught outdoor sound propagation and nonlinear acoustics
- Physics 662: Sound-structure Interaction – Just-In-Time-Teaching, teaching of near-field acoustical holography, notes, several in-depth laboratory exercises

UNIVERSITY SERVICE

- Chair, Department Awards Committee (2015-Current)
- Advisor, Brigham Young University Chapter of the Acoustical Society of America (2006-Current)
- Member, University College of Engineering Dean Search Committee (2015-2016)
- Member, Faculty Review Committee (2015)
- Member, Department Graduate Committee (2006-2012)
- Member, Department Undergraduate Research Committee (2006-2011)
- Presenter, Presidents Leadership Council (2012)
- Presenter, College Volunteer Leadership Council (2014)

HONORS AND AWARDS

- 2015 Fellow of the Acoustical Society of America – "For contributions to jet-noise and nonlinear propagation."
- 2015 Brigham Young University Lawrence K. Egbert Teaching and Learning Fellowship
- 2015 Invitation Research Fellowship from Japan Society for the Promotion of Science
- Invited Resource Letter in August 2014 *American Journal of Physics*
- 2014 ASA Physical Acoustics Summer School Discussion Leader
- Feature article in July 2013 *Acoustics Today* magazine
- 2011 Brigham Young University Young Scholar Award
- 2011 BYU College of Physical and Mathematical Sciences Young Scholar Award
- 2010 Acoustical Society of America R. Bruce Lindsay Award – "For contributions to the fields of jet noise propagation, nonlinear acoustics, and active control of fan noise."
- Research featured in Sept. 2010 Issue of *Physics Today*
- Feature article in Aug. 2010 *Sound and Vibration* magazine
- 2010 National Instruments Achievement Award
- Feature article in Mar. 2009 *American Journal of Physics*
- 2008 ASA Physical Acoustics Summer School Discussion Leader
- 2006 ASA Outstanding Young Presenter in Noise
- 2006 ASA Women in Acoustics Conference Travel Award
- 2005-2007 Penn State Acoustics Program Kenneth T. Simowitz Award winner

- 2004 INCE Martin Hirschorn IAC Best Paper Award recipient [K. L. Gee and S. D. Sommerfeldt, Noise Cont. Eng. J. **51**, 325-334 (2003)]
- 2004 ASA/ONR Physical Acoustics Summer School scholarship recipient
- 2002-2005 PSU College of Engineering Dean's Fellowship
- 2002-2003 PSU University Graduate Fellowship
- Inter-Noise 2002 Student Paper Competition Award
- 143rd ASA Meeting (2002) Structural Acoustics and Vibration Paper Award – 2nd Prize
- 2002 BYU Dept. of Physics Copley Graduate Fellowship
- 2001 BYU Magna Cum Laude graduate, B.S. in Applied Physics
- 2001 BYU Office of Research and Creative Activities Scholarship
- Member of Phi Kappa Phi, Sigma Pi Sigma, and Golden Key Honor Societies
- Four-year BYU University Scholarship

PROFESSIONAL ASSOCIATIONS

- Acoustical Society of America
  - Editor, Proceeding of Meetings on Acoustics (2011 – present)
    - Associate Editor, Noise (2007 – 2011)
  - Advisor of BYU student chapter
  - Session organizer
    - Rocket noise: 2010 (2), 2011 (2), 2012, 2013, 2014 (2), 2015 (2, including international meeting in Kobe, Japan)
    - Education: 2011 (3), 2015
    - Jet aeroacoustics: 2013 (2), 2014 (2)
    - Other: IT noise (2011), acoustical holography (2011)
  - Member of the Education in Acoustics, Noise, and Physical Acoustics committees
    - Physical Acoustics student representative and ASA Education Coordinator search committees
    - 2014 and 2016 Physical Acoustics Summer School local organizing committee
  - Conference Organizer
    - Technical program and local organizing committee for 2007 Salt Lake ASA meeting
    - Co-general chair for the 2016 Salt Lake City ASA meeting
  - 2004-05 Central PA Regional Chapter president
- American Institute of Aeronautics and Astronautics
  - Author at multiple national and international aeroacoustics meetings
- Institute of Noise Control Engineering
  - Organized sessions for aircraft noise at multiple meetings
- American Physical Society
  - Regular participant with students in Four Corners regional meetings
- American Association of Physics Teachers
  - Regular participant in Utah-Idaho sectional meetings
  - Attended New Faculty Workshop in Baltimore, MD, Oct. 2006
  - Wrote Resource Letter on acoustics education and outreach for American Journal of Physics

STUDENT AWARDS AND RECOGNITION

- 2015, Brent Reichman, ASA Physical Acoustics Technical Committee Student Rep
- 2015, Kyle Miller, NASA Rocky Mountain Research Fellowship
- 2015, Darren Torrie, ASA Engineering Acoustics Paper Award
- 2015, Kevin Leete, BYU ORCA Research Grant
- 2015, Cameron Vongsawad, Knowles Science Teaching Foundation Fellowship finalist
- 2014, Brent Reichman, ASA Royster Poster Competition Award
- 2014, Blaine Harker, ASA Royster Poster Competition Award
- 2014, Blaine Harker, Kevin Leete, Trevor Stout, ASA Gallery of Acoustics, First Prize
- 2014, Brent Reichman, Four Corners APS Paper Award

- 2014, Michael Pearson, Four Corners APS Paper Award
- 2014, Kevin Leete, Four Corners APS Paper Award
- 2014, Joseph Thaden, Four Corners APS Paper Award
- 2014-2016, Blaine Harker, NASA Rocky Mountain Research Fellowship
- 2014-2016, Blaine Harker, AFRL ORISE Graduate Research Fellowship
- 2014, Jazmin Myres, INCE Leo Beranek Award for Excellence in Noise Control Studies
- 2014-2016, Brent Reichman, AFRL ORISE Graduate Research Fellowship
- 2013, Alan Wall, INCE Leo Beranek Award for Excellence in Noise Control Studies
- 2013, Ben Christensen, NASA Rocky Mountain Research Fellowship
- 2013, Jazmin Myres, ASA Robert Young Research Award
- 2013, Ben Christensen, BYU Grad Expo Grand Prize Winner
- 2013, Jazmin Myres, BYU ORCA Research Grant
- 2012, Alan Wall, ASA Structural Acoustics Paper Award
- 2012, Jazmin Myres, Four Corners APS Paper Award
- 2012, David Hart, BYU ORCA Research Grant
- 2012, Ben Christensen, BYU ORCA Research Grant
- 2011, Alan Wall, ASA Royster Poster Competition Award
- 2011, Alan Wall, ASA Structural Acoustics Paper Award
- 2011, Ben Christensen, BYU ASA Student Chapter Undergrad Poster Award
- 2011, Jessica Morgan, ASA Noise Young Presenter Award
- 2011, James Esplin, ASA Noise Young Presenter Award
- 2011-2013, Alan Wall, AFRL ORISE Graduate Research Fellowship
- 2011, Michael Muhlestein, NASA Rocky Mountain Research Fellowship
- 2011, Blaine Harker, BYU ORCA Research Grant
- 2010, Alan Wall, ASA Noise Young Presenter Award
- 2010, Jessica Morgan, Four Corners APS Paper Award
- 2010, Julia Vernon, Four Corners APS Paper Award
- 2010, David Krueger, Four Corners APS Paper Award
- 2010, Jarom Giraud, Four Corners APS Paper Award
- 2010, Julia Vernon, ASA Noise Young Presenter Award
- 2010, Cole Duke, ASA Noise Young Presenter Award
- 2009-2011, Alan Wall, NASA Rocky Mountain Research Fellowship
- 2009, Matthew Shaw, INCE Student Paper Prize
- 2009, David Krueger, ASA Musical Acoustics Paper Award
- 2008, Micah Shepherd, ASA Structural Acoustics Paper Award
- 2008, Michael Gardner, BYU ORCA Research Grant
- 2007-2009, Michael Gardner, NASA Rocky Mountain Research Fellowship
- 2007, Cole Duke, ASA Noise Young Presenter Award
- 2007, Ben Shafer, ASA Noise Young Presenter Award
- 2007, Connor Duke, INCE Student Paper Prize
- 2006-2007, Micah Shepherd, NASA Rocky Mountain Research Fellowship

STUDENTS ADVISED

(for thesis, capstone project, or other research leading to a coauthored paper/presentation. *Italics denotes coauthorship as a committee member of significance*.)

Ph.D. Physics

Student	Date
Alan Wall	04/2013
Brent Reichman	Current
Blaine Harker	Current

M.S. Physics

Student	Date
Micah Shepherd	08/2007
Connor Duke	08/2007
Benjamin Shafer	12/2007
Derek Thomas	08/2008
Michael Gardner	08/2009
Cole Duke	08/2012

James Esplin	08/2012
David Krueger	12/2012
Jarom Giraud	04/2013
Michael Muhlestein	08/2013
Ben Christensen	08/2014
Trevor Stout	08/2015
Eric Whiting	Current
Kyle Miller	Current

M.S. Mech. Eng.

Jonathan Oldham	08/2007
Jeff Fisher	08/2010
Zach Collins	08/2010
Ryan Rust	12/2010
Daniel Manwill	12/2010
Curtis Wiederhold	08/2011
Ian Coltrin	04/2012
Brad Solomon	12/2012
William Johnson	08/2013

B.S. Degrees

Seth Tomlinson	04/2007
Hales Swift	08/2007
Derek Thomas	08/2007
Michael Gardner	08/2007
Cole Duke	12/2007
Trent Mouton	04/2008
Jarom Giraud	08/2009
David Krueger	08/2009
Matthew Shaw	08/2009
Curtis Wiederhold	08/2009
Devin Young	12/2009
Jessica Morgan	04/2011
Julia Vernon	08/2011
Michael Muhlestein	08/2011
Troy Taylor	08/2011
John Boyle	04/2012
Ben Christensen	08/2012
Blaine Harker	08/2012
Garrett Porter	12/2012
Marc Jenkins	12/2012
Brace White	12/2012
Trevor Jerome	12/2012
Stuart Harper	12/2012
David Hart	04/2013
Shanell Reynolds	04/2013

B.S. Degrees

Ken Bostwick	04/2013
Spencer Perry	04/2013
Josh Bodon	08/2013
Trevor Stout	08/2013
Jazmin Myres	04/2014
Zachary Anderson	04/2014
Eric Whiting	04/2014
Hsin-Ping Pope	08/2014
Rachael Bakaitis	12/2014
Joseph Thaden	04/2015
Cameron Vongsawad	04/2015
Samuel Hord	04/2015
Kyle Millller	04/2015
Kimball Gunther	08/2015
Jackson Farnsworth	08/2015
Darren Torrie	Current
Michael Pearson	Current
Kevin Leete	Current
Caleb Goates	Current
Aaron Vaughn	Current

NSF REU/RET Program

Tara Tubbs	2007
Emily Egan	2007
Trent Mouton	2007
Molly Jones	2008
Dorothy Manuel	2008
Molly Jones	2009
Brad Moser	2009
Jessica Morgan	2010
Brad Moser	2010
Chris Ross	2011
Chris Bronson	2011
Chris Ross	2012
Sarah Young	2014

PUBLICATIONS LIST

Patents

S. D. Sommerfeldt and K. L. Gee, "Multi-channel active control system and method for the reduction of tonal noise from an axial fan," U.S. Patent No. 7,272,234 (Issued Sept. 2007).

Patents (Filed)

S. D. Sommerfeldt, C. R. Duke, and K. L. Gee, "Control source configurations for free-field active noise control applications," U. S. Patent Application, filed Aug. 28, 2008.

Peer-Reviewed Articles

C. T. Vongsaward, M. Berardi, J. L. Whiting, M. J. Lawler, K. L. Gee, and T. B. Neilsen, "Acoustics for the Deaf: Can you see me now?," submitted to Phys. Teach. (2015).

B. M. Harker, T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Spatiotemporal Correlation Analysis of Jet Noise from a High-Performance Military Aircraft," accepted to AIAA J. (2015).

K. L. Gee, T. B. Neilsen, A. T. Wall, J. M. Downing, M. M. James, and R. L. McKinley, "Propagation of crackle-containing noise from military jet aircraft," Noise Control Eng. J. **64**, 1-12 (2016).

M. B. Muhlestein and K. L. Gee, "Evolution of the temporal slope density function for waves propagating according to the inviscid Burgers equation," J. Acoust. Soc. Am. **139**, 958-967 (2016).

