

Readers' Forum

Brief discussion of previous investigations in the aerospace sciences and technical comments on papers published in the AIAA Journal are presented in this special department. Entries must be restricted to a maximum of 1000 words, or the equivalent of one Journal page including formulas and figures. A discussion will be published as quickly as possible after receipt of the manuscript. Neither the AIAA nor its editors are responsible for the opinions expressed by the correspondents. Authors will be invited to reply promptly.

Comment on "Unsteady Separation over Maneuvering Bodies"

L. E. Ericsson* and J. P. Reding†
Lockheed Missiles & Space Company, Inc.,
Sunnyvale, California 94086

THE authors of Ref. 1 apparently did not read pages 11 and 12 of Ref. 2, where "the M.R.S.-criterion" for unsteady separation is used to define the "moving separation

point effect." It is an apparent moving wall effect that produces a phase lag, but cannot change the magnitude of the force or moment vector, contrary to the case for the real moving wall effect.

As the topic of Ref. 1 is presently of great interest to the aerospace industry, one would hope that the authors will apply their analysis to one or more of the many experiments that have been performed on unsteady flow separation and determine to what extent the experimental results can be predicted by their theory.

References

Received April 15, 1991; accepted for publication May 27, 1991. Copyright © 1991 by the American Institute of Aeronautics and Astronautics, Inc. All rights reserved.

*Senior Consulting Engineer. Fellow AIAA.

†Group Engineer. Associate Fellow AIAA.

¹Shen, S. F., and Wu, T., "Unsteady Separation over Maneuvering Bodies," *AIAA Journal*, Vol. 28, No. 12, 1990, pp. 2059-2068.

²Ericsson, L. E., and Reding, J. P., "Fluid Dynamics of Dynamic Stall, Pt. I; Unsteady Flow Concepts," *Journal of Fluids and Structures*, Vol. 2, Jan. 1988, pp. 1-33.

Errata

Streamwise Upwind Algorithm for Computing Unsteady Transonic Flows Past Oscillating Wings

Shigeru Obayashi, Guru P. Guruswamy,
and Peter M. Goorjian
NASA Ames Research Center,
Moffett Field, California 94035

[*AIAA Journal* 29(10), pp. 1668-1667 (1991)]

THE following changes should be made to certain equations in this paper:

Page 1670

In the third line after Eq. (10), the expression $s_l = s_r = 1$ should be $s_l = s_r = 0$.

Page 1671

In Eq. (18g), the term $\Delta\rho$, density, should be Δp , pressure. In the line following Eq. (20), $\epsilon = 10^6$ should be $\epsilon = 10^{-6}$.

Page 1672

The line following Eq. (25) should begin,

$$\text{and } \kappa_j^{(4)} = \epsilon^{(4)} - \min(\epsilon^{(4)}, \kappa_j^{(2)}).$$

Page 1677

In Ref. 28, the second and third authors should be van Nunen and Kraan.