

RESUME'
of
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II. Education

1. Kansas City Junior College, Kansas City, Missouri, 1946-47
2. Cornell University, Ithaca, New York, 1947-52
McMullen Regional Scholarship, Five-Year Bachelor of Mechanical Engineering Degree, 1952
3. Cambridge University, Cambridge, England, 1952-53
Rotary International Foundation Fellowship One-year post-graduate course in Theory of Structures and Strength of Materials.
4. University of Pennsylvania, Philadelphia, PA, 1956-61
Dissertation Title: "New Techniques of Solution for Problems in the Theory of Orthotropic Plates", Ph.D. - 1961

III. Academic Experience

1. Lecturer, University of Pennsylvania, Graduate Division of Engineering Mechanics, 1963.
2. Associate Professor of Engineering Mechanics, University of Delaware, Department of Civil Engineering, September 1964 to July 1965.
3. Chairman and Associate Professor, Department of Mechanical Engineering, University of Delaware, July 1965 to September 1966.
4. Chairman and Professor, Department of Mechanical and Aerospace Engineering, University of Delaware, September 1966 to September 1979.
5. Visiting Professor, Fachgruppe Fur Mechanik, Eidgenossische Technische Hochschule (E.T.H.), Zurich, 1970-71.
6. Professor of Marine Studies, College of Marine Studies, University of Delaware, 1971-present.
7. Director, Center of Composite Materials, University of Delaware, 1974 to April 1978.

Publications - National Journals or Meetings

by

Jack R. Vinson

1. Analysis of Maximum Stresses in Elastic Spherical Shells During High Speed Water Entry, presented at the Second Annual Technical Symposium on Ballistic Missiles, sponsored by the USAF and Ramo-Woolridge Corp., Los Angeles, CA, June 13-14, 1957 and published in the Proceedings of the Symposium; presented at the 12th Southeastern Conference on Applied Mechanics, Callaway Gardens, May 10-11, 1984; published in the Transactions of the Conference.
2. Approximate Three-Dimensional Solution for Transient Temperature Distribution in Shells of Revolution, co-authored with M. A. Brull, presented at the 26th Annual Meeting of the Institute of the Aeronautical Sciences, New York, January 27-30, 1958, and published in the Journal of the Aero-Space Sciences, December 1958.
3. Thermal Stresses in Laminated, Circular Plates, presented at the Third U.S. National Congress of Applied Mechanics, Providence, Rhode Island, June 11-15, 1958 and published in the Transactions of the Congress.
4. The Application of Columbium Alloys for Space and Re-Entry Vehicles, presented at the Special Technical Meetings on Columbium, General Electric Research Laboratory, Schenectady, New York, June 8, 1960.
5. Effects of Hypervelocity Particles on Shielded Structures, co-authored with Messrs. R. R. Wallace, Jr. and M. Kornhauser, presented at the American Rocket Society Conference on Lifting Re-Entry Vehicles: Structures, Materials, and Design, Palm Springs, California, April 5-7, 1961, published in the A.R.S. Journal, August 1962, pp. 1231-1237.
6. New Techniques of Solution for Problems in the Theory of Orthotropic Plates, co-authored with M. A. Brull, presented at the Fourth U.S. National Congress of Applied Mechanics, Berkeley, California, June 18-21, 1962, published in the Transactions of the Congress, Vol. 2, pp. 817-825.
7. On the Flexural Vibrations of Solid Propellant Rocket Motors, co-authored with M. A. Brull and H. B. Kingsbury, presented at the AIAA Shell Structures Conference, Palm Springs, CA, April 1963, A.I.A.A. Paper 2891-63.
8. On the Lobar and Longitudinal Vibrations of Solid Propellant Rocket Motors, co-authored with H. B. Kingsbury and A. I. Soler, presented at the AIAA Sixth Solid Propellant Rocket Conference, Washington, D.C. February 1968, A.I.A.A. Paper 65-172.
9. Edge Load Solutions for Conical Shells, presented at the ASCE National Structures Conference, Miami, FL, February 1966; published in the Journal of the Engineering Mechanics Division, ASCE, 92, EMI, pp. 37-58, February 1966.

- 222 Failure Analysis of Stepladders Manufactured From Extruded Aluminum, with G.A.Snyder and J.L.Glancey, Paper IMECE2003-41526, Proceedings of the 2003 ASME International Annual Conference, Washington, D.C., November 2003.
- 223 Analysis, Design and Structural-Aerodynamic Coupling of a Piezoelectric Active Fin, with O. Rabinovitch, P. Weinacht, and T. Bogetti, presented at the 45th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, Palm Springs, April 2004.
- 224 History of Sandwich Structures and Their Analysis, presented at the Symposium honoring Arnold D. Kerr, University of Delaware, May 2004
- 225 Analysis, Design and Optimization of High performance Sandwich Water Skis, with J.L.Glancey and G.A Snyder, presented at the ASDME-IMECE, Long beach, November 2004
- 226 Preliminary Design of Piezo-Activated Composite Sandwich Fins for Projectile Maneuverability, with J,T, Arters, R. Don, O Rabinovitch, M. Leibowitz, T. Bogetti, and P Weinacht, presented at the 46th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, Austin, April 18-21, 2005
- 227 Sandwich Structures: Past, Present and Future, Plenary Speech at the Seventh International Conference on Sandwich Structures, Aalborg, Denmark, August 29-31, 2005; published in Sandwich Structures 7; Advancing With Sandwich Structures and Materials, eds. O.T. Thomsen, E. Bozhevolnaya and A. Lyckegaard. Springer, Dordrecht, The Netherlands, pp. 3-12
- 228 Wind Tunnel Verification of the Performance of a Smart Material Canard Actuator, with P. Weinacht, J. Drysdale, T. Bogetti, R. Don, J Arters, A. Hickman, Auman and O. Rabinovitch. Proceedings of the 22nd International Symposium on Ballistics, Vancouver BC, Canada, 14-18 November 2005, Vol. 1, pp13-18.
- 229 Continued Efforts in the Development of Piezo-Activated Composite Sandwich Fins, with A.R. Hickman, T. Bogetti, P. Weinacht, W.H. Drysdale, and O. Rabinovitch, presented at the 47th Annual AIAA,ASME,ASCE,AHS,ASC Structures, Structural Dynamics and Materials Conference, Newport RI, May 1-4 2006; published in the Proceedings of the Conference.
- 230 Fiberglass and Aluminum Stepladder Performance Under Dynamic Loading, with J.L.Glancey, G.A.Snyder,, J. Krisher, and P. Franklin, Paper No. 055 009, Proceedings of the 2006 ASME International Conference, Orlando, 2006
- 231 On the Analysis of Adhesively Bonded Structures: A High order Semi-Elastic Adhesive Layer Model, with J.J.Radice