



[Mark Hilburger](#) [1]

NASA Principal Technologist



Dr. Mark Hilburger is a Senior Research Engineer in the Space Technology Exploration Directorate at NASA Langley Research Center in Hampton VA. He was recently appointed Space Technology Mission Directorate (STMD) Principal Technologist (PT) for Structures, Materials, and Nanotechnology at NASA. His roles and responsibilities include developing technology investment plans across his assigned areas in coordination with NASA Exploration Programs; identify technology needs that will enable exploration; lead focused technology studies and coordinate with Agency Capability Managers in technology development activities to maintain and advance capabilities. Previous to his STMD PT appointment, he was the Principal Investigator and Manager of the NASA Engineering and Safety Center's Shell Buckling Knockdown Factor Project from 2007 to 2018. The goal of the project was to develop and validate new design, analysis, and testing methods for buckling-critical launch vehicle structures. His responsibilities included defining and managing the integration of analysis, design, manufacturing, and test teams to develop an efficient, multi-disciplinary approach to optimal structural design, verification, and validation. His staff included experts across three NASA centers, industry, and academia. He also coordinated Space Act Agreements with Boeing, Northrop-Grumman, the German Research Laboratory (DLR), and the European Space Agency (ESA).

Dr. Mark Hilburger specializes in High-Fidelity Analysis and Design Technology Development and Experimental Methods for Aerospace Structures. He has been presented with numerous awards and including the 2018 Middle Career Stellar Award presented by The Rotary National Award for Space Achievement; the NASA Exceptional Engineering Achievement Medal, 2010; the NASA Engineering and Safety Center Engineering Excellence Award, 2009; selected as one of the nation's top 100 young engineers and scientist by the National Academy of Engineering, 2009; and the NASA Silver Snoopy Award, (Astronauts' Personal Achievement Award), 2006. He received his Ph.D. and Master of Science in Aerospace Engineering from the University of Michigan in Ann Arbor, MI in 1998 and 1995, respectively, and his Bachelor of Science in Mechanical Engineering from Rutgers University in New Brunswick, NJ in 1993.

