Eq. (6) with Eq. (12) becomes

$$u_1 = -\frac{2}{3^{1/2} a\mu}\left(\frac{dp}{dz}\right)\left[\frac{3^{1/2}a}{2} - x\right]$$

$$\left[\frac{1}{2}x - \frac{3^{1/2}}{2}y\right]\left[\frac{1}{2}x + \frac{3^{1/2}}{2}y\right]$$

$$= -\frac{2}{3^{1/2} a\mu}\left(\frac{dp}{dz}\right) h_1 h_2 h_3 \tag{13}$$

which is same as Eq. (1) where

$$h_1 = \left(\frac{3^{1/2}}{2}a - x\right)$$

$$h_2 = \left(\frac{1}{2}x - \frac{3^{1/2}}{2}y\right)$$

$$h_3 = \left(\frac{1}{2}x + \frac{3^{1/2}}{2}y\right)$$

If a more exact answer is required, the solution may be sought in the form

$$u_2 = \left[y^2 - \left(\frac{x}{3^{1/2}}\right)^2\right] v_1(x) +$$

$$\left[y_2 - \left(\frac{x}{3^{1/2}}\right)^2\right]^2 v_2(x) \tag{14}$$

For this choice of u_2, Eq. (7) will take the form

$$I(u_2) = \int_{x_0}^{x_l} F[x, v_l(x), v_2(x), v_1^1(x), v_2^1(x)]\, dx \tag{15}$$

where $v_1(x)$ and $v_2(x)$ must satisfy the system of Euler's equations

$$F_{\nu_1} - (d/dx)(F_{\nu_1^1}) = 0 \qquad F_{\nu_2} - (d/dx)(F_{\nu_2^1}) = 0 \tag{16}$$

References

[1] Landau, L. D. and Lifshitz, E. M. *Fluid Mechanics,* Addison-Wesley, Reading, Mass., 1959, p. 58.

[2] Kantorovich, L. V. and Krylov, V. I. *Approximate Methods of Higher Analysis,* Interscience, New York, 1958.

Errata

Coupled Pitch and Heave Porpoising Instability in Hydrodynamic Planing

Peter R. Payne*
Payne Inc., Annapolis, Md.
[J. Hydronautics **8**, 58-71 (1974)]

A SHORT portion of the paper was garbled when being paged from galley proofs. It appears on the right-hand side of page 8, the first complete paragraph down, and should read:

"The Day and Haag tests involved, essentially, varying the c.g. position at a given towing speed until the model porpoised with a +2° amplitude. Their raw data is plotted in Fig. 19.

"If one were unaware of the previous literature, one would be tempted to conclude from Fig. 19 that the model is unstable when the c.g. is aft of 4.0 in., and that an increased buoyancy contribution (greater weight at a given speed, or less speed) increases the stable range somewhat. One would then present the data as in Fig. 20, suspecting that the trends were all quite regular, and that the two highest speed points for Δ = 1.023 lb were somewhat in error."

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Announcement: 1974 Author and Subject Indexes

The indexes of the four AIAA archive journals (*AIAA Journal, Journal of Spacecraft and Rockets, Journal of Aircraft,* and *Journal of Hydronautics*) will be combined and mailed separately early in 1975. In addition, papers appearing in volumes of the *Progress in Astronautics and Aeronautics* book series published in 1974, as well as technical papers published in the 1974 issues of *Astronautics & Aeronautics,* also will be included. All subscribers to the four *Journals* are entitled to one copy of the index for each subscription which they had in 1974. All others may obtain it for $10 per copy from the Circulation Department, AIAA, Room 730, 1290 Avenues of the Americas, New York, New York 10019. **Remittance must accompany the order.**

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