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Structure"; "III. L' Garde Inc.'s Inflatable Space Structures"; "A. L' Garde Inc.'s Simulated Decoys"; "B. Large Offset Reflector Structure"; "C. Inflatable Antenna Experiment"; "IV. ILC Dover's Inflatable Space Structures"; "A. Large Solar-Array Structure"; "V. Other Organizations with Inflatable Space Structures Technology Capability"; "References"; "Chapter 3. Mechanics of Membrane Structures"; "Nomenclature"; "I. Introduction"

"A. Definition and Unique Behavior of Membranes""B. Tensor Analysis"; "C. Coordinate Systems and Configurations"; "II. Kinematics of Deformation"; "A. Motion and Deformation"; "B. Deformation Gradient, Stretch, and Polar Decomposition"; "C. Strain Definitions"; "D. Deformation and Strain Rate"; "III. Stress and Balance Laws"; "A. Concept of Stress"; "B. Stress Definitions"; "C. Mass Balance"; "D. Momentum Balance"; "E. Energy Balance"; "F. Conjugate Stress and Strain"; "IV. Constitutive Equations"; "A. Introduction"; "B. Thermomechanics"

"C. Thermomechanic Field Theory""D. Constitutive Relations for Elastic Solids and Sheets"; "E. Constitutive Laws for Viscoelastic Materials"; "F. Bodner's Parton's Rubin Model"; "G. Fabrics"; "V. Approximations"; "A. Approximations in the Era of Computational Mechanics"; "B. Nonlinear Nature of Membrane Problems"; "C. Approximations in the Context of the Governing Equations"; "D. Example"; "E. On Accuracy and Modeling"; "VI. Analysis of Wrinkled Membranes"; "A. Introduction"; "B. Tension-Field Modeling via a Penalty Parameter Modified Constitutive Law"

"VII. Experimental Analysis"
