is an example where the improvement given by the P-L-K technique is illusory. In this connection, Olstad's Fig. 2 provides an excellent illustration of this point. Note that the second-order P-L-K solution for $\Gamma = 0.1$ gives a value of approximately 0.69 for $y(0)$ as compared to the exact value of zero. Similarly for $\Gamma = 0.01$, $y(0)$ equals approximately 0.9 and the convergence difficulty can be seen. That is, as we take Γ smaller and smaller, the P-L-K solution is less and less accurate. Also, the third-order P-L-K solution yields no value for $y(0)$ and gives multiple values of y for x small. This convergence difficulty persists in higher-order calculations. Furthermore, the analytical results obtained by the P-L-K solution, apart from numerical inaccuracies, has the wrong functional dependence upon the small parameter Γ. The P-L-K solution simply does not give the correct dependence upon Γ as Γ approaches zero.

Regarding the suggested relaxation of the criterion for uniform validity, it is not conventional. Also, it is difficult to interpret a uniform validity condition where one compares the exact solution at a point with the approximate solution at a *different* point. Furthermore, unless one can explicitly evaluate $\lambda(\epsilon)$—a difficult task in general—this criterion is of limited utility.

Finally, we disagree with the conclusion that the P-L-K technique provides an entirely satisfactory solution. A satisfactory solution is here taken to mean a solution which approximates the exact solution uniformly in the region of interest. The singular behavior occurs near $X = 0$ and the P-L-K technique does not correct this difficulty and does not yield a uniformly valid solution according to conventional definitions of uniform validity.[3,4] The simplicity of the P-L-K technique, while perhaps a virtue, does not insure correctness. There are several examples in the literature (see Ref. 3) where the P-L-K method gives what appears to be "reasonable" results that are, in fact, completely erroneous. It is for this reason that Lighthill[5] suggests restriction of application to hyperbolic partial differential equations.

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Errata: "Optimized Acceleration of Convergence of an Implicit Numerical Solution of the Time-Dependent Navier-Stokes Equations"

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THE word "much" should be deleted from the first sentence of the last paragraph on p. 2187. The analysis is valid for any cell Reynolds number greater than 2. The sign of the 4 inside the bracket in the numerator of the expression for $a_{p,q}$ and Eq. (14) should be negative. The sign of the 1 in the numerator of Eq. (15) and the abscissa of Fig. 1 should be negative. The points in Fig. 1 are not affected.

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