if u_E is the same order of magnitude. Since u_E only appears in the energy equation, the low Prandtl number result contained in Ref. 1 should be reasonably accurate. If the temperature gradient in the x direction is comparable to that in the y direction, the heat conduction term in the x direction must be included also.

Reference

[1] Rhodes, C. A. and Kaminer, H., Jr., "Laminar Thermal Boundary Layers on Continuous Surfaces," *AIAA Journal*, Vol. 10, No. 3, March 1972, pp. 331–333.

Comment on "Lift of Wing-Body Combination"

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THE Note on the lift of multiple finned bodies by H. T. Yang[1] undertakes to "correct" a result of Miles published in 1952.[2] Unfortunately, Yang has made an error in reading or copying Miles' Eq. (3) and has omitted the exponent n (where n is the number of fins) in one term. Therefore in Yang's Eq. (3a) the term

$$[(1+R/S)/2]^{4/n}$$

should be replaced by

$$[\{1+(R/S)^n\}/2]^{4/n}$$

With this correction, it is easily verified that Yang's Eqs. (3) and (3a) for lift are identical in agreement with Miles' earlier work and reduce to the well-known result of Spreiter[3] and Ward[4] for the case $n = 2$.

References

[1] Yang, H. T., "Lift of Wing-Body Combination," *AIAA Journal*, Vol. 10, No. 11, Nov. 1972, pp. 1535–1536.

[2] Miles, J. W., "On Interference Factors for Finned Bodies," *Journal of the Aeronautical Sciences*, Vol. 18, No. 4, April 1952, p. 287.

[3] Spreiter, J. R., "Aerodynamic Properties of Slender Wing-Body Combinations at Subsonic, Transonic, and Supersonic Speeds," TN1662, July 1948, NACA.

[4] Ward, G. N., "Supersonic Flow Past Slender Pointed Bodies," *Quarterly Journal of Mechanics and Applied Mathematics*, Vol. II, Pt. I, 1949, pp. 76–97.

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Reply by Author to A. H. Flax

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I AM grateful to A. H. Flax for pointing out the erroneous omission of the exponent n in my Eq. (3a). With this equation thus restored to its original form due to Professor Miles, it is seen that Eqs. (3) and (3a) are indeed equivalent. For n other than 1 or 2, both equations reduce to

$$L = \pi\rho_\infty U_\infty{}^2 \alpha s^2 \left\{ 2\left[\frac{1+(R/s)^n}{2}\right]^{4/n} - \left(\frac{R}{s}\right)^2 \right\}$$

For $n = 1$, both reduce to

$$L = \tfrac{1}{4}\pi\rho_\infty U_\infty{}^2 \alpha s^2 \left[1+4\left(\frac{R}{s}\right)-6\left(\frac{R}{s}\right)^2+4\left(\frac{R}{s}\right)^3+\left(\frac{R}{s}\right)^4\right]$$

For $n = 2$, both reduce to Eq. (4), a well-known result as pointed out by Flax.

It is of interest to note that Eq. (3) was derived from the complex potential, Eq. (1), which may be useful in other applications.

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Errata

Thin-Walled Beams in Frame Synthesis

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THE direction of the inequality in Eq. (3c) should be reversed. In Eq. (6), the quantity $3^{1/2}$ should be $3^{2/3}$.

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