Technical Comments

Comments on "A Three-Dimensional Dynamic Analysis of a Towed System"

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THE writers wish to congratulate the authors of Ref. 1 for their elegant numerical solution of a mathematical model for an important physical problem in ocean technology. However, a more detailed discussion of the hypothesis of the model, involving matters such as the nature of the assumptions made to calculate the towline forces, and a more comprehensive presentation of numerical results, would be helpful. The steady-state cable configuration used by the authors for the initial values of the towline parameters is of practical interest in itself. It is also the purpose of this Comment to present a condensed list of references dealing with both steady-state configurations and dynamic analyses of cable systems which should prove useful to other investigators in the field.†

Practical problems related to cable systems have been under investigation since the middle 19th century.[2–4] A well-known paper that pioneered on the dynamics of cables is by Glauert.[5] Studies of the propagation of disturbances in a cable have been extensively discussed by several authors.[6,10–12] The influence of vortex shedding, ship and wake motion, and boundary-layer fluctuations on the transmission of vibrations to the towed body has also become of great interest in recent years.[7–9]

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† A complete annotated bibliography on cable systems prepared by the writers will be published soon in the document Themis Report 68-1 (Institute of Ocean Engineering, The Catholic University of America, Washington, D. C.) and will be made available upon written request.

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