T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Source characterization of full-scale jet noise using acoustic intensity,' Noise Control Eng. J. **63**, 522-536 (2015).

K. M. Leete, K. L. Gee, T. B. Neilsen, and T. T. Truscott, "Mach stem formation in outdoor measurements of acoustic shocks," J. Acoust. Soc. Am. **138**, EL522-527 (2015); http://dx.doi.org/10.1121/1.4937745

S. M. Young, K. L. Gee, T. B. Neilsen, and K. M. Leete, "Outdoor measurements of spherical acoustic shock decay," J. Acoust. Soc. Am. **138**, EL305-310 (2015); http://dx.doi.org/10.1121/1.4929928

T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Acoustic intensity near a high-powered military jet aircraft," J. Acoust. Soc. Am. **138**, EL1-EL7 (2015); http://dx.doi.org/10.1121/1.4921746

D. C. Thomas, B. Y. Christensen, and K. L. Gee, "Phase and amplitude gradient method for the estimation of acoustic vector quantities," J. Acoust. Soc. Am. **137**, 3366-3376 (2015); http://dx.doi.org/10.1121/1.4914996

A. T. Wall, K. L. Gee, and T. B. Neilsen, "Multisource statistically optimized near-field acoustical holography," J. Acoust. Soc. Am. **137**, 963-975 (2015). http://dx.doi.org/10.1121/1.4906585

M. B. Muhlestein, K. L. Gee, T. B. Neilsen, and D. C. Thomas, "Evolution of the average steepening factor for nonlinearly propagating waves," J. Acoust. Soc. Am. **137**, 640-650 (2015). http://dx.doi.org/10.1121/1.4906584

K. L. Gee and T. B. Neilsen, "Resource letter: Acoustics for physics pedagogy and outreach," Am. J. Phys. **82**, 825-838 (2014); http://dx.doi.org/10.1119/1.4869298 **Invited article**

J. H. Macedone, K. L. Gee, and J. A. Vernon, "Managing auditory risk of acoustically impulsive chemistry demonstrations," J. Chem. Educ., **91**, 1661-1666 (2014).

I. S. Coltrin, R. D. Maynes, J. D. Blotter, and K. L. Gee, "Influence of nozzle spacing and diameter on acoustic radiation from supersonic jets in closely spaced arrays," Appl. Acoust. **81**, 19-25 (2014); DOI: 10.1016/j.apacoust.2014.01.008

A. T. Wall, K. L. Gee, T. B. Neilsen, D. W. Krueger, and M. M. James, "Cylindrical acoustical holography applied to full-scale military jet aircraft noise," J. Acoust. Soc. Am. **136**, 1120-1128 (2014); http://dx.doi.org/10.1121/1.4892755

M. B. Muhlestein, D. C. Thomas, and K. L. Gee, "Time-domain effects of rigid sphere scattering on measurement of transient plane waves," J. Acoust. Soc. Am. **136**, 13-21 (2014).

C. P. Wiederhold, K. L. Gee, J. D. Blotter, S. D. Sommerfeldt, and J. H. Giraud, "Comparison of multimicrophone probe design and processing methods in measuring acoustic intensity," J. Acoust. Soc. Am. **135**, 2797-2807 (2014). http://dx.doi.org/10.1121/1.4871180

S. B. Perry and K. L. Gee, "The acoustically driven vortex cannon," Phys. Teach. **52**, 146-147 (2014). http://dx.doi.org/10.1119/1.4865515

R. S. Matoza, D. Fee, T. B. Neilsen, K. L. Gee, and D. E. Ogden, "Aeroacoustics of volcanic jets: Acoustic power estimation and jet velocity dependence," *J. Geophys. Res. Solid Earth **118***, 6269–6284 (2013). DOI: 10.1002/2013JB010303

D. Fee, R. S. Matoza, K. L. Gee, T. B. Neilsen, and D. E. Ogden, "Infrasonic crackle and supersonic jet noise from the eruption of Nabro Volcano," Geophys. Res. Lett. **40**, 4199-4203 (2013). DOI: 10.1002/grl.50827

I. S. Coltrin, J. D. Blotter, R. D. Maynes, and K. L. Gee, "Shock-cell structures and corresponding sound pressure levels emitted from closely spaced supersonic jet arrays," Appl. Acoust. **74**, 1519-1526 (2013).

R. L. Rust, S. D. Sommerfeldt, K. L. Gee, and J. D. Blotter, "Characterization of microphone placement and noise sensitivity of a global active noise control system for axial cooling fans," Noise Cont. Eng. J. **61**, 280-290 (2013).

K. L. Gee, T. B. Neilsen, and A. A. Atchley, "Skewness and shock formation in laboratory-scale supersonic jet data," J. Acoust. Soc. Am. **133**, EL 491 – 497 (2013). DOI: 10.1121/1.4807307

B. M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall, S. A. McInerny, and M. M. James, "On autocorrelation analysis of jet noise," J. Acoust. Soc. Am. **133**, EL458 – EL464 (2013). DOI: 10.1121/1.4802913

T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Similarity spectra analysis of high-performance jet aircraft noise," J. Acoust. Soc. Am. **133**, 2116 – 2125 (2013). DOI: 10.1121/1.4792360

K. L. Gee, T. B. Neilsen, J. M. Downing, M. M. James, R. L. McKinley, R. C. McKinley, and A. T. Wall, "Near-field shock formation in noise propagation from a high-power jet aircraft," J. Acoust. Soc. Am. **133**, EL88-EL93 (2013). DOI: 10.1121/1.4773225

R. L. Rust, K. L. Gee, S. D. Sommerfeldt, and J. D. Blotter, "Active noise control of a two-fan exhaust-mounted array using near-field control sources and error sensors," Noise Cont. Eng. J. **60**, 481-489 (2012).

J. Morgan, T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Simple-source model of high-power jet aircraft noise," Noise Control Eng. J. **60**, 435-449 (2012).

A. T. Wall, K. L. Gee, M. M. James, K. A. Bradley, S. A. McInerny, and T. B. Neilsen, "Near-field noise measurements of a high-performance military jet aircraft," Noise Control Eng. J. **60**, 421-434 (2012).

A. T. Wall, M. D. Gardner, K. L. Gee, and T. B. Neilsen, "Coherence length as a figure of merit in multireference near-field acoustical holography," J. Acoust. Soc. Am. **132**, EL215-EL221 (2012).

J. M. Fisher, J. D. Blotter, S. D. Sommerfeldt, and K. L. Gee, "Development of a pseudo-uniform structural quantity for use in active structural acoustic control of simply supported plates: An analytical comparison," J. Acoust. Soc. Am. **131**, 3833-3480 (2012).

C. P. Wiederhold, K. L. Gee, J. D. Blotter, and S. D. Sommerfeldt, "Comparison of methods for processing acoustic intensity from orthogonal multimicrophone probes," J. Acoust. Soc. Am. **131**, 2841-2852 (2012).

T. B. Neilsen, W. J. Strong, B. E. Anderson, K. L. Gee, S. D. Sommerfeldt, and T. W. Leishman, "Creating an active-learning environment in an introductory acoustics course," J. Acoust. Soc. Am. **131**, 2500-2509 (2012).

M. B. Muhlestein, K. L. Gee, and J. H. Macedone, "Educational demonstration of a spherically propagating acoustic shock," J. Acoust. Soc. Am. **131**, 2422-2430 (2012).

B. E. Anderson, B. Moser, and K. L. Gee, "Loudspeaker line array educational demonstration," J. Acoust. Soc. Am. **131**, 2394-2400 (2012).

J. A. Vernon, K. L. Gee, and J. H. Macedone, "Acoustical characterization of exploding hydrogen-oxygen balloons," J. Acoust. Soc. Am. **131**, EL243-EL249 (2012).

M. R. Shepherd, K. L. Gee, and A. D. Hanford, "Evolution of statistics for a nonlinearly propagating sinusoid," J. Acoust. Soc. Am. **130**, EL8-EL13 (2011).

S. H. Swift and K. L. Gee, "Examining the use of a time-varying loudness algorithm for quantifying characteristics of nonlinearly propagated noise (L)," J. Acoust. Soc. Am. **129**, 2753-2756 (2011).

M. D. Shaw and K. L. Gee, "Acoustical design of a firing range for a 30-mm Gatling gun," Noise Control Eng. J. **58**, 611-620 (2010).

K. L. Gee, A. A. Atchley, L. E. Falco, M. R. Shepherd, L. S. Ukeiley, B. J. Jansen, and J. M. Seiner, "Bicoherence analysis of model-scale jet noise," J. Acoust. Soc. Am. **128**, EL211-EL216 (2010).

K. L. Gee, J. A. Vernon, and J. H. Macedone, "Auditory risk of exploding hydrogen-oxygen balloons," J. Chem. Educ. **87**, 1039-1044 (2010).

K. L. Gee, J. H. Giraud, J. D. Blotter, and S. D. Sommerfeldt, "Near-field acoustic intensity measurements of a small solid rocket motor," J. Acoust. Soc. Am. **128**, EL69-EL74 (2010).

D. W. Krueger, K. L. Gee, and J. Grimshaw, "Acoustical and vibrometry analysis of a large Balinese gamelan gong," J. Acoust. Soc. Am. **128**, EL8-EL13 (2010).

M. E. Jones, K. L. Gee, and J. Grimshaw, "Vibrational characteristics of Balinese gamelan metallophones," J. Acoust. Soc. Am. **127**, EL197-EL202 (2010).

J. H. Giraud, K. L. Gee, and J. E. Ellsworth, "Acoustic temperature measurement in a rocket noise field," J. Acoust. Soc. Am. **127**, EL179-EL184 (2010).

B. M. Shafer, K. L. Gee, and S. D. Sommerfeldt, "Verification of a near-field error sensor placement method in active control of compact noise sources," J. Acoust. Soc. Am. **127**, EL66-EL72 (2010).

M. R. Shepherd, K. L. Gee, and M. S. Wochner, "Short-range shock formation and coalescence in numerical simulation of broadband noise propagation," J. Acoust. Soc. Am. **127**, 2886-2893 (2009).

C. R. Duke, S. D. Sommerfeldt, K. L. Gee, and C. V. Duke, "Optimization of control source locations in free-field active noise control using a genetic algorithm," Noise Cont. Eng. J. **57**, 221-231 (2009).

M. Gardner, K. L. Gee, and G. Dix, "An investigation of Rubens flame tube resonances," J. Acoust. Soc. Am. **125**, 1285-1292 (2009).

D. C. Thomas, K. L. Gee, and R. S. Turley, "A balloon lens: Acoustic scattering from a penetrable sphere," Am. J. Phys. **77**, 197- 203 (2009).

J. R. Oldham, J. Sagers, J. D. Blotter, S. D. Sommerfeldt, T. W. Leishman, and K. L. Gee, "Development of a multi-microphone calibrator," Appl. Acoust. **70**, 790-798 (2009).

K. L. Gee, V. W. Sparrow, M. M. James, J. M. Downing, C. M. Hobbs, T. B. Gabrielson, and A. A. Atchley, "The role of nonlinear effects in the propagation of noise from high-power jet aircraft," J. Acoust. Soc. Am. **123**, 4082-4093 (2008).

K. L. Gee, V. W. Sparrow, M. M. James, J. M. Downing, C. M. Hobbs, T. B. Gabrielson, and A. A. Atchley, "Measurement and prediction of noise propagation from a high-power jet aircraft," AIAA J. **45**, 3003-3006 (2007).

B. B. Monson, S. D. Sommerfeldt, and K. L. Gee, "Improving compactness for active noise control of a small axial cooling fan," Noise Control Eng. J. **55**, 397-407 (2007).

K. L. Gee, V. W. Sparrow, A. A. Atchley, and T. B. Gabrielson, "On the perception of crackle in high-amplitude jet noise," AIAA J. **45**, 593-598 (2007).

K. L. Gee, S. H. Swift, V. W. Sparrow, K. J. Plotkin, and J. M. Downing, "On the potential limitations of conventional sound metrics in quantifying perception of nonlinearly propagated noise," J. Acoust. Soc. Am. **121**, EL1-EL7 (2007).

K. L. Gee, V. W. Sparrow, M. M. James, J. M. Downing, and C. M. Hobbs, "Measurement and prediction of nonlinearity in outdoor propagation of periodic signals," J. Acoust. Soc. Am. **120**, 2491-2499 (2006).

