

Errata: A Uniqueness Proof for a Transonic Flow Problem, Vol. 27 (1978), 51–71

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There are several misprints in this paper. They do not affect the proof, but rather affect terms which were included only for clarity. The corrections should be noted in order that it be clear that the proof is applicable to the transonic flow problem as claimed.

The far fields of φ_0 , φ_1 , φ which appear respectively on page 53 in (6), line 11, (11), as well as in the first two expressions in appendix (3) should read:

$$\begin{aligned}\varphi_0 \quad x^2 + K\tilde{y}^2 \rightarrow \infty \quad & \frac{\Gamma_0(z^*)}{2\pi} \tan^{-1}\left(\frac{\sqrt{K} \tilde{y}}{x}\right) + 0 \left(\frac{\log(x^2 + K\tilde{y}^2)}{\sqrt{x^2 + K\tilde{y}^2}}\right), \\ \varphi_1 \quad x^2 + K\tilde{y}^2 \rightarrow \infty \quad & \frac{\tilde{y}}{2\pi} \int \frac{\Gamma'_0(\xi)}{z^* - \xi} d\xi + \frac{\Gamma_1(z^*)}{2\pi} \tan^{-1}\left(\frac{\sqrt{K} \tilde{y}}{x}\right) \\ & + 0 \left(\frac{\log(x^2 + K\tilde{y}^2)}{\sqrt{x^2 + K\tilde{y}^2}}\right), \\ \varphi \quad x^2 + K\tilde{y}^2 \rightarrow \infty \quad & \frac{\Gamma}{2\pi} \tan^{-1}\left(\frac{\sqrt{K} \tilde{y}}{x}\right) + 0 \left(\frac{\log(x^2 + K\tilde{y}^2)}{\sqrt{x^2 + K\tilde{y}^2}}\right),\end{aligned}$$

as can be easily seen from Reference [4] of that paper. Then also (27) and the last expression on page 70 should read respectively

$$\begin{aligned}\Psi_y &= \frac{\sqrt{K} \Gamma_1^2}{2\pi\Gamma_0(\gamma + 1)} + 0 \left(\frac{\log \tilde{r}}{\tilde{r}}\right), \\ \Psi_x &= 0 \left(\frac{\log \tilde{r}}{\tilde{r}}\right).\end{aligned}$$

Page 63 line 4⁻ should have a term $J \log^2(r + 1)$, and page 64 line 12 should read

$$\Psi_{\tilde{r} \rightarrow \infty} \sim J \log^2(\tilde{r} + 1).$$

Finally page 70 line 7⁻ is missing a minus sign. The parenthesis should read $(x^2 - K\tilde{y}^2)$.

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