

# Acknowledgments

I would like to thank my advisor, Professor Michael W. Hyer, and my Ph.D. committee members, Professors Alfred C. Loos, Don H. Morris, Liviu Librescu, and Yuriko Renardy. Additional support from Dr. J. H. Starnes, Dr. Adel Jilani, David McGowan, Jaret C. Riddick, and Marc Schultz is gratefully acknowledged. I am thankful for the patience and support of my family, especially Gina.

This study was funded by the Mechanics and Durability Branch of the NASA Langley Research Center through grants NAG-1-1895 and NAG-1-2298, with additional support from the Virginia Space Grant Consortium.