K. L. Gee, T. B. Gabrielson, A. A. Atchley, and V. W. Sparrow, "Preliminary analysis of nonlinearity in military jet aircraft noise propagation," AIAA J. **43**, 1398-1401 (2005).

K. L. Gee and S. D. Sommerfeldt, "Application of theoretical modeling to multichannel active control of cooling fan noise," J. Acoust. Soc. Am. **115**, 228-236 (2004).

K. L. Gee and S. D. Sommerfeldt, "A compact active control implementation for axial cooling fan noise," Noise Control Eng. J. **51**, 325-334 (2003).

Refereed Conference Proceedings

B. M. Harker, T. B. Neilsen, K. L. Gee, J. K. Whiting, M. L. Berardi, and M. F. Calton, "@BYUAcoustics and @SoundstoAstound: Using social media to enhance research and outreach at Brigham Young University," Proc. Mtgs. Acoust. **23**, 025002 (2015); http://dx.doi.org/10.1121/2.0000082

K. L. Gee, T. B. Neilsen, S. D. Sommerfeldt and T. W. Leishman, "Preparing for a career in academia: Managing students in research," Proc. Mtgs. Acoust. **23**, 025001 (2015); http://dx.doi.org/10.1121/2.0000068

B. O. Reichman, J. M. Downing, A. Aubert, R. L. McKinley, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Acoustical Environment of an F-35B Aircraft during Vertical Landings," AIAA paper 2015-2377. *Extended Abstract Reviewed.*

M. M. James, A. R. Salton, J. M. Downing, K. L. Gee, T. B. Neilsen, B. O. Reichman, R. L. McKinley, A. T. Wall, and H. L. Gallagher, "Acoustic Emissions from F-35 Aircraft during Ground Run-Up," AIAA paper 2015-2375. *Extended Abstract Reviewed*

A. T. Wall, K. L. Gee, T. B. Neilsen, B. M. Harker, S. A. McInerny, R. L. McKinley, and M. M. James, "Investigation of multi-lobed fighter jet noise sources using acoustical holography and partial field decomposition methods," AIAA paper 2015-2379. *Extended Abstract Reviewed*

B. M. Harker, T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Spatiotemporal Correlation Analysis of Jet Noise from a High-Performance Military Aircraft," AIAA paper 2015-2376. *Extended Abstract Reviewed*

K. L. Gee, T. B. Neilsen, and M. M. James, "Including source correlation and atmospheric turbulence in a ground reflection model for rocket noise," Proc. Mtgs. Acoust. **22**, 040001 (2014). http://dx.doi.org/10.1121/2.0000002

T. A. Stout, K. L. Gee, T. B. Neilsen, D. W. Krueger, and M. M. James, "Intensity analysis of the dominant frequencies of military jet aircraft noise," Proc. Mtgs. Acoust. **20**, 040010 (2014); http://dx.doi.org/10.1121/1.4895772

K. L. Gee, T. B. Neilsen, D. C. Thomas, J. Micah Downing, M. M. James, and R. L. McKinley, "Comparison of two time-domain measures of nonlinearity in near-field propagation of high-power jet noise, AIAA Paper 2014-2199. *Extended Abstract Reviewed*

B. M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Phased-array measurements of full-scale military jet noise," AIAA Paper 2014-3069. *Extended Abstract Reviewed*

C. T. Vongsawad, T. B. Neilsen, and K. L. Gee, "Development of educational stations for Acoustical Society of America outreach," Proc. Mtgs. Acoust. **20**, 025003 (2014); http://dx.doi.org/10.1121/1.4882076.

T. B. Neilsen, K. L. Gee, D. M. Hart, and M. M. James, "Sensitivity analysis of an equivalent source model for military jet aircraft noise," Proc. Mtgs. Acoust. **20**, 045002 (2014). http://dx.doi.org/10.1121/1.4865249

M. M. James, A. R. Salton, K. L. Gee, T. B. Neilsen, and S. A. McInerny, "Full-scale rocket motor acoustic tests and comparisons with empirical source models," Proc. Mtgs. Acoust. **18**, 040007 (2014). http://dx.doi.org/10.1121/1.4870984

M. M. James, A. R. Salton, K. L. Gee, T. B. Neilsen, S. A. McInerny, and J. R. Kenny, "Modification of directivity curves for a rocket noise model," Proc. Mtgs. Acoust. **18**, 040007 (2014). http://dx.doi.org/10.1121/1.4870986

K. L. Gee, T. B. Neilsen, and M. M. James, "On the crest factor of noise in full-scale supersonic jet engine measurements," Proc. Mtgs. Acoust. **20**, 045003 (2014). http://dx.doi.org/10.1121/1.4869290

K. L. Gee, T. B. Neilsen, J. M. Downing, M. M. James, and S. A. McInerny, "Characterizing nonlinearity in military jet aircraft flyover data," Proc. Mtgs. Acoust. **12**, 040008 (2013). http://dx.doi.org/10.1121/1.4854715

M. B. Muhlestein, K. L. Gee, T. B. Neilsen, and D. C. Thomas, "Prediction of nonlinear noise propagation from a solid rocket motor," Proc. Mtgs. Acoust. **18**, 040006 (2013). http://dx.doi.org/10.1121/1.4828827

A. T. Wall, K. L. Gee, D. W. Krueger, T. B. Neilsen, S. D. Sommerfeldt, and M. M. James, "Aperture extension for near-field acoustical holography of jet noise," Proc. Mtgs. Acoust. **14**, 065001 (2013). http://dx.doi.org/10.1121/1.4794833

K. L. Gee, R. J. Kenny, T. B. Neilsen, T. W. Jerome, C. M. Hobbs, and M. M. James, "Spectral and statistical analysis of noise from reusable solid rocket motors," Proc. Mtgs. Acoust. **18**, 040002 (2013). http://dx.doi.org/10.1121/1.4789401

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "Partial field decomposition of jet noise sources using optimally located virtual reference microphones," Proc. Mtgs. Acoust. **18**, 045001 (2012).

K. L. Gee and T. B. Neilsen, "Application of Just-In-Time Teaching to advanced acoustics courses," Proc. Mtgs. Acoust. **18**, 025002 (2012).

T. B. Neilsen and K. L. Gee, "Use of a Just-In-Time Teaching techniques in an introductory acoustics class," Proc. Mtgs. Acoust. **18**, 025001 (2012).

J. H. Giraud, K. L. Gee, S. D. Sommerfeldt, T. Taylor, and J. D. Blotter, "Low-frequency calibration of a multidimensional acoustic intensity probe for application to rocket noise," Proc. Mtgs. Acoust. **14**, 040006 (2013); http://dx.doi.org/10.1121/1.4817532

R. T. Taylor, K. L. Gee, J. H. Giraud, S. D. Sommerfeldt, J. D. Blotter, and C. P. Wiederhold, "On the use of prepolarized microphone systems in rocket noise measurements," Proc. Mtgs. Acoust. **14**, 040005 (2012).

K. L. Gee, S. D. Sommerfeldt, and T. B. Neilsen, "The current state of acoustics education at Brigham Young University," Proc. Mtgs. Acoust. **11**, 025002 (2012).

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "On near-field acoustical inverse measurements of partially coherent sources," Proc. Mtgs. Acoust. **11**, 040007 (2012).

T. B. Neilsen and K. L. Gee, "Application of active-learning techniques to enhance student-based learning objectives," Proc. Mtgs. Acoust. **14**, 025001 (2012).

K. L. Gee, "The Rubens tube," Proc. Mtgs. Acoust. **8**, 025003 (2011).

A. T. Wall, K. L. Gee, M. D. Gardner, T. B. Neilsen, and M. M. James, "Near-field acoustical holography applied to high-performance jet aircraft noise," Proc. Mtgs. Acoust. **9**, 040009 (2011).

M. B. Muhlestein and K. L. Gee, "Experimental investigation of a characteristic shock formation distance in finite-amplitude noise propagation," Proc. Mtgs. Acoust. **12**, 045002 (2011).

R. McKinley, R. McKinley, K. L. Gee, T. Pilon, F. Mobley, M. Gillespie, and J. M. Downing, "Measurement of near-field and far-field noise from full scale high performance jet engines," Proc. ASME Turbo Expo 2010, Glasgow, UK, paper GT2010-22531, June 2010.

Z. A. Collins, K. L. Gee, S. D. Sommerfeldt, and J. D. Blotter, "Interior Fourier near-field acoustical holography using energy density," Proc. Mtgs. Acoust. **9**, 040007 (2010).

D. A. Manwill, J. M. Fisher, S. D. Sommerfeldt, K. L. Gee, and J. D. Blotter, "On the use of energy-based metrics in active structural acoustic control," Proc. Mtgs. Acoust. **9**, 065006 (2010).

J. Fisher, D. A. Manwill, J. D. Blotter, K. L. Gee, and S. D. Sommerfeldt, "Development of a pseudo-uniform structural quantity for use in active structural acoustic control," Proc. Mtgs. Acoust. **9**, 065005 (2010).

T. Neilsen, K. L. Gee, and M. D. Gardner, "Near-field acoustic holography in conical coordinates" Proc. Mtgs. Acoust. **6**, 065004 (2009).

Peer-Reviewed Articles (Submitted)

B. O. Reichman, M. B. Muhlestein, K. L. Gee, T. B. Neilsen, and D. C. Thomas, "Evolution of the time-derivative skewness of nonlinearly propagating waves," submitted to J. Acoust. Soc. Am. (2014).

A. T. Wall, K. L. Gee, T. B. Neilsen, R. L. McKinley, and M. M. James, "Military jet noise source imaging using multisource statistically optimized near-field acoustical holography," submitted to J. Acoust. Soc. Am. (2015).

B. O. Reichman, J. M. Downing, A. Aubert, R. L. McKinley, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Acoustical Environment of an F-35B Aircraft during Vertical Landings," submitted to AIAA J. (2015).

B. O. Reichman, K. L. Gee, T. B. Neilsen, and K. G. Miller, "Quantitative analysis of a frequency-domain nonlinearity indicator," submitted to J. Acoust. Soc. Am. (2015).

T. B. Neilsen, K. L. Gee, and M. M. James, "Analysis of the effects of finite-impedance ground and atmospheric turbulence on launch vehicle noise measurements," submitted to Trans. JSASS, Aerospace Tech. Jap. (2015).

K. L. Gee, E. B.Whiting, T. B. Neilsen, M. M. James, and A. R. Salton, "Development of a near-field intensity measurement capability for static rocket firings," submitted to Trans. JSASS, Aerospace Tech. Jap. (2015).

M. M. James, A. R. Salton, K. L. Gee, and T. B. Neilsen, "Comparative analysis of NASA SP-8072's core length with full-scale rocket data," submitted to Trans. JSASS, Aerospace Tech. Jap. (2015).

Some Peer-Reviewed Articles (In Preparation)

Book Chapters

B. E. Anderson, J. D. Blotter, K. L. Gee, and S. D. Sommerfeldt, "Acoustical Measurements," Chap. 27 in *Mechanical Engineer's Handbook*, edited by M. Kutz, (Wiley & Sons, Hoboken, NJ, 2015).

B. E. Anderson, J. D. Blotter, K. L. Gee, and S. D. Sommerfeldt, "Acoustical Measurements," in *Handbook of Engineering Measurements*, edited by M. Kutz, (Wiley & Sons, Hoboken, NJ, 2013).

J. D. Blotter, S. D. Sommerfeldt, and K. L. Gee, "Acoustics," in *Eshbach's Handbook of Engineering Fundamentals 5th edition*, edited by M. Kutz, (Wiley & Sons, Hoboken, NJ, 2009).

Invited Magazine Features

K. L. Gee, T. B. Neilsen, A. T. Wall, J. M. Downing, and M. M. James, "The 'sound of freedom': Characterizing jet noise from high-performance military aircraft," Acoustics Today **9**(3), 8-21 (2013). http://dx.doi.org/10.1121/1.4821141

M. M. James and K. L. Gee, "Aircraft jet plume noise source measurement system," *Sound and Vibration*, August 2010, pp. 14-17.

Invited Conference Proceedings

T. B. Neilsen, K. L. Gee, and M. M. James, "Analysis of the effects of finite-impedance ground and atmospheric turbulence on launch vehicle noise measurements," Proc. 30th ISTS, paper 2015-o-2-11, Kobe, Japan, July 2015.

