

Satisfaction of the asymptotic boundary conditions was achieved by using a modified Nachtsheim-Swigert iteration scheme.⁴ Asymptotic boundary conditions were considered satisfied when they were within $\pm 5 \times 10^{-6}$ of the required value. The results are shown in Table 1. Unfortunately, numerical values were not presented in Ref. 1; thus a detailed comparison is not possible. However, comparison with Fig. 1 of Ref. 1 indicates general agreement with the present results when the $\xi(g'^2 - g''g)$ term is neglected.

Examination of Table 1 shows that solutions with the term $\xi(g'^2 - g''g)$ could be obtained to the required accuracy only for $\xi \leq 0.076$. Although a number of techniques were used, no solutions could be obtained for values of $\xi > 0.076$ when the term $\xi(g'^2 - gg'')$ was included. This indicates a mathematical instability which yields results that are not physically reasonable. Furthermore, detailed examination of the values of $f''(0)$, the nondimensional shearing stress, for $\xi = 0.070, 0.075$, and 0.076 , shows that $f''(0)$ is increasing. The results in Table 1 also show that acceptable solutions without the term $\xi(g'^2 - gg'')$ could be

obtained only for values of $\xi \leq 0.95$. Note that this is approximately the limit of ξ shown in Fig. 1 of Ref. 1. Beyond $\xi = 0.095$, attempts to obtain solutions again indicate that $f''(0)$ increases.

The results of the present numerical experiment indicate that the original closure condition used in Ref. 1 is to be preferred.

References

- ¹ Sparrow, E. M., Quack, H., and Boerner, C. J., "Local Non-similarity Boundary-Layer Solutions," *AIAA Journal*, Vol. 8, No. 11, Nov. 1970, pp. 1936-1942.
- ² Coxon, M. and Parks, E. K., "Comment on 'Local Non-similarity Boundary-Layer Solutions,'" *AIAA Journal*, Vol. 9, No. 8, Aug. 1971, p. 1664.
- ³ Sparrow, E. M., "Reply by Authors to M. Coxon and E. K. Parks," *AIAA Journal*, Vol. 9, No. 8, Aug. 1971, p. 1664.
- ⁴ Rogers, D. F., "Axisymmetric Viscous Interaction with Small Velocity Slip and Transverse Curvature Effects," Rept. E-67-2, 1967, Engineering Dept., U.S. Naval Academy, Annapolis, Md.

Errata

Ignition Analysis of Adiabatic, Homogeneous Systems Including Reactant Consumption

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EQUATION (11) should read:

$$\tau = u + \varepsilon \{ [(\gamma + 2)[u + (1-u)\ln(1-u)] - (1-u)\ln^2(1-u) \} + \varepsilon^2 \{ 2Au + (1-u)[2A\ln(1-u) - A\ln^2(1-u) + B\ln^3(1-u) - \frac{1}{2}\ln^4(1-u)] \}$$

where A and B are as given.

The fourth line, second column, on p. 1731 of the Appendix should read in part:

"... the higher-order solutions, F_i , $i \neq 0$ should be (no) more complicated..." The "no" was added.

Nonlinear Vibration of Orthotropic Triangular Plates

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IN Table 1 on p. 706, the shear modulus G_{12} of the isotropic material should be read as 0.385×10^5 ksc. The expressions on the right-hand sides of the two equations immediately after Eq. (26) on p. 708 should be replaced by $0.27063 \times 10^{-2} [c(K_{12} - K_3)/b]\tau^2$ in the first equation and $0.27063 \times 10^{-2} [(3c^2K_2 - K_3 - 2K_{12})/b]\tau^2$ in the second equation.

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