tonian impact theory for slender bodies of revolution can be shown to be given by

$$\beta/\beta_{\text{cone}} = 3(2n - 1)/[n^3(2n + 1)] \quad (1)$$

The maximum value of this ratio is

$$(\beta/\beta_{\text{cone}})_{\max} = 6^4[(10)^{1/2} - 2]/\{2[(10)^{1/2} + 4][(10)^{1/2} + 1]^3\} \quad (2)$$

or about 1.458, at a power law exponent given by

$$n = [(10)^{1/2} + 1]/6 \simeq 0.694 \quad (3)$$

Thus the maximum empirical value of ballistic coefficient is overestimated by about 4% and the optimum exponent is overestimated by about 10% with Newtonian impact theory.

The ratio of ballistic coefficients obtained from Newton-Busemann centrifugal theory under the same assumptions is

$$\beta/\beta_{\text{cone}} = 6(2n - 1)/[n^2(3n - 1)(2n + 1)] \quad (4)$$

This ratio is approximately equal to 1.952 at the optimum power law exponent of about 0.637. As with the results published in Ref. 2, the optimized aerodynamic quantity obtained from higher-order hypersonic theory is fairly close to that calculated from Newtonian impact theory but differs markedly from that of Newtonian centrifugal theory.

Subsequent to this analysis, optimum slender bodies that satisfy this constraint for a Newtonian impact pressure distribution and constant skin friction coefficient have been derived by Miele and Huang.[3]

References

[1] Berman, R. J., "Ballistic coefficients for power law bodies," AIAA J. 5, 166–167 (1967).

[2] Fink, M. R., "Hypersonic minimum-drag slender bodies of revolution," AIAA J. 4, 1717–1724 (1966).

[3] Miele, A. and Huang, H.-Y., "Missle shapes of minimum ballistic factor," Rice Univ. Aero Astronautics Rept. 32 (April 1967; also J. Optimization Theory Appl. (to be published).

Announcement: Change in Style for References in AIAA Publications

The Committee of Engineering Society Editors, of the Engineers Joint Council, has recommended a standard style for references in engineering publications. In the interest of reducing the burden on authors and editors and minimizing confusion, the AIAA Publications Department has decided to follow the recommended style. Examples of the new style will be found below and on the inside back cover of all AIAA journals. The changes will be effective with manuscripts scheduled for the January 1968 issues and thereafter.

Example—Journals

Walker, R. E., Stone, A. R., and Shandor, M., "Secondary Gas Injection in a Conical Rocket Nozzle," *AIAA Journal*, Vol. 1, No. 2, Feb. 1963, pp. 334–338.

Examples—Books

Turner, M. J., Martin, H. C., and Leible, R. C., "Further Development and Applications of Stiffness Method," *Matrix Methods of Structural Analysis*, 1st ed., Vol. 1, Macmillan, New York, 1964, pp. 203–266.

Segrè, E., ed., *Experimental Nuclear Physics*, 1st ed., Vol. 1, Wiley, New York, 1953, pp. 6–10.

Example—Reports

Book, E. and Bratman, H., "Using Compilers to Build Compilers," SP-176, Aug. 1960, Systems Development Corp., Santa Monica, Calif.

Example—Transactions or Proceedings

Soo, S. L., "Boundary Layer Motion of a Gas-Solid Suspension," *Proceedings of the Symposium on Interaction between Fluids and Particles*, Institute of Chemical Engineers, Vol. 1, 1962, pp. 50–63.