K. L. Gee, E. B.Whiting, T. B. Neilsen, M. M. James, and A. R. Salton, "Development of a near-field intensity measurement capability for static rocket firings," Proc. 30th ISTS, paper 2015-o-2-12, Kobe, Japan, July 2015.

M. M. James, A. R. Salton, K. L. Gee, and T. B. Neilsen, "Comparative analysis of NASA SP-8072's core length with full-scale rocket data," Proc. 30th ISTS, paper 2015-o-2-08, Kobe, Japan, July 2015.

C. T. Vongsawad, M. L. Berardi, K. L. Gee, T. B. Neilsen, and M. J. Lawler, "Sound education for the deaf and hard of hearing," 169th ASA Meeting Lay Language Papers, Pittsburgh, PA (2015).

D. Fee, R. S. Matoza, K. L. Gee, T. B. Neilsen, and D. E. Ogden, "African volcano makes sound like supersonic jet and rocket engines," 166th ASA meeting Lay Language Papers, San Francisco, CA (2013).

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "Acoustical holography and proper orthogonal decomposition methods for the analysis of military jet noise," Proc. Noise-Con (2013).

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "Acoustical holography imaging of full-scale jet noise fields," Proc. Noise-Con (2013).

K. L. Gee, T. B. Neilsen, A. T. Wall, and N. J. Eyring, "Teaching principles of outdoor sound propagation using football game measurements," Proc. Mtgs. Acoust. **19**, 025007 (2013). http://dx.doi.org/10.1121/1.4788646

S. D. Sommerfeldt and K. L. Gee, "Active control of axial and centrifugal fan noise," Proc. Mtgs. Acoust. **19**, 030009 (2013).

M. M. James and K. L. Gee, "Advanced acoustic measurement system for rocket noise source characterization," Proc. Internoise 2012, paper in12_1127 (2012).

A. T. Wall, K. L. Gee, M. M. James, K. A. Bradley, S. A. McInerny, and T. B. Neilsen, "Noise measurements in the near field of a high-performance military jet aircraft," Proc. Internoise 2012, paper in12_605 (2012).

J. Morgan, T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Simple-source model of military jet aircraft noise," Proc. Internoise 2012, paper in12_1098.

K. L. Gee, S. D. Sommerfeldt, T. W. Leishman, B. E. Anderson, and J. D. Blotter, "Improving undergraduate noise control education at Brigham Young University," Proc. Internoise 2009, paper 10521.

M. M. James, K. L. Gee, and J. M. Downing, "Development of a near-field acoustical holography system for aircraft jet source noise measurements," Proc. Internoise 2009, paper 10928.

M. D. Gardner, A. T. Wall, K. L. Gee, S. D. Sommerfeldt, D. Manwill, and J. D. Blotter, "Near-field acoustical holography of military jets: Experiments on partially correlated noise sources," Proc. Internoise 2009, paper 10938.

M. R. Shepherd and K. L. Gee, "On the possible role of short-range shock formation and coalescence in jet aeroacoustic source characterization," Proc. Internoise 2009, paper 10286.

K. L. Gee, J. H. Giraud, J. D. Blotter, and S. D. Sommerfeldt, "Energy-based acoustical measurements of rocket noise," AIAA paper 2009-3165, May 2009.

K. L. Gee, S. A. McInerny, M. M. James, and J. M. Downing, "A preliminary investigation of near-field acoustical holography in characterizing noise from military jet aircraft," Proc. Noise-Con 2008, Dearborn, MI, July 2008.

S. H. Swift and K. L. Gee, "Evaluation of time-varying loudness for quantifying perception of nonlinearly propagated noise," Proc. Noise-Con 2007, Reno, NV, Oct. 2007.

K. L. Gee, V. W. Sparrow, A. A. Atchley, and T. B. Gabrielson, "Snap, crackle, pop: The sound of freedom?" Lay language paper, 153rd ASA meeting, Salt Lake City, UT, 2007.

K. L. Gee and V. W. Sparrow, "Quantifying nonlinearity in the propagation of noise from military jet aircraft," Proc. Noise-Con 05, Minneapolis, MN, Oct. 2005.

L. E. Falco, K. L. Gee, A. A. Atchley, and V. W. Sparrow, "Investigation of a single-point indicator of nonlinearity in one-dimensional propagation," Proc. Forum Acusticum, Budapest, Hungary, Aug. 2005.

Invited Conference Abstracts (with Oral Presentation)

B. M. Harker, B. O. Reichman, T. A. Stout, E. B. Whiting, K. L. Gee and T. B. Neilsen, "Far-field acoustical measurements during a Space Launch System solid rocket motor static firing," J. Acoust. Soc. Am. **138**, 1892 (2015); http://dx.doi.org/10.1121/1.4933940

B. M. Harker, T. B. Neilsen, K. L. Gee, A. T. Wall and M. M. James, "Spatiotemporal correlation of high-performance military aircraft jet noise," J. Acoust. Soc. Am. **138**, 1892 (2015); http://dx.doi.org/10.1121/1.4933942

T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Source characterization of full-scale jet noise using vector intensity," J. Acoust. Soc. Am. **138**, 1916 (2015); http://dx.doi.org/10.1121/1.4934027

T. B. Neilsen, K. L. Gee, M. M. James, and B. M. Harker, "Inclusion of a ground-reflecting plane in wavepacket modeling of military jet noise," J. Acoust. Soc. Am. **138**, 1893 (2015); http://dx.doi.org/10.1121/1.4933943

K. L. Gee, T. B. Neilsen, D. K. Torrie, M. Akamine, K. Okamoto, S. Teramoto, T. Okunuki, and S. Tsutsumi, "Near-field acoustical array measurements of an impinging supersonic jet," J. Acoust. Soc. Am. **138**, 1891 (2015); http://dx.doi.org/10.1121/1.4933938

K. L. Gee, T. B. Neilsen, S. D. Sommerfeldt and T. W. Leishman, "Preparing for a career in academia: Managing students in research," J. Acoust. Soc. Am. **137**, 2316 (2015); http://dx.doi.org/10.1121/1.4920453

K. L. Gee, S. D. Sommerfeldt, T. A. Stout, T. B. Neilsen and P. Aslani, "The cymbal as a structural acoustics demonstration: From evanescence to chaos," J. Acoust. Soc. Am. 137, 2411 (2015); http://dx.doi.org/10.1121/1.4920787

B. M. Harker, T. B. Neilsen, K. L. Gee, J. K. Whiting, M. L. Berardi, P. White, N. D. Ortega and M. F. Calton, "@BYUAcoustics: Using social media to enhance research and outreach at BYU," J. Acoust. Soc. Am. **137**, 2367 (2015) ; http://dx.doi.org/10.1121/1.4920600

K. L. Gee and T. B. Neilsen, "Inclusion of source extent and coherence in a finite-impedance ground reflection model with atmospheric turbulence," J. Acoust. Soc. Am. **136**, 2135 (2014). http://dx.doi.org/10.1121/1.4899702

A. T. Wall, K. L. Gee, and T. B. Neilsen, "A multisource-type representation statistically optimized near-field acoustical holography method," J. Acoust. Soc. Am. **136**, 2171 (2014) ; http://dx.doi.org/10.1121/1.4899856

T. B. Neilsen, K. L. Gee, H.-S. C. Pope, B. Harker and M. M. James, "Finely resolved spatial variation in F-22 spectra," J. Acoust. Soc. Am. **136**, 2101 (2014). http://dx.doi.org/10.1121/1.4899555

M. M. James, A. R. Salton, K. L. Gee and T. B. Neilsen, "Comparison of the acoustical emissions of multiple full-scale rocket motors," J. Acoust. Soc. Am. **136**, 2167 (2014); http://dx.doi.org/10.1121/1.4899843

T. W. Leishman, K. L. Gee, T. B. Neilsen, S. D. Sommerfeldt, J. D. Blotter and W. J. Strong, "Graduate acoustics at Brigham Young University," J. Acoust. Soc. Am. **136**, 2199 (2014) ; http://dx.doi.org/10.1121/1.4899972

A. T. Wall, B. M. Harker, T. A. Stout, K. L. Gee, T. B. Neilsen and M. M. James, "Considerations for array design and inverse methods for source modeling of full-scale jets," J. Acoust. Soc. Am. **136**, 2100 (2014); http://dx.doi.org/10.1121/1.4899553

K. L. Gee, T. B. Neilsen, and S. D. Sommerfeldt, "Resources for teaching near-field acoustical holography in advanced acoustics courses," J. Acoust. Soc. Am. **135**, 2159 (2014). http://dx.doi.org/10.1121/1.4877004

C. T. Vongsawad, K. L. Gee, T. B. Neilsen, and B.Y. Christensen, "Use of the hammered dulcimer to demonstrate physical acoustics principles," J. Acoust. Soc. Am. **135**, 2249 (2014). http://dx.doi.org/10.1121/1.4877367

C. T. Vongsawad, T. B. Neilsen, and K. L. Gee, "Development of educational stations for the Acoustical Society of America outreach activities," J. Acoust. Soc. Am. **134**, 4015 (2013). http://dx.doi.org/10.1121/1.4830650.

T. B. Neilsen and K. L. Gee, "Using acoustics to enhance physics education," J. Acoust. Soc. Am. **134**, 4015 (2013. http://dx.doi.org/10.1121/1.4830647.

D. C. Thomas, B. Y. Christensen, and K. L. Gee, "Methods for estimating acoustic intensity in rocket noise fields," J. Acoust. Soc. Am. **134**, 4058 (2013). http://dx.doi.org/10.1121/1.4830809.

K. L. Gee, T. B. Neilsen and M. M. James, "On the crest factor of noise from supersonic jets," J. Acoust. Soc. Am. **134**, 4098 (2013) ; http://dx.doi.org/10.1121/1.4830968.

M. M. James, A. R. Salton, K. L. Gee and T. B. Neilsen, "Intensity-based approach to characterize near-field acoustic environments of space flight vehicles," J. Acoust. Soc. Am. **134**, 4058 (2013) ; http://dx.doi.org/10.1121/1.4830808.

A. T. Wall, K. L. Gee, T. B. Neilsen and M. M. James, "Acoustical holography and proper orthogonal decomposition analyses of full-scale jet source properties," J. Acoust. Soc. Am. **134**, 4127 (2013) ; http://dx.doi.org/10.1121/1.4831159.

T. B. Neilsen, K. L. Gee, D. M. Hart and M. M. James, "Sensitivity analysis of an equivalent source model for a military jet aircraft," J. Acoust. Soc. Am. **134**, 4127 (2013) ; http://dx.doi.org/10.1121/1.4831158.

D. C. Thomas, K. L. Gee, T. B. Neilsen, T. W. Leishman, S. D. Sommerfeldt, J. D. Blotter, S. L. Thomson and W. J. Strong, "Roots and branches of the acoustics program at Brigham Young University," J. Acoust. Soc. Am. **134**, 4018 (2013) ; http://dx.doi.org/10.1121/1.4830668.

R. S. Matoza, D. Fee, K. L. Gee, T. B. Neilsen and D. E. Ogden, "Aeroacoustics of volcanic jets: An overview J. Acoust. Soc. Am. **134**, 4098 (2013) ; http://dx.doi.org/10.1121/1.4830970.

D. Fee, R. S. Matoza, K. L. Gee, T. B. Neilsen and D. E. Ogden, "High skewness infrasound from the eruption of Nabro Volcano, Eritrea: Comparison with supersonic jet and rocket engine data," J. Acoust. Soc. Am. **134**, 4099 (2013) ; http://dx.doi.org/10.1121/1.4830971.

K. L. Gee and T. B. Neilsen, "Use of pre-class quizzes to promote active learning in acoustics," J. Acoust. Soc. Am. **132**, 1922 (2012).

T. B. Neilsen and K. L. Gee, "Active-learning techniques in an introductory acoustics class," J. Acoust. Soc. Am. **132**, 1923 (2012).

K. L. Gee, J. D. Blotter, S. D. Sommerfeldt, D. C. Thomas, K. S. Bostwick, and B. Y. Christensen, "Investigating measurement of acoustic intensity for rocket sound field characterization," J. Acoust. Soc. Am. **132**, 1985 (2012).

K. L. Gee, R. J. Kenny, T. W. Jerome, T. B. Neilsen, C. M. Hobbs, M. M. James, "Analysis of noise from reusable solid rocket motor firings," J. Acoust. Soc. Am. **132**, 1992 (2012).

