Introduction: Analysis and Design of Gossamer Spacecraft

URING the fall of 2002 and the spring of 2003, three special sections on gossamer spacecraft technology were published in the *Journal of Spacecraft and Rockets*. The papers in these special sections were derived from papers presented at the 2001 Gossamer Spacecraft Forum (42nd AIAA Structures, Structural Dynamics, and Materials Conference, Seattle, Washington). The present edition of the *Journal of Spacecraft and Rockets* begins a second series of gossamer spacecraft special sections with papers derived from the 2002 Gossamer Spacecraft Forum (43rd AIAA Structures, Structural Dynamics, and Materials Conference, Denver, Colorado).

By definition, gossamer spacecraft incorporate structures that are extremely lightweight and large in span. Successful designs for gossamer spacecraft require the use of advanced materials and active control technologies coupled with innovative structural concepts. Similarly, validating these designs demands the use of advanced modeling and test methods. The present special section includes four papers that highlight recent advancements in the analysis and design of gossamer spacecraft.

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