

## Refereed journal papers

“Application of the Limiting Amplitude Principle to Elastodynamic Scattering Problems”, (with G.A. Kriegsmann and J.D. Achenbach), **SIAM J. Sci. Stat. Comp.**, Vol. 7, pp. 571-590(1986).

“Numerical Studies of Acoustic Pulse Scattering by Baffled Two Dimensional Membranes”, (with G.A. Kriegsmann), **J. Acoust. Soc. Am.**, Vol 79, pp. 9-17(1986).

“Scattering of a Pulse by a Cavity in an Elastic Half Space”, (with G.A. Kriegsmann and J.D. Achenbach), **J. Comp. Phys.**, Vol. 65, pp. 410-431(1986).

“Time Domain Finite Difference Calculations for Interaction of an Ultrasonic Wave with a Surface Breaking Crack”, (with J.D. Achenbach), **Wave Motion**, Vol. 9, pp. 171-190(1987).

“Assessment of a New Radiation Damping Model for Structural Acoustic Interactions”, (with G.A. Kriegsmann), **J. Acoust. Soc. Am.**, Vol. 86, pp. 788-794(1989).

“A Comparison of Several Iterative Techniques in the Solution of Symmetric Banded Equations on a Two-pipe Cyber 205”, **Appl. Math. Comput.**, Vol. 34, pp. 95-112(1989).

“Decoupling Approximations for Structural Acoustic Interactions”, (with G.A. Kriegsmann), **Appl. Math. Letters**, Vol 3, pp. 51-54(1990).

“The Propagation of Time Harmonic Rayleigh-Lamb Waves in a Bimaterial Plate”, (with N. Vasudevan), **J. Acoust. Soc. Am.**, Vol. 89, pp.1606-1614 (1991).

“Acoustic Interactions in Arrays of Spherical Elastic Shells”, (with D. Canright), **J. Acoust. Soc. Amer.**, Vol. 90, pp. 589-595(1991).

“Large Membrane Array Scattering”, (with G. A. Kriegsmann), **J. Acoust. Soc. Amer.**, Vol. 93, pp. 3043-3048(1993).

“Low Frequency Active Array Calculations in a Shallow Channel”, (with D. Canright), **J. Acoust. Soc. Am.**, Vol. 96, pp. 557-563(1994).

“Decoupling Approximations Applied to an Infinite Array of Fluid Loaded Baffled Membranes”, (with G.A. Kriegsmann), **J. Comp. Phys.**, Vol. 111, pp. 282-290(1994).

“A bi-orthogonality relationship for porous media”, (with C. Frenzen), **J. Acoust. Soc. Am.**, Vol. 98, 1199-1203(1995).

“Scattering by Large Structures with Periodic Surfaces: A Prototype Problem”, (with G. A. Kriegsmann), **Applied Computational Electromagnetics Society Journal: Special Issue**, Vol 11(1), 57-62(1996).

“A modal Pritchard approximation for computing array element mutual impedance”, (with J. Day and S. Baker), **J. Acoust. Soc. Am.**, Vol 109, pp 2215-2229(2001).

“Scattering and active acoustic control from a submerged spherical shell”, accepted for publication to **J. Acoust. Soc. Am.**

“Cancellation techniques in underwater scattering of Acoustic Signals”, (with Y. S. Shin, K. C. Hung, M. S. Khan, C. K. Lim, and C. C. Lilian), submitted to **J. Sound Vibration**.

### **Refereed Conference Papers**

”Bi-orthogonality Relationships and Scattering From Material Discontinuities”, (with C. Frenzen), in **Mathematical and Numerical Aspects of Wave propagation**, ed. J. A. DeSanto, SIAM, Philadelphia, PA, 440-442(1998).

### **Presentations**

“Applications of the Limiting Amplitude Principle to Elastodynamic Scattering”, SIAM National Meeting, Boston, Mass., July 21-25, 1986.

“An Approximate Boundary Condition for Structural Acoustic Interactions”, SIAM National Meeting, San Diego, Calif., July 16-21, 1989.

“Numerical and Radiation Impedance Approximations for Fluid/Structure Interactions”, Workshop on Integral and Field Equation Methods in Fluid-Structure Interactions, September 12-15, 1989, University of Delaware, Newark, DE (invited talk).

“Acoustic Interactions in Arrays of Fluid Loaded Spheres”, International Conference of Industrial and Applied Mathematics, Washington D.C., July 1991 (Chaired session entitled Vibrations and Acoustics).

“Acoustic Interactions in Transducer Arrays”, ATILA Users Miniworkshop, Naval Postgraduate School, August 1991.

“Application of the T-matrix method to low-frequency, active sonar array performance”, Third International Workshop on Transducers for Sonics and Ultrasonics, Orlando, FL, May 1992.

“Low Frequency Active Array Calculations in a Shallow Channel”. SIAM National Meeting, Philadelphia, PA, July 1993.

“Summary of Codes used in Sonar Transducer Modeling”, Transducer Modeling Workshop, NPS, July 10-11, 1997.

“Bi-orthogonality Relationships and Scattering From Material Discontinuities”, Fourth International Conference on Mathematical and Numerical Aspects of Wave Propagation, Golden, CO, June, 1998

“Scattering and Radiation from submerged structures: Theory and application of piezo-electric elements”, Singapore, November 1999.

“Cancellation techniques in underwater scattering”, US/Singapore Workshop on computational mechanics and simulation of underwater explosion effects, Washington DC, Nov. 1-2, 2000.

“A Modal Pritchard approximation for computing array element mutual impedance”, 140<sup>th</sup> Meeting of the Acoustical Society of America, Newport Beach, CA, Dec. 3-8, 2000.

### **Non-refereed Technical Reports**

“A comparison of 3 iterative techniques in solving symmetric systems of linear equations on a CYBER 203”. Supercomputer Computations Research Institute, Florida State University Report FSU-SCRI-87-44, 1987

“Acoustic Interactions in Arrays of Spherical Elastic Shells”, (with D. Canright), Technical Report, NPS-53-90-009, June 1990.

“T-matrix Approach to Array Modeling”, (with S. Baker), Technical report NPS-UW-98-001, September 1998.

“Fluid-Structure Interactions”, Technical report NPS-MA-98-002, July 1998.

“Pritchard's Approximation in Array Modeling”, (with S. Baker), Technical report NPS-UW-99-001, October 1999.