M. M. James, A. R. Salton, and K. L. Gee, "Full-scale rocket motor acoustic tests and comparisons with models: Revisiting the empirical curves," J. Acoust. Soc. Am. **132**, 1991 (2012).

M. M. James, A. R. Salton, and K. L. Gee, "Full-scale rocket motor acoustic tests and comparisons with models: Updates and comparisons with SP-8072," J. Acoust. Soc. Am. **132**, 1991 (2012).

M. B. Muhlestein, K. L. Gee, D. C. Thomas, and T. B. Neilsen, "Prediction of nonlinear propagation of noise from a solid rocket motor," J. Acoust. Soc. Am. **132**, 1992 (2012).

S. D. Sommerfeldt, K. L. Gee, and T. B. Neilsen, "Incorporating real-world measurement and analysis experiences in the teaching of advanced acoustics," J. Acoust. Soc. Am. **131**, 3214 (2012).

S. D. Sommerfeldt and K. L. Gee, "Lessons learned for implementing near-field active control systems to achieve global control of fan noise," J. Acoust. Soc. Am. **131**, 3379 (2012).

T. B. Neilsen and K. L. Gee, "Application of active-learning techniques to enhance student-based learning objectives," J. Acoust. Soc. Am. **130**, 2362 (2011).

M. M. James and K. L. Gee, "Energy-based acoustic measurement system for rocket noise," J. Acoust. Soc. Am. **130**, 2511 (2011).

J. M. Downing and K. L. Gee, "Characterizing nonlinearity in jet aircraft flyover data," J. Acoust. Soc. Am. **129**, 2441 (2011).

J. J. Esplin, J. K. Boyle, S. D. Sommerfeldt, and K. L. Gee, "Active control of centrifugal fan noise: Modeling design guidelines," J. Acoust. Soc. Am. **129**, 2584 (2011).

A. T. Wall, K. L. Gee, T. B. Neilsen, S. D. Sommerfeldt, J. D. Blotter, and M. M. James, "Statistically optimized near-field acoustical holography applied to a high-power jet," J. Acoust. Soc. Am. **129**, 2492 (2011).

M. B. Muhlestein, K. L. Gee, and J. H. Macedone, "A pedagogical demonstration of weak-shock propagation from a gas-filled balloon explosion," J. Acoust. Soc. Am. **129**, 2648 (2011).

J. M. Downing, M. M. James, K. L. Gee, and S. A. McInerny, "Do nonlinear effects in jet noise alter perception of loudness?," Aviation Noise Impacts Roadmap Annual Meeting, Washington D.C., April 2011.

M. M. James, J. M. Downing, and K. L. Gee, "Aircraft jet plume noise source characterization using near-field acoustical holography," NAVAIR Jet Noise Technical Interchange Meeting, Jan. 2011.

K. L. Gee and S. D. Sommerfeldt, "Undergraduate and graduate acoustics education at Brigham Young University," J. Acoust. Soc. Am. **128**, 2306 (2010).

S. D. Sommerfeldt and K. L. Gee, "Acoustics at Brigham Young University through the years," J. Acoust. Soc. Am. **128**, 2306 (2010).

K. L. Gee, J. H. Giraud, and J. D. Blotter, "Near-field energy-based measurements of small solid rocket motors," J. Acoust. Soc. Am. **127**, 1743 (2010).

E. Herrera, D. Pilkey, K. L. Gee, J. H. Giraud, and D. J. Young, "Rocket motor microphone investigation," J. Acoust. Soc. Am. **127**, 1773 (2010).

J. H. Giraud and K. L. Gee, "Directivity indices for rocket noise modeling: Measurement considerations," J. Acoust. Soc. Am. **127**, 1772 (2010).

T. B. Neilsen, K. L. Gee, J. M. Downing, and M. M. James, "Characterization of near and far-field nonlinearity in high-performance jet aircraft noise," J. Acoust. Soc. Am. **127**, 1877 (2010).

K. L. Gee, B. E. Anderson, T. B. Neilsen, and S. D. Sommerfeldt, "Acoustics outreach and scouting: A merit badge proposal," J. Acoust. Soc. Am. **125**, 2626 (2009).

K. L. Gee, "Measurement of high-intensity continuous noise fields," Air Force Research Laboratory Workshop for Effects of High Intensity Continuous and Impulse/Blast Noise on Humans, Moab, UT, Feb. 2008.

K. L. Gee and A. A. Atchley, "Why acoustic shocks are important to our perception of military jet aircraft noise," Proc. NATO Study Group on Military Jet Aircraft Noise, Athens, Greece, Dec. 2007.

C. R. Duke, S. D. Sommerfeldt, and K. L. Gee, "Optimization of control source locations in an active noise control application of axial cooling fans using genetic algorithms," J. Acoust. Soc. Am. **121**, 3179 (2007).

Contributed Conference Proceedings

Harker - BeBeC

K. L. Gee, T. B. Neilsen, E. B. Whiting, D. K. Torrie, M. Akamine, K. Okamoto, S. Teramoto, and S. Tsutsumi, "Application of a phase and gradient estimator to intensity-based laboratory-scale jet noise source characterization," Proc. Berlin Beamforming Conference, Mar. 2016.

M. Akamine, K. Okamoto, K. L. Gee, T. B. Neilsen, S. Teramoto, S. Tsutsumi, T. Okunuki, "Comparison of Acoustic Intensity Vectors with SPL and Phase Distributions of Supersonic Jet," 8th Asian Joint Conference on Propulsion and Power, Mar. 2016.

B. O. Reichman, A. T. Wall, K. L. Gee, T. B. Neilsen, J. M. Downing, M. M. James, and R. McKinley. "Modeling Far-field Acoustical Nonlinearity from F-35 Aircraft during Ground Run-up", AIAA paper 2016-1888. http://dx.doi.org/10.2514/6.2016-1888

T. B. Neilsen, K. L. Gee, B. M. Harker, and M. M. James. "Level-educed Wavepacket Representation of Noise Radiation from a High-Performance Military Aircraft", AIAA paper 2016-1880. http://dx.doi.org/10.2514/6.2016-1880

B. M. Harker, T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James. "Wavepacket Modeling and Full-scale Military Jet Noise Beamforming Analyses", AIAA paper 2016-2129; http://dx.doi.org/10.2514/6.2016-2129

K. G. Miller, B. O. Reichman, K. L. Gee, T. B. Neilsen and A. A. Atchley, "Quantitative nonlinearity analysis of model-scale jet noise," 20th International Symposium on Nonlinear Acoustics, AIP Conf. Proc. **1685**, 090003 (2015); http://dx.doi.org/10.1063/1.4934469

T. B. Neilsen, K. L. Gee, and M. M. James, "Spectral characterization in the near and mid-field of military jet aircraft noise," AIAA paper 2013-2191. DOI: 10.2514/6.2013-2191

K. L. Gee, T. B. Neilsen, M. B. Muhlestein, A. T. Wall, J. M. Downing, M. M. James, and R. L. McKinley, "On the evolution of crackle in jet noise from high-performance engines," AIAA paper 2013-2190, May 2013. DOI: 10.2514/6.2013-2190

A. T. Wall, K. L. Gee, and T. B. Neilsen, "Modified statistically optimized near-field acoustical holography for jet noise characterization," Proc. Mtgs. Acoust. **19**, 055013 (2013). http://dx.doi.org/10.1121/1.4798951

K. J. Bodon, D. C. Thomas, K. L. Gee, R. C. Bakaitis, D. T. Blackstock, and W. M. Wright, "Radiation of finite-amplitude waves from a baffled pipe," Proc. Mtgs. Acoust. **19**, 045076 (2013).

J. M. Downing, K. L. Gee, S. A. McInerny, T. B. Neilsen, and M. M. James, "Do recent findings on jet noise answer aspects of the Schultz curve?," Proc. Mtgs. Acoust. **19**, 040022 (2013).

B. M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall, S. A. McInerny, and M. M. James, "Autocorrelation analysis of military jet aircraft noise," Proc. Mtgs. Acoust. **19**, 040072 (2013).

T. B. Neilsen, K. L. Gee, A. T. Wall, M. M. James, and A. A. Atchley, "Comparison of supersonic full-scale and laboratory-scale jet data and the similarity spectra for turbulent mixing noise," Proc. Mtgs. Acoust. **19**, 040071 (2013).

T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, D. W. Krueger, and M. M. James, "Preliminary Analysis of Acoustic Intensity in a Military Jet Noise Field," Proc. Mtgs. Acoust. **19**, 040074 (2013).

D. M. Hart, T. B. Neilsen, K. L. Gee, and M. M. James, "A Bayesian-based equivalent sound source model for a military jet aircraft," Proc. Mtgs. Acoust. **19**, 055094 (2013).

W. R. Johnson, P. Aslani, S. D. Sommerfeldt, J. D. Blotter, and K. L. Gee, "Acoustic radiation mode shapes for control of plates and shells," Proc. Mtgs. Acoust. **19**, 065036 (2013).

S. C. Reynolds, J. S. Myres, T. B. Neilsen, A. T. Wall, K. L. Gee, and M. M. James, "Geometric near-field characteristics of supersonic jets: Full and laboratory scales," Proc. Internoise 2012, paper in12_1194.

K. L. Gee, A. A. Atchley, L. E. Falco, and M. R. Shepherd, "Nonlinearity analysis of model-scale jet noise," 19th International Symposium on Nonlinear Acoustics, Tokyo, Japan, May 2012, paper 3pC11.

K. L. Gee, J. M. Downing, M. M. James, R. C. McKinley, R. L. McKinley, T. B. Neilsen, and A. T. Wall, "Nonlinear evolution of noise from a military jet aircraft during ground run-up," AIAA paper 2012-2258, June 2012.

A. T. Wall, K. L. Gee, T. B. Neilsen, D. W. Krueger, M. M. James, S. D. Sommerfeldt, and J. D. Blotter, "Full-scale jet noise characterization using scan-based acoustical holography," AIAA paper 2012-2081, June 2012.

M. James and K. L. Gee, "Performing aircraft jet plume noise measurements using NI LabVIEW Software and PXI hardware," National Instruments NI-Week Conference, Austin TX, Aug. 2010.

R. Rust, J. D. Blotter, S. D. Sommerfeldt, and K. L. Gee, "Active noise control of multiple cooling fans," Proc. NoiseCon 2010 **220**, 818 (2010).

M. D. Shaw and K. L. Gee, "Acoustical analysis of an indoor test facility for a 30-mm Gatling gun," Proc. Internoise 2009, paper 10386.

K. L. Gee and S. D. Sommerfeldt, "Global active control of axial cooling fan noise: An overview of past and present research," Proc. Noise-Con 2008, Dearborn, MI, July 2008.

C. V. Duke, S. D. Sommerfeldt, K. L. Gee, and C. R. Duke, "Measurement and evaluation of blade passage frequency fluctuations," Proc. Noise-Con 2007, Reno, NV, Oct. 2007.

B. M. Shafer, K. L. Gee, and S. D. Sommerfeldt, "Optimal near-field error sensor locations for active control of fan noise using multipole expansions," Proc. Noise-Con 2007, Reno, NV, Oct. 2007.

K. L. Gee, M. R. Shepherd, L. E. Falco, A. A. Atchley, L. S. Ukeiley, B. J. Jansen, and J. M. Seiner, "Identification of nonlinear and near-field effects in jet noise using nonlinearity indicators," AIAA paper 2007-3653, May 2007.

S. A. McInerny, K. L. Gee, J. M. Downing, and M. M. James, "Acoustical nonlinearities in aircraft flyover data," AIAA paper 2007-3654, May 2007.

K. L. Gee, V. W. Sparrow, M. M. James, J. M. Downing, C. M. Hobbs, T. B. Gabrielson, and A. A. Atchley, "Measurement and prediction of noise propagation from a high-power jet aircraft," AIAA paper 2006-2531, May 2006.

K. L. Gee, V. W. Sparrow, A. A. Atchley, and T. B. Gabrielson, "On the perception of crackle in noise radiated from military jet aircraft," AIAA paper 2006-2530, May 2006.

L. E. Falco, A. A. Atchley, and K. L. Gee, "Investigation of a single-point nonlinearity indicator in the propagation of high-amplitude noise," AIAA paper 2006-2529, May 2006.

