

Abstract Submitted
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Flow-induced flutter of thin elastic films C. RANDALL TRUMAN, MICHELLE GALLEGOS, HUGH SMYTH, University of New Mexico — An experimental investigation of the aeroelastic performance of thin elastic films in flutter mode was carried out. The flow velocity of a uniform air stream was varied, as were film length, width and tension. Several commercially-available polymer films were tested. A laser vibrometer was used to acquire vibration characteristics of the film, including flutter frequency and film acceleration. Correlations between these parameters will be used to design a device to disperse particles from an adhesive film within an air stream.

C. Randall Truman
University of New Mexico

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