Professor Wilfred H. Horton

See:
https://airandspace.si.edu/support/wall-of-honor/prof-wilfred-h-horton
https://www.mylife.com/wilfred-horton/e381196031250

Biography (from the Wall of Honor, National Air and Space Museum, Washington D.C.)
Aeronautical engineer and educator, native of England, educated at the University College in Nottingham, University College in London, and Stanford University. His expertise in Aircraft Structures & Design has been derived from his technical experience as Technical Staff & Project Group Leader with De Havilland Aircraft & Percival Aircraft, during World War II, and as Principal Scientific Officer in the Structures & Guided Weapons Departments, Group Leader on Ballistic Missiles, and consulting designer with the Royal Aircraft Establishment, Metropolitan Vickers, and Lincoln Labs at M.I.T. He was the first R.A.E. representative on Operation Totem (Atomic Bomb Test Program) and later, responsible for correlation of all data obtained on full scale tests of airplanes & missile structures and research into thermal effects and techniques of testing of all high-speed vehicles. He has taught primarily in the structures area at Stanford University and the Georgia Institute of Technology. He was an early leader in developing the graduate education and sponsored research program in structural mechanics in the School of Aerospace Engineering at Georgia Tech. His research and teaching efforts were most notable in the area of experimental mechanics and he was advisor to a number of early doctoral students in AE. Member of the Sigma Xi & Experimental Stress Analysis Societies; Associate of the British Institute of Physics; Associate Fellow of the Royal Aeronautical Society; Fellow of the Royal Statistical & Horticultural Societies.

Selected Publications:
W. H. Horton, R. W. Johnson and N. J. Hoff 1961 Experiments with Thin-Walled Circular Cylindrical Specimens Subjected to Axial Compression, Appendix 1 to Buckling of Thin Shells, by N. J. Hoff, in Proceedings of an Aerospace Symposium of Distinguished Lecturers in Honor of Dr. Theodore Von Kármán on his 80th Anniversary, Institute of the Aerospace Sciences, New York, p. 58

Horton, W. H. and Durham, S. C., “The Effect of Restricting Buckle Depth in Circular Cylindrical Shells Repeatedly Compressed to the Buckling Limit,” SUDAER No. 174, Stanford University, November 1963
Horton, W. H., and Durham, S. C., “Repeated Buckling of Circular Cylindrical Shells and Conical Frusta by Axial Compressive Forces,” Stanford University Department of Aeronautics and Astronautics, SUDAER Report No. 175 (1963)
Horton, W. H., and Cox, J. W., “The Stability of Thin-Walled Unstiffened Circular Shells Under Nonuniformly Distributed Axial Load,” SUDAER No. 220, Stanford University, February 1965
Horton, W. H., A New Philosophy on the Buckling of Shell Bodies, SUDAER No. 229, Stanford University, March 1965.
Horton, W. H., and Durham, S. C., “Imperfections, A Main Contributor to Scatter in Experimental Values of Buckling Load,” Intl. Jnl. Solids and Structures (Pergamon), 1 (1965).
Horton, W. H., Bailey, S. C., Cox, J. W., and Smith, S., “The Influence of Test Machine Rigidity on the Initial Buckling Load for Unstiffened Circular Cylindrical Shells,” SUDAER No. 230, Stanford University, April 1965.
Bernard Ross, Nicholas J. Hoff and Wilfred H. Horton, “The buckling behavior of uniformly heated thin circular cylindrical shells, Dept. of Aeronautics and Astronautics, Stanford University, SUDAER Number 225, April 1965
W. H. Horton, S. C. Bailey and A. M. Edwards, “Nonsymmetric buckle patterns in progressive plastic buckling” (Experiments conducted by the authors were concerned not only with the method in which a buckle generates and develops in a thick-walled shell, but also with the influence of geometric and mechanical parameters on this process), Experimental Mechanics, Vol. 6, No. 9, 1966, pp. 433-444
B. Ross, N.J. Hoff and W.H. Horton, “The buckling behavior of uniformly heated thin circular cylindrical shells, Experimental Mechanics, Vo. 6, No. 11, pp 529-537, November 1966
Horton, W.H. and Cundari, F.L., “On the Applicability of the Southwell Plot to the Interpretation of Test Data Obtained from Instability Studies of Shell Bodies,” Proc. AIAA/ASME 8th ‘Structures, Structural Dynamics and Materials’ Conf., CA, 651–660 (March 1967).
Horton, W. H., Bailey S. C., and McQuilkin B. H., An Introduction to Stability," Stanford University report version of Paper 219 presented at ASTM Annual Meeting, Atlantic City, N.J., June 1966
Horton, W.H., Cundari, F.L, and Johnson, R.W., "The Analysis of Experimental Data Obtainied from Stability Studies on Elastic Column and Plate Structures", Proceedings of the 9th Israel Annual Conference on Aviation and Astronautics, Israel Journal of Technology, Vol. 5, Nos. I - 2, pp. 104 - 113, February 1967.
W.H. Horton and S.C. Bailey, “Influence of test machine rigidity on the buckling load of shells”, in Test Methods for Compression Members, ASTM STP 419, Am. Soc. Testing Mats., 1967, p. 183
Wilfred H. Horton, “Structural instability” Final report/AFOS, 1968
D.J. Tenerelli and W.H. Horton, “An experimental study of the local buckling of ring-stiffened cylinders subject to axial compression”, Proceedings of the 11th Israel Annual Conference on Aviation and Astronautics, Israel Journal of Technology, Vol. 7, Nos. 1 and 2, pp. 181-194, March 1969
Wilfred H. Horton (School of Aerospace Engineering, Georgia Institute of Technology), “On the elastic stability of shells”, NASA-CR-148484, June 1976
Horton, W.H.: On the elastic stability of shells. NASA CR-145088 (1977).
Horton, W.H. Nassar, E.M. and Singhal, M.K., Determination of critical load of shells by nondestructive methods, Experimental Mechanics, 17, 1977, 154–160.