M. M. James, J. M. Downing, C. M. Hobbs, K. L. Gee, S. A. McInerny, and V. W. Sparrow, "Nonlinearity in outdoor propagation of high-power jet noise: measurement results," Proc. Noise-Con 05, Minneapolis, MN, Oct. 2005.

K. L. Gee and V. W. Sparrow, "Asymptotic behavior in the numerical propagation of finite-amplitude jet noise," 17th International Symposium on Nonlinear Acoustics, State College, PA, July 2005.

L. E. Falco, A. A. Atchley, K. L. Gee, and V. W. Sparrow, "Investigation of a single-point indicator of nonlinearity in one-dimensional propagation," 17th International Symposium on Nonlinear Acoustics, State College, PA, July 2005.

K. L. Gee, V. W. Sparrow, T. B. Gabrielson, and A. A. Atchley, "Nonlinear modeling of F/A-18E/F noise propagation," AIAA paper 2005-3089, May 2005.

K. L. Gee, A. A. Atchley, L. E. Falco, T. B. Gabrielson, and V. W. Sparrow, "Bispectral analysis of high-amplitude jet noise," AIAA paper 2005-2937, May 2005.

K. L. Gee, B. P. Petitjean, D. K. McLaughlin, and V. W. Sparrow, "Nonlinear propagation of noise radiated from supersonic jets," *Proc. Noise-Con 04*, edited by C. B. Burroughs and G. C. Maling, Jr. (Noise Control Foundation, Poughkeepsie, New York, 2004), pp. 725-733.

K. L. Gee, T. B. Gabrielson, A. A. Atchley, and V. W. Sparrow, "Indicators of nonlinearity in F/A-18E/F noise propagation," *Proc. 17th ONR Propulsion Meeting*, edited by G. D. Roy and A. F. Ghoniem (Office of Naval Research Energy Conversion and Propulsion Program, Arlington, VA, 2004), pp. 69-74.

K. L. Gee, T. B. Gabrielson, A. A. Atchley, and V. W. Sparrow, "Preliminary analysis of nonlinearity in F/A-18E/F noise propagation," AIAA paper 2004-3009, May 2004.

G. Dix, K. L. Gee, and S. D. Sommerfeldt, "Design and implementation of an automated intensity scanning system at the Acoustical Testing Lab of NASA Glenn Research Center," *Proc. Noise-Con 03*, edited by D. K. Holger and G. C. Maling, Jr. (Noise Control Foundation, Poughkeepsie, New York, 2003), paper nc03_202.

K. L. Gee and S. D. Sommerfeldt, "Multi-channel active control of axial cooling fan noise," *Proc. Inter-Noise 2002*, edited by A. Selamet, R. Singh, and G. C. Maling, Jr. (Noise Control Foundation, Poughkeepsie, New York, 2002), paper N616.

Contributed Conference Abstracts (with Oral Presentation)

A. T. Wall, B. M. Harker, T. A. Stout, T. B. Neilsen, and K. L. Gee, "Comparison of holography, beamforming, and intensity-based inverse measurements on full-scale jet noise sources. Part I: Numerical investigations," J. Acoust. Soc. Am. **138**, 1917 (2015); http://dx.doi.org/10.1121/1.4934029

B. M. Harker, A. T. Wall, T. A. Stout, T. B. Neilsen, K. L. Gee, and M. M. James, "Comparison of holography, beamforming, and intensity-based inverse measurements on full-scale jet noise sources. Part II: Experimental results," J. Acoust. Soc. Am. **138**, 1917 (2015); http://dx.doi.org/10.1121/1.4934030

E. B. Whiting, T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Analytical intensity calculated from a wavepacket model and comparison to intensity measurements near a high-performance military aircraft," J. Acoust. Soc. Am. **138**, 1917 (2015); http://dx.doi.org/10.1121/1.4934028

K. G. Miller, B. O. Reichman, K. L. Gee, T. B. Neilsen and A. A. Atchley, "Quantitative nonlinearity in subsonic and supersonic model-scale jet noise," J. Acoust. Soc. Am. **138**, 1893 (2015); http://dx.doi.org/10.1121/1.4933944

B. O. Reichman, A. T. Wall, K. L. Gee and T. B. Neilsen, "Comparison of measured and predicted statistical measures in military jet noise propagation," J. Acoust. Soc. Am. **138**, 1893 (2015); http://dx.doi.org/10.1121/1.4933945

B. O. Reichman, K. L. Gee, and T. B. Neilsen, "Acoustic Environment of an F-35B Aircraft During Vertical Landings," Ann. Mtg. APS Four Corners Sect., **60** (2015).

K. G. Miller, K. L. Gee, and T. B. Neilsen, "Quantitative nonlinearity in subsonic and supersonic model-scale jet noise," Ann. Mtg. APS Four Corners Sect., **60** (2015).

B. M. Harker, T. B. Neilsen, and K. L. Gee, "Coherence lengths of high-performance military aircraft noise radiation in the near field," Ann. Mtg. APS Four Corners Sect., **60** (2015).

S. M. Young, K. L. Gee, T. B. Neilsen, and K. M. Leete, "Outdoor measurements of shock-wave propagation from exploding balloons," J. Acoust. Soc. Am. **137**, 2199 (2015); http://dx.doi.org/10.1121/1.4919996

K. M. Leete, K. L. Gee, T. B. Neilsen, S. M. Young, T. T. Truscott, and J. R. Pendlebury, "Mach reflections in the propagation of outdoor acoustic shocks generated by exploding balloons," J. Acoust. Soc. Am. **137**, 2199 (2015); http://dx.doi.org/10.1121/1.4919997

C. T. Vongsawad, M. L. Berardi, K. L. Gee, T. B. Neilsen, and M. J. Lawler, "Development of an acoustics outreach program for the deaf," J. Acoust. Soc. Am. **137**, 2289 (2015); http://dx.doi.org/10.1121/1.4920355

K. G. Miller, B. O. Reichman, K. L. Gee and T. B. Neilsen, "Quantitative analysis of a frequency-domain nonlinearity indicator," J. Acoust. Soc. Am. **137**, 2199 (2015); http://dx.doi.org/10.1121/1.4919998

D. K. Torrie, E. B. Whiting, K. L. Gee and T. B. Neilsen, "Initial laboratory experiments to validate a phase and gradient estimator method for the calculation of acoustic intensity," J. Acoust. Soc. Am. **137**, 2402 (2015); http://dx.doi.org/10.1121/1.4920743

S. H. Swift, K. L. Gee and T. B. Neilsen, "Three transformations of a crackling jet noise waveform and their potential implications for quantifying the "crackle" percept," J. Acoust. Soc. Am. **136**, 2081 (2014). http://dx.doi.org/10.1121/1.4899472

S. Hord, T. B. Neilsen and K. L. Gee, "The effect of finite impedance ground reflections on horizontal full-scale rocket motor firings," J. Acoust. Soc. Am. **136**, 2128 (2014). http://dx.doi.org/10.1121/1.4899669

B. M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall and M. M. James, "Correlation lengths in deconvolved cross-beamforming measurements of military jet noise," J. Acoust. Soc. Am. **136**, 2102 (2014). http://dx.doi.org/10.1121/1.4899562

B. O. Reichman, K. L. Gee, T. B. Neilsen, J. J. Thaden and M. M. James, "Comparison of nonlinear, geometric, and absorptive effects in high-amplitude jet noise propagation," J. Acoust. Soc. Am. **136**, 2102 (2014). http://dx.doi.org/10.1121/1.4899561

T. A. Stout, K. L. Gee, T. B. Neilsen, D. C. Thomas, B. Y. Christensen and M. M. James, "A new method of estimating acoustic intensity applied to the sound field near a military jet aircraft," J. Acoust. Soc. Am. **136**, 2081 (2014). http://dx.doi.org/10.1121/1.4899471

M. F. Pearson, K. L. Gee, T. B. Neilsen, B. O. Reichman, M. M. James and A. R. Salton, "Influence of source level, peak frequency, and atmospheric absorption on nonlinear propagation of rocket noise," J. Acoust. Soc. Am. **136**, 2169 (2014). http://dx.doi.org/10.1121/1.4899851

T. A. Stout, K. L. Gee, T. B. Neilsen, D. C. Thomas, B. Y. Christensen, and M. M. James, "A new method of estimating acoustic intensity applied to the sound field near a military jet aircraft," Four Corners APS Meeting, Orem, UT (2014).

Blaine M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James, "Phased-array measurements of military jet noise," Four Corners APS Meeting, Orem, UT (2014).

M. Pearson, K. L. Gee, T. B. Neilsen, B. O. Reichman, M. M. James, and A. R. Salton, " Influence of source level, peak frequency, and atmospheric absorption on nonlinear propagation of rocket noise," Four Corners APS Meeting, Orem, UT (2014).

B. O. Reichman, K. L. Gee, T. B. Neilsen, and J. Thaden, "Comparison of nonlinear, geometric, and absorptive effects in high-amplitude jet noise," Four Corners APS Meeting, Orem, UT (2014).

J. Thaden, K. L. Gee, T. B. Neilsen, and B. O. Reichman, "Determining Atmospheric Absorption for Jet Noise Analysis," Four Corners APS Meeting, Orem, UT (2014).
D. Torrie, B. Y. Christensen, E. Whiting, K. L. Gee, and T. B. Neilsen, "Comparing Two Methods Used in Calculating Acoustical Intensity," Four Corners APS Meeting, Orem, UT (2014).

S. K. Hord, T. B. Neilsen, and K. L. Gee, "The effect of finite impedance ground reflections on horizontal full-scale rocket motor firings," Four Corners APS Meeting, Orem, UT (2014).

K. M. Leete, J. R. Pendlebury, S. Young, K. L. Gee, T.B. Neilsen, "Evidence of Mach-like Reflections From Exploding Balloons," Four Corners APS Meeting, Orem, UT (2014).

K. L. Gee, T. B. Neilsen, B. O. Reichman, D. C. Thomas and M. M. James, "Nonlinearity spectral analysis of high-power military jet aircraft waveforms," J. Acoust. Soc. Am. 135 , 2381 (2014) ; http://dx.doi.org/10.1121/1.4877868

T. B. Neilsen, K. L. Gee, and M. M. James, "Spectral variations near a high-performance military aircraft," J. Acoust. Soc. Am. **135**, 2382 (2014) ; http://dx.doi.org/10.1121/1.4877871

B. O. Reichman, M. B. Muhlestein, K. L. Gee, T. B. Neilsen, and D. C. Thomas, "Evolution of the derivative skewness for high-amplitude sound propagation," J. Acoust. Soc. Am. **135**, 2381 (2014) ; http://dx.doi.org/10.1121/1.4877869

B. M. Harker, B. E. Anderson, K. L. Gee, T. B. Neilsen, and M. M. James, "Application of time reversal analysis to military jet aircraft noise," J. Acoust. Soc. Am. **135**, 2382 (2014); http://dx.doi.org/10.1121/1.4877870

B. Christensen, D. C. Thomas, K. L. Gee, T. B. Neilsen and M. Stewart, "Experimental validation of a new intensity estimation method," J. Acoust. Soc. Am. **135**, 2406 (2014); http://dx.doi.org/10.1121/1.4877970

T. A. Stout, K. L. Gee, T. B. Neilsen, B. Y. Christensen, D. C. Thomas, and M. M. James, "An equivalent source model for the sound intensity in the vicinity of a high-performance military aircraft," J. Acoust. Soc. Am. **135**, 2406 (2014) ; http://dx.doi.org/10.1121/1.4877973

J. K. Whiting, K. H. Fortney, T. B. Neilsen, and K. L. Gee, "Software usage for synthesized sound in acoustics education," J. Acoust. Soc. Am. **135**, 2159 (2014) ; http://dx.doi.org/10.1121/1.4877005

M. B. Muhlestein, K. L. Gee, T. B. Nielsen and D. C. Thomas, "Evolution of the wave steepening factor for high-amplitude sound propagation," J. Acoust. Soc. Am. **134**, 3981 (2013); http://dx.doi.org/10.1121/1.4830507.

Z. Anderson, B. M. Harker, K. L. Gee, T. B. Neilsen, and M. M. James, "Correlation analysis of military aircraft jet noise," J. Acoust. Soc. Am. **134**, 4094 (2013) ; http://dx.doi.org/10.1121/1.4830954.

