

Some References for Boundary Layer Separation

Boundary-layer separation is a very large field, with many publications. The following are just a few selected references.

1. *Control of flow separation: energy conservation, operation efficiency, and safety*, Paul K. Chang, Hemisphere Publishing Co., 1976.
2. *Boundary-Layer Separation: Proceedings of the IUTAM Symposium, London, August 1986*, Springer-Verlag, 1987.
3. *Prediction of Separated Flow Past an Airfoil Using Viscous- Inviscid Interaction Technique*, J.N. Sorensen, 1988, La Recherche Aerospaciale (English Edition), no. 3, p. 1-11.
4. *A Simple Exact Solution of the Prandtl boundary layer equations containing a point of separation*, C.S. Liu and Y.-H. Wan, 1985, *Archive for Rat. Mech. and Analysis*, 89, p. 177-185.
5. *The Instability of Two-Dimensional Laminar Separation*, L. Pauley, P. Moin, and W. Reynolds, 1989, in *Low Reynolds Number Aerodynamics: Proceedings of the Conference*, Notre Dame, IN, June 1989, Springer-Verlag, p. 82-92.
6. *Criterion for the detachment of laminar and turbulent boundary layers*, by M. Sajben and Y. Liao, *AIAA Journal*, v. 33, n. 11, pp. 2114ff, 1995.
7. *A Study of the Sensitivity of an Incompressible Turbulent Boundary Layer on the Verge of Separation*, P. Dengel and H. Fernholz, 1989, in *Seventh Symposium on Turbulent Shear Flows, Proceedings*, Volume 1, Stanford, CA, August 1989, p. 1.4.1 to 1.4.6. Proceedings apparently published by Penn State University. NASA STAR Accession number A90-35179.
8. *Afterbody aeroheating flight data for planetary probe thermal protection system design*, by Michael Wright, Frank Milos, and Phillippe Tran, *J. Spacecraft and Rockets*, v. 43, 2006, pp. 929-943.
9. *Computational analysis of laminar boundary layer separation on a slender cone at angle of attack*, by Joseph Stecher and Graham Candler, *AIAA Paper 2005-0509*, Jan. 2005.
10. The following articles in *Annual Reviews of Fluid Mechanics*:
 - (a) *Laminar Separation*, Brown and Stewartson, vol. 1.
 - (b) *Incompressible Boundary Layer Separation*, Williams, vol. 9.
 - (c) *Steady and Unsteady BL Separation*, Smith, vol. 18.
 - (d) *Turbulent BL Separation*, Simpson, vol. 20.