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Reply by Author to R. W. Farquhar

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FARQUHAR's comment on the fuel consumption estimates deserves a reply. In his Comment, Eq. (5) properly states the geometrical effects which define A_z; let the value thus computed be denoted A_z^f. Equation (7), which is due to the present author, defines a value which is denoted A_z^h. Then,

$$A_z^f/A_z^h = 1 + \tfrac{1}{2}(\sin\psi_o/k)^2 + 0(1/k^4)$$

Thus, A_z^h may be regarded as a lower bound, which is approximated for moderate values of k. Indeed, $k = 3.0$ gives $(A_z^f/A_z^h) = 1.03$ for $\Delta t = 93$ days. Nevertheless, A_z^f should indeed be used, and I thank Dr. Farquhar for his comment.

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Errata: "Effects of Products of Inertia on Re-Entry Vehicle Roll Behavior"

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IN the above paper, 1) Eq. (6) should read

$$\dot{p} = (1/I_X)\{M_X + (1/I)[J_{XY}(M_Y - I_X pr) + J_{XZ}(M_Z + I_X pq)]\}$$

2) in the section labeled "Conclusion," 2d should read "are zero at zero roll rate"; and 3) in the nomenclature, the fifth symbol defined should be C_{m_q} not C_m.

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