T. A. Stout, K. L. Gee, T. B. Neilsen, A. T. Wall, and M. M. James , "Intensity analysis of peak-frequency region in noise produced by a military jet aircraft," J. Acoust. Soc. Am. **134**, 4159 (2013) ; http://dx.doi.org/10.1121/1.4831245.

J. S. Myres, K. L. Gee, T. B. Neilsen, and A. T. Wall, "Creation of coherent complex pressure measurements through overlapping scan-based measurements," J. Acoust. Soc. Am. **134**, 3981 (2013) ; http://dx.doi.org/10.1121/1.4830506.

B. M. Harker, K. L. Gee, T. B. Neilsen and M. M. James, "Preliminary phased-array characterization of near-field military jet aircraft noise," J. Acoust. Soc. Am. **134**, 4099 (2013) ; http://dx.doi.org/10.1121/1.4830974.

D. Fee, R. S. Matoza, K. L. Gee, T. B. Neilsen, and D. E. Ogden, "Infrasonic crackle from the 2011 eruption of Nabro Volcano, Eritrea: Evidence for supersonic jet noise," IAVCEI 2013, Kagoshima, Japan, Abstract #875.

R. S. Matoza, D. Fee, K. L. Gee, T. B. Neilsen, and D. E. Ogden, "Using infrasound to infer volcanic jet parameters: Revisiting acoustic power vs. jet velocity scaling laws," IAVCEI 2013, Kagoshima, Japan, Abstract #874.

K. L. Gee and T. B. Neilsen, "Teaching sound propagation at BYU football games," 2013 Idaho-Utah AAPT meeting, Orem, UT, March 2013.

T. B. Neilsen and K. L. Gee, "The physics of the voice," 2013 Idaho-Utah AAPT meeting, Orem, UT, March 2013.

R. Bakaitis, J. Bodon, K. L. Gee, and D. C. Thomas, "Radiation of sawtooth waves from the end of an open pipe," 2012 Four Corners APS Meeting, Socorro, NM, Oct. 2012.

D. M. Hart, T. B. Neilsen, and K. L. Gee, "Bayesian analysis of equivalent sound sources for a military jet aircraft," 2012 Four Corners APS Meeting, Socorro, NM, Oct. 2012.

J. S. Myres , S. C. Reynolds, T. B. Neilsen, A. T. Wall, and K. L. Gee, "Geometric near-field characteristics of supersonic jets: Full and laboratory scales," 2012 Four Corners APS Meeting, Socorro, NM, Oct. 2012.

T. W. Jerome, K. L. Gee, and T. B. Neilsen, "Analysis of noise from reusable solid rocket motor firings," 2012 Four Corners APS Meeting, Socorro, NM, Oct. 2012.

T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Decomposition of military jet aircraft mixing noise into fine and large-scale turbulent components," J. Acoust. Soc. Am. **132**, 1993 (2012).

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "Partial field decomposition of jet noise using optimally located virtual reference microphones," J. Acoust. Soc. Am. **132**, 1993 (2012).

B. M. Harker, K. L. Gee, T. B. Neilsen, A. T. Wall, M. M. James, and S. A. McInerny "Near-field correlation and coherence of military jet noise," J. Acoust. Soc. Am. **132**, 1993 (2012).

A. T. Wall, M. D. Gardner, K. L. Gee, and T. B. Neilsen, "References per coherence length: A figure of merit for multireference acoustical holography," J. Acoust. Soc. Am. **132**, 2075 (2012).

M. B. Muhlestein, D. C. Thomas, and K. L. Gee, "Impact of rigid sphere scattering on measurement of acoustic shocks," J. Acoust. Soc. Am. **132**, 1995 (2012).

B. Y. Christensen, K. L. Gee, B. E. Anderson, and A. T. Wall, "Sound radiation of the hammered dulcimer," NCUR 2012, Ogden, UT, March 2012.

K. S. Bostwick, J. H. Giraud, K. L. Gee, J. D. Blotter, and S. D. Sommerfeldt, "Low-frequency microphone probe calibration for rocket noise measurements," NCUR 2012, Ogden, UT, March 2012.

D. M. Hart, T. B. Neilsen, and K. L. Gee, "Automating the creation of equivalent sound sources for the radiated noise from a military jet aircraft," NCUR 2012, Ogden, UT, March 2012.

K. L. Gee and T. B. Neilsen, " 'Sound' physics? A discussion of acoustics in Utah's sixth grade science curriculum," 2012 Idaho-Utah AAPT meeting, Rexburg, ID, March 2012.

T. B. Neilsen and K. L. Gee, "Preliminary results of pre-class learning activities," 2012 Idaho-Utah AAPT meeting, Rexburg, ID, March 2012.

T. B. Neilsen and K. L. Gee, "Similarity spectra and the effect of propagation on F-22 spectra at afterburner," J. Acoust. Soc. Am. **130**, 2563 (2011).

J. J. Esplin, J. K. Boyle, S. D. Sommerfeldt, and K. L. Gee, "Active control of a centrifugal fan in a mock laptop enclosure," J. Acoust. Soc. Am. **130**, 2564 (2011).

J. K. Boyle, J. J. Esplin, S. D. Sommerfeldt, and K. L. Gee, "A two-dimensional model for control of centrifugal fan inlet noise in a notebook computer," J. Acoust. Soc. Am. **130**, 2564-2465 (2011).

M. B. Muhlestein and K. L. Gee, "Statistical analysis of a characteristic shock formation distance for high-amplitude noise," J. Acoust. Soc. Am. **130**, 2513 (2011).

S. A. Harper, K. L. Gee, J. H. Giraud, and M. B. Muhlestein, "Statistical analysis of noise from solid rocket motors," J. Acoust. Soc. Am. **130**, 2512 (2011).

R. T. Taylor, K. L. Gee, J. H. Giraud, S. D. Sommerfeldt, J. D. Blotter, and C. P. Wiederhold, "On the use of prepolarized microphones in rocket noise measurements," J. Acoust. Soc. Am. **130**, 2512 (2011).

J. H. Giraud, K. L. Gee, S. D. Sommerfeldt, R. T. Taylor, and J. D. Blotter, "Low-frequency calibration of a multidimensional acoustic intensity probe for application to rocket noise," J. Acoust. Soc. Am. **130**, 2512 (2011).

A. T. Wall, K. L. Gee, D. W. Krueger, and T. B. Neilsen, "Aperture extension for near-field acoustical holography applied to jet noise," J. Acoust. Soc. Am. **130**, 2344 (2011).

B. Y. Christensen, K. L. Gee, B. E. Anderson, and A. T. Wall, "Modal response and sound radiation from a hammered dulcimer," J. Acoust. Soc. Am. **130**, 2509 (2011).

M. B. Muhlestein and K. L. Gee, "Experimental characterization of shock formation distance in broadband noise propagation," J. Acoust. Soc. Am. **129**, 2679 (2011).

M. R. Shepherd, A. D. Hanford, and K. L. Gee, "Statistical analysis of a finite-amplitude sinusoid," J. Acoust. Soc. Am. **129**, 2679 (2011).

J. A. Vernon, K. L. Gee, and J. H. Macedone, "Acoustical characterization of exploding hydrogen-oxygen balloons," J. Acoust. Soc. Am. **129**, 2651(2011).

C. P. Wiederhold, K. L. Gee, S. D. Sommerfeldt, and J. D. Blotter, "Analytical comparison of spherical multimicrophone probes," J. Acoust. Soc. Am. **129**, 2644 (2011).

J. H. Giraud, K. L. Gee, S. D. Sommerfeldt, and J. D. Blotter, "Experimental analysis of multimicrophone probes for measurement of rocket noise," J. Acoust. Soc. Am. **129**, 2644 (2011).

J. K. Boyle, J. J. Esplin, S. D. Sommerfeldt, and K. L. Gee, "Active control of centrifugal fan noise: Experimental results," J. Acoust. Soc. Am. **129**, 2584 (2011).

D. W. Krueger, K. L. Gee, A. T. Wall, S. D. Sommerfeldt, and J. D. Blotter, "Cylindrical Fourier near-field acoustical holography applied to a high-power jet," J. Acoust. Soc. Am. **129**, 2493 (2011).

J. Morgan, K. L. Gee, T. Neilsen, and A. T. Wall, "A simple-source model of military jet aircraft noise," J. Acoust. Soc. Am. **129**, 2442 (2011).

T. B. Neilsen, K. L. Gee, A. T. Wall, and M. M. James, "Comparison of near-field military jet aircraft noise with similarity spectra," J. Acoust. Soc. Am. **129**, 2442 (2011).

K. L. Gee and T. B. Neilsen, "Overview of 'Sounds to Astound: An Acoustics Demonstration Show'," Idaho-Utah AAPT section meeting, Ogden, UT, March 2011.

J. A. Vernon, K. L. Gee, and J. H. Macedone, "Acoustical characterization of exploding hydrogen-oxygen balloons," Idaho-Utah AAPT section meeting, Ogden, UT, March 2011.

A. T. Wall, K. L. Gee, T. B. Neilsen, and M. M. James, "Considerations for near-field acoustical inverse measurements on partially correlated sources," J. Acoust. Soc. Am. **128**, 2285 (2010).

K. L. Gee, "Nonlinear acoustic propagation of launch vehicle and military jet aircraft noise," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

J. H. Giraud, K. L. Gee, and J. E. Ellsworth, "Acoustic temperature measurement in a rocket noise field," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

A. T. Wall, K. L. Gee, T. Neilsen, D. W. Krueger, S. D. Sommerfeldt, and M. M. James, "Near-field acoustical holography of military jet aircraft noise," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

J. Morgan, K. L. Gee, T. Neilsen, and A. T. Wall, "A simple-source model of military jet aircraft noise," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

J. A. Vernon, K. L. Gee, and J. H. Macedone, "Acoustical characterization of exploding hydrogen-oxygen balloons," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

M. B. Muhlestein, K. L. Gee, and J. H. Macedone, "A demonstration of acoustic shock wave propagation," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

D. W. Krueger, K. L. Gee, and J. Grimshaw, "Nonlinear vibrations of a large Balinese gamelan gong," 2010 Four Corners APS Meeting, Ogden, UT, Oct. 2010.

B. D. Moser, B. E. Anderson, and K. L. Gee, "Loudspeaker line array educational demonstration, 2010 AAPT Summer Meeting, Portland, OR, July 2010.

M. E. Jones, K. L. Gee, and J. Grimshaw, "Vibrational characteristics of Balinese gamelan metallophones," J. Acoust. Soc. Am. **127**, 1982 (2010).

D. A. Manwill, J. M. Fisher, S. D. Sommerfeldt, K. L. Gee, and J. D. Blotter, "Real-time active control of structural energy density and structural power flow," J. Acoust. Soc. Am. **127,** 1953 (2010).

J. M. Fisher, D. A. Manwill, J. D. Blotter, S. D. Sommerfeldt, and K. L. Gee, "Relationships between structural energy density, power flow, and their influence on acoustic intensity," J. Acoust. Soc. Am. **127**, 1953 (2010).

A. T. Wall, K. L. Gee, M. M. James, and M. D. Gardner, "Application of near-field acoustical holography to high-performance jet aircraft noise," J. Acoust. Soc. Am. **127**, 1879 (2010).

J. A. Vernon, K. L. Gee, and J. H. Macedone, "Measurements of exploding balloon demonstrations," J. Acoust. Soc. Am. **127**, 1882 (2010).

M. M. James, K. L. Gee, A. T. Wall, J. M. Downing, K. A. Bradley, and S. A. McInerny, "Aircraft jet source noise measurements of a Lockheed Martin F-22 fighter jet using a prototype near-field acoustical holography measurement system," J. Acoust. Soc. Am. **127**, 1878 (2010).

C. V. Duke, S. D. Sommerfeldt, and K. L. Gee, "Active control of axial fan noise using a multiple-input multiple-output feedback controller," J. Acoust. Soc. Am. **127**, 1838 (2010).

Z. A. Collins, K. L. Gee, S. D. Sommerfeldt, and J. D. Blotter, "Interior Fourier near-field acoustical holography using energy density," J. Acoust. Soc. Am. **127**, 1771 (2010).

K. L. Gee, "The Rubens tube," J. Acoust. Soc. Am. **126,** 2294 (2009).

K. L. Gee, W. J. Strong, and S. D. Sommerfeldt, "The Harvey Fletcher years at Brigham Young University," J. Acoust. Soc. Am. **126,** 2294 (2009).

