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Technical Comments

Comment on "Turning Moment on a Rotating Disk"

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FOR the combined presence of laminar and turbulent flow in the boundary layer on a rotating disk, the authors[1] have overlooked a general formula for the moment coefficient. In the notation of the authors this formula published as Eq. (9) of Ref. 2 is:

$$C_M = (C_M)_{\text{turb}} - (R_c/R)^{2.5}[(C_m)_{\text{turb}} - (C_M)_{\text{lam}}]$$

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Received April 28, 1975.
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[2]Granville, P. S., "The Torque and Turbulent Boundary Layer for Rotating Disks with Smooth and Rough Surfaces, and in Drag-Reducing Polymer Solutions," *Journal of Ship Research,* Vol. 17. Dec. 1973, pp. 181-195.

Reply by Authors to P.S. Granville

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THE authors thank Dr. Granville for bringing Eq. (97) of Ref. 1 to our attention. We note in closing that Ref. 2 provides comparisons with experimental data for Reynolds numbers in the intermediate range where Eq. (97) of Ref. 1 is of interest.

References

[1]Granville, P. S., "The Torque and Turbulent Boundary Layer for Rotating Disks with Smooth and Rough Surfaces, and in Drag-Reducing Polymer Solutions," *Journal of Ship Research,* Vol. 17, Dec. 1973, pp. 181-195.
[2]Shanebrook, J. R. and McMullan, D., "Turning Moment on a Rotating Disk," *Journal of Hydronautics,* Vol. 9, Jan. 1975, pp. 46-47.

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