[5]Homann, F., "Der Einfluss grosser Zähigkeit bei der Strömung um den Zylinder und um die Kugel," *ZAMM*, Vol. 16, June 1936, pp. 153–164; translated as "The Effect of High Viscosity on the Flow Around a Cylinder and Around a Sphere," NACA TM 1334, June 1952.

Reply by the Author to B. W. van Oudheusden

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THE Comment is very useful in expanding the scope of the original article and in highlighting the important application to the pitot tube device. The original analysis is extended to the case of axisymmetric stagnation flow, and results similar to those obtained for the previously considered plane flow case are reached.

However, the writer of the Comment has misinterpreted some of the statements in the article. Whereas the text states that the positive source causing the rise in total pressure is solely related to the normal stresses, the writer has incorrectly understood this to mean that it is only the normal stresses that cause the change in total pressure. The original article does not imply in any way that there is no negative though smaller contribution due to the shear stresses as indeed there is. It merely states that only the normal stresses in this particular case contribute to the increase in total pressure.

The author agrees that the introduction of the relationship for a in Eq. (5) of the Comment possibly provides a more physical (hence useful) interpretation of the quantity. The original expression [Eq. (13) of the paper] was only introduced to facilitate the presentation of the results in nondimensional form. In fact, the article inadvertently and incorrectly introduces δ, which is the viscous layer thickness in the definition of a. The proper quantity that should have appeared in Eq. (13) and the subsequent definition of the Reynolds number is y_∞, which is the normal distance far upstream. Corrections were indeed sent to the *AIAA Journal*, but unfortunately they appear to have arrived too late to be included in the final published paper.

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