C. P. Wiederhold, K. L. Gee, D. C. Thomas, S. D. Sommerfeldt, and J. D. Blotter, "Impact of spherical probe scattering on estimation of acoustic vector quantities," J. Acoust. Soc. Am. **125,** 2636 (2009).

D. C. Thomas and K. L. Gee, "Wave vector method for estimating acoustic vector quantities," J. Acoust. Soc. Am. **125,** 2636 (2009).

T. B. Neilsen, K. L. Gee, and M. D. Gardner, "Near-field acoustic holography in conical coordinates," J. Acoust. Soc. Am. **125** 2634 (2009).

A. T. Wall, M. D. Gardner, K. L. Gee, S. D. Sommerfeldt, D. Manwill, and J. D. Blotter, "Scan-based near-field acoustical holography on partially correlated fields: Laboratory experiments," J. Acoust. Soc. Am. **125,** 2634 (2009).

M. D. Gardner, K. L. Gee, A. T. Wall, S. D. Sommerfeldt, D. Manwill, and J. D. Blotter, "Scan-based near-field acoustical holography on partially correlated fields: Theory and numerical experiments," J. Acoust. Soc. Am. **125,** 2634 (2009).

J. H. Giraud, K. L. Gee, J. E. Ellsworth, and D. C. Thomas, "Acoustic temperature measurement in a full-scale rocket noise field," J. Acoust. Soc. Am. **125,** 2631 (2009).

D. W. Krueger, K. L. Gee, J. Grimshaw, D. Manuel, and M. E. Jones, "Acoustic and vibrometry analysis of beating in a large Balinese gamelan gong," J. Acoust. Soc. Am. **125,** 2516 (2009).

C. V. Duke, S. D. Sommerfeldt, and K. L. Gee, "Active feedback control of broadband noise from a small axial fan," J. Acoust. Soc. Am. **125,** 2494 (2009).

M. D. Shaw and K. L. Gee, "Acoustical analysis of an indoor test facility for a 30-mm Gatling gun," J. Acoust. Soc. Am. **125,** 2493 (2009).

K. L. Gee, J. A. Vernon, and J. H. Macedone, "Exploring auditory risk of exploding balloons," Idaho-Utah AAPT section meeting, Provo, UT, March 2009.

M. R. Shepherd, K. L. Gee, and M. S. Wochner, "Numerical study of finite-amplitude source reconstruction in one-dimension," J. Acoust. Soc. Am. **124,** 2516 (2008).

M. R. Shepherd and K. L. Gee, "Higher-order statistical analysis of nonlinearly propagated broadband noise," J. Acoust. Soc. Am. **124,** 2491 (2008).

K. L. Gee, "The ear: An extremely portable nonlinear oscillator demonstration," Idaho-Utah AAPT section meeting, Boise, ID, March 2008.

C. V. Duke, S. D. Sommerfeldt, K. L. Gee, and C. R. Duke, "Measurement and evaluation of blade passage frequency fluctuations," J. Acoust. Soc. Am. **112,** 2964 (2007).

J. M. Downing, M. M. James, K. L. Gee, and S. M. McInerny, "Do recent findings on jet noise raise questions about the Schultz curve?" TRB ADC40 Summer Meeting, San Luis Obispo, July 2007.

M. R. Shepherd, M. S. Wochner, and K. L. Gee, "Numerical study of finite-amplitude source reconstruction," J. Acoust. Soc. Am. **121,** 3070 (2007).

M. M. James, J. M. Downing, S. A. McInerny, and K. L. Gee, "Analysis of acoustical nonlinear measures for aircraft flyover data," J. Acoust. Soc. Am. **121,** 3112 (2007).

K. L. Gee, V. W. Sparrow, A. A. Atchley, and T. B. Gabrielson, "On the perception of crackle in noise radiated from military jet aircraft," J. Acoust. Soc. Am. **121**, 3112 (2007).

S. H. Swift and K. L. Gee, "Evolution of time-varying loudness during nonlinear propagation of broadband noise," J. Acoust. Soc. Am. **121**, 3113 (2007).

S. S. Tomlinson, R. Anderson, K. L. Gee, and S. D. Sommerfeldt, "Demonstration of properties of human hearing using a cochlear analogue," J. Acoust. Soc. Am. **121** 3115 (2007).

M. D. Gardner, G. R. Dix, K. L. Gee, and J. Giraud, "An investigation of Rubens flame tube resonances," J. Acoust. Soc. Am. **121**, 3156 (2007).

D. C. Thomas, K. L. Gee, and R. S. Turley, "Physics of a balloon lens," J. Acoust. Soc. Am. **121** 3157 (2007).

C. R. Duke, S. D. Sommerfeldt, and K. L. Gee, "Optimization of control source locations in an active noise control application of axial cooling fans using genetic algorithms," J. Acoust. Soc. Am. **121**, 3179 (2007).

B. M. Shafer, K. L. Gee, S. D. Sommerfeldt, and J. I. Fjelsted, "Determination of optimal near-field error sensor locations for active control of cooling fan noise using spherical harmonic expansions," J. Acoust. Soc. Am. **121**, 3180 (2007).

C. R. Duke, S. L. Thomson, S. D. Sommerfeldt, K. L. Gee, C. V. Duke, and D. W. Krueger, "Near field placement of error sensors in an active noise control application of axial cooling fans using flow visualization techniques," J. Acoust. Soc. Am. **121**, 3180 (2007).

D. C. Thomas, K. L. Gee, and R. S. Turley, "Physics of an acoustic balloon lens," Idaho-Utah AAPT section meeting, Logan, UT, March 2007.

M. D. Gardner, G. R. Dix, K. L. Gee, and J. Giraud, "Solving Rubens' Flame Tube," Idaho-Utah AAPT section meeting, Logan, UT, March 2007.

B. M. Shafer, K. L. Gee, S. D. Sommerfeldt, and C. V. Duke, "Near-field mapping of pressure fields during active control of small axial cooling fans," J. Acoust. Soc. Am. **120**, 3198 (2006).

M. R. Shepherd and K. L. Gee, "The effects of nonlinear propagation on acoustic source imaging in one-dimension," Proceedings of 2006 Four Corners Section of the APS Fall Meeting, 6-7 Oct 2006, Logan, UT.

B. M. Shafer, C. V. Duke, and K. L. Gee, "Near-field mapping of pressure fields during active control of small axial cooling fans," Proceedings of 2006 Four Corners Section of the APS Fall Meeting, 6-7 Oct 2006, Logan, UT.

K. L. Gee, M. R. Shepherd, L. E. Falco, A. A. Atchley, L. S. Ukeiley, and B. J. Jansen, "Analysis of high-amplitude jet noise using nonlinearity indicators," J. Acoust. Soc. Am. **119**, 3384 (2006).

L. E. Falco, K. L. Gee, and A. A. Atchley, "Measurements of the rate of change of the power spectral density due to nonlinearity in one-dimensional propagation," J. Acoust. Soc. Am. **117**, 2596 (2005).

K. L. Gee, V. W. Sparrow, M. M. James, and J. M. Downing, "Nonlinearity in outdoor propagation of periodic signals: prediction method development," J. Acoust. Soc. Am. **115**, 2517 (2004).

J. M. Downing, M. M. James, C. Hobbs, K. L. Gee, V. W. Sparrow, and S. A. McInerny, "Nonlinearity in outdoor propagation of periodic signals: measurement and results," J. Acoust. Soc. Am. **115**, 2517 (2004).

V. W. Sparrow, D. K. McLaughlin, P. J. Morris, K. L. Gee, B. P. Petitjean, U. Paliath, S. McInerny, M. Downing, and K. Plotkin, "Nonlinear noise generation and propagation from high-thrust jet engines," Partners in Environmental Technology Symposium and Workshop, Washington D. C., 2-4 Dec., 2003.

K. L. Gee and V. W. Sparrow, "Evaluating prediction methods for the spectral evolution of finite-amplitude jet noise," J. Acoust. Soc. Am. **114**, 2418 (2003).

V. W. Sparrow, K. L. Gee, J. M. Downing, and K. J. Plotkin, "Military aircraft noise and nonlinear acoustics," J. Acoust. Soc. Am. **112**, 2214 (2002).

K. L. Gee and S. D. Sommerfeldt, "Multi-channel active control of axial cooling fan noise," J. Acoust. Soc. Am. **111**, 2453 (2002).

Invited Lectures

K. L. Gee, "That's shocking! The physics of nonlinear sound waves with examples," Idaho State University Physics Colloquium, October 2015.

K. L. Gee, "Acoustics of military jet engines," IHI Corporation Seminar, Tokyo Japan, July 2015.

K. L. Gee, "Acoustics of rockets and other supersonic jets," Japan Aerospace Exploration Agency seminar, Tokyo Japan, July 2015.

K. L. Gee and T. B. Neilsen, "From the laboratory to military aircraft, rockets, and explosive volcanoes: Supersonic jet noise across multiple scales," University of Tokyo Hongo campus Aerospace Engineering seminar, Tokyo Japan, July 2015.

K. L. Gee and T. B. Neilsen, "From the laboratory to military aircraft, rockets, and explosive volcanoes: Supersonic jet noise across multiple scales," University of Tokyo Kashiwa campus Graduate Program in Frontier Sciences seminar, Tokyo Japan, July 2015.

K. L. Gee and T. B. Neilsen, "Acoustics of military aircraft and rockets," South Korea Agency for Defense Development, Teajon, South Korea, July 2015.

K. L. Gee and T. B. Neilsen, "From the laboratory to military aircraft, rockets, and explosive volcanoes: Supersonic jet noise across multiple scales," Yonsei University Department of Mechanical Engineering Distinguished Lecture, Seoul, South Korea, July 2015.

K. L. Gee, "That's shocking! The physics of nonlinear sound waves with examples," BYU Idaho Physics Colloquium, January 2015.

K. L. Gee, "A Tale of Scale: Supersonic Jet Noise from the Laboratory through Explosive Volcanoes," Penn State CAV Flow Noise Group Lecture, April 2014.

A. T. Wall, K. L. Gee, *et al*., "Of microphones, measurements, and military jets: Acoustical holography of the F-22 Raptor," BYU Physics Colloquium, Nov. 2011.

K. L. Gee, "Graduate studies in physics at BYU," Utah Valley University, Dept. of Physics Colloquium, Nov. 2011.

S. D. Sommerfeldt and K. L. Gee, "Active Noise Control," Short Course at 161st Acoustical Society of America Meeting, Seattle, WA, May 2011.

K. L. Gee, "Use of LabVIEW and PXI Hardware in Military Jet and Rocket Noise Testing," Utah Valley LabVIEW User Group Meeting, Jan. 2011.

K. L. Gee and S. D. Sommerfeldt, “Both Good and Great: On the contributions of Carl Eyring and Harvey Fletcher,” BYU Physics Colloquium, Feb. 2010.

K. L. Gee, “A pseudorandom introduction to jet noise,” BYU Statistics Dept., Dec. 2009.

K. L. Gee, “Rockets, and Jets, and Noise! Oh, My!” Idaho State University Physics Dept. Seminar, Oct. 2009.

K. L. Gee and J. Grimshaw, “Riding the Ombak: Acoustics of the Balinese Gamelan,” Keynote address, Utah Academy of Science, Arts, and Letters, Oct. 2008.

K. L. Gee, “Physical Acoustics: Research in Jet and Rocket Noise,” Geophysics Research Group, Los Alamos National Laboratory, May 2008.

K. L. Gee, “Nonlinearity in jet noise,” Utah Valley State College, Dept. of Physics Colloquium, April 2006.

K. L. Gee, “Sound inflamed: Demonstrations in physical acoustics,” Brigham Young University Dept. of Physics and Astronomy Colloquium, Nov. 2005.

K. L. Gee, “Prediction of high-amplitude jet noise propagation,” National Center for Physical Acoustics Seminar, University of Mississippi, March 2005.

K. L. Gee, “Prediction of high-amplitude jet noise propagation,” Brigham Young University Dept. of Physics and Astronomy Colloquium, March 2005.

K. L. Gee, T. B. Gabrielson, A. A. Atchley, and V. W. Sparrow, “Nonlinear propagation of F/A-18E/F noise,” Penn State Center for Acoustics and Vibration, Radiation and Propagation Group Lecture, April 2004.

K. L. Gee, “Active control of cooling fan noise,” Penn State Center for Acoustics and Vibration, Flow-induced Noise Group Lecture, March 2003.