Available online at www.sciencedirect.com
SCIENCE DIRECT®
Journal of Sound and Vibration 285 (2005) 511
JOURNAL OF SOUND AND VIBRATION
www.elsevier.com/locate/jsvi

Discussion

Comments on "Non-linear free vibration analysis of a string under bending moment effects using the perturbation method"

Hossein M. Navazi[a,1], Mehrdaad Ghorashi[b,2]

[a]*Aerospace Engineering Department, Sharif University of Technology, P.O. Box 11365-9567, Tehran, Iran*
[b]*The Rotorcraft Research Group, Department of Mechanical and Aerospace Engineering, Carleton University, ME3135, 1125 Colonel By Drive, Ottawa, Ont., Canada K1S 5B6*

Received 19 July 2004; received in revised form 8 November 2004; accepted 13 January 2005

Available online 18 April 2005

Non-linear free vibration analysis of a "string" under bending moment effects has been discussed in [1]. A string, however, is known to be a structural element that can support the applied forces only by tensile forces generated in it—and not by compressive or shear forces as well as the bending moments. As far as the present authors are aware, using the word "string" for a structural element subjected to bending moment is unprecedented. Therefore, by the inclusion of bending moment in the analysis, the authors in [1] derive equations that are not valid for a string, but for a beam. In this way, the paper has actually discussed a problem other than what it has intended to do, based on its title.

Reference

[1] S.E. Khadem, M. Rezaee, Non-linear free vibration analysis of a string under bending moment effects using the perturbation method, *Journal of Sound and Vibration* 254 (2002) 677–691.

E-mail address: ghorashi@vt.edu (M. Ghorashi).
[1]Graduate student.
[2]Post-doctoral fellow and corresponding author. The comment was prepared while working as an Associate Professor in the Mechanical Engineering Department, Sharif University of Technology, Tehran, Iran.

0022-460X/$ - see front matter
doi:10.1016/j.jsv.2005.01.042