

LAWRENCE DALE THOMAS

EDUCATION: University of Alabama in Huntsville, Ph.D., 1988.
North Carolina State University, M.S., 1983.
University of Alabama in Huntsville, B.S.E., 1981.

LICENSE: Professional Engineer, Alabama #17107.

EXPERIENCE:

NASA, MARSHALL SPACE FLIGHT CENTER, Huntsville, AL (April 1996 to present)

Manager, Space Transportation Systems Engineering & Integration (10/04 – present)_ Responsible for Systems Engineering & Integration for all programs and projects managed by the MSFC Space Transportation Programs & Projects Office (STPPO).

Director, Systems Management Office (6/02 – 9/04) Responsible for project management and systems engineering of MSFC programs and projects.

Manager, Systems Engineering, Analysis, & Integration (3/01 -- 5/02) Lead systems engineering for the NASA Second Generation Reusable Launch Vehicle.

Manager, Systems Engineering Office (5/99 – 3/01) Responsible for system engineering processes in all MSFC flight projects and programs.

Chief, Systems Test Division (2/98 – 4/99) Responsible for the functional test and checkout of launch vehicles, spacecraft, and payloads developed by MSFC.

Technical Assistant to the Director, Systems Analysis and Integration Laboratory (5/96 - 1/98) Served as Agency expert in system engineering and integration (SE&I).

NASA, SPACE STATION PROGRAM OFFICE, Houston, TX (Dec. 1993 to April 1996)

Manager, Vehicle Analysis and Integration (12/93 - 4/96) Responsible for overall flight vehicle SE&I for the International Space Station.

UNIVERSITY OF ALABAMA IN HUNTSVILLE, Huntsville, AL (June 1984 to present)

Adjunct Associate Professor -- (September 1991 appointment).

Associate Member of the Graduate Faculty -- (August 1990 appointment).

PROFESSIONAL ACTIVITIES:

Member – International Astronautical Federation Space Systems Committee
Member – American Institute of Aeronautics and Astronautics
Member -- International Council on Systems Engineering

RECENT AND FORTHCOMING PUBLICATIONS:

V. Weyers and L. D. Thomas, "System Concepts and Architectures," Chapter 2 in Space Launch and Transportation Systems, edited by W. Larson, publication forthcoming.

T. Lee and L.D. Thomas, "Cost Growth Models for NASA's Programs," Journal of Probability and Statistical Science, 1 (2), pp. 265-79, August 2003.

L.D. Thomas, C. Smith, L. Thomas, M. Verhage, & S. Kittredge, "Systems Engineering Approach to Technology Integration for NASA's 2nd Generation Reusable Launch Vehicle", Proceedings of the Space Technology and Applications International Forum, Albuquerque, New Mexico, February 2-6, 2003.

L.D. Thomas, C. Smith, F. Safie, & S. Kittredge, "Life Cycle Systems Engineering Approach to NASA's 2nd Generation Reusable Launch Vehicle", Proceedings of the Life Cycle Systems Engineering Workshop, Huntsville, Alabama, November 6-8, 2002.

T. Lee and L.D. Thomas, "Cost Growth Models for NASA's Programs," Proceedings of the 33rd Symposium on the Interface of Computing Science and Statistics, Orange County, California, June 13-16, 2001.

L. D. Thomas, C.A. Smith, and J.R. Beveridge, "Advanced Engineering Environments for Space Transportation System Development", Proceedings of the 51st International Astronautical Federation Congress, Rio de Janeiro, Brazil, October 2-6, 2000.

L. D. Thomas, "Advanced Engineering Environments – Implications for Aerospace Manufacturing," Proceedings of the 4th Aerospace Material Processes and Environmental Technology Conference, Huntsville, Alabama, USA, September 18-21, 2000.

E. Messerschmid, R. Bertrand, and L. D. Thomas, "Design and Sizing Space Elements," Chapter 11 in Human Space Mission: Analysis and Design, edited by W. Larson, McGraw-Hill, 1999.