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Flow about a jet source with a deflector

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Abstract

We suggest a method to solve one of the model problems of aerohydrodynamics, namely, a problem of a flow about a point source, from which a fluid with density and total pressure, different from the corresponding values in the incoming flow enters. The calculations are carried out for various values of the determining parameter; and the data are compared with the known results. We revealed the advantages of the suggested method in comparison with the known ones. © Allerton Press, Inc., 2011.

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Keywords

Ideal incompressible fluid, Jet stream, Point singularity