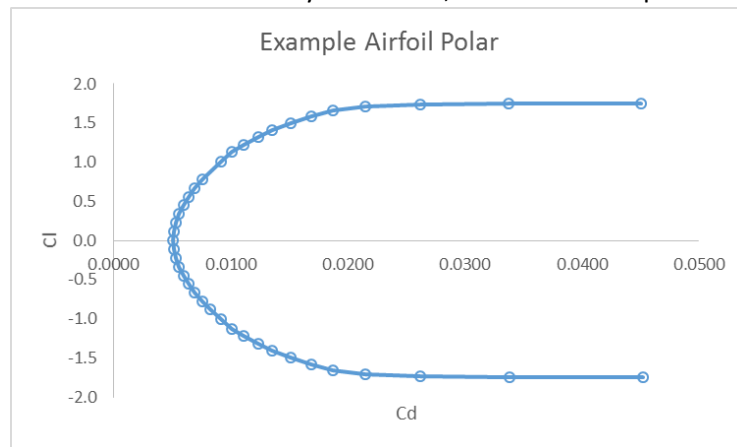


The Lockheed F-104 Starfighter, a Mach 2 fighter designed in the late 1950s, used a 3.35% thick “diamond” biconvex airfoil. The leading edge was sharp, so much so that a LE protector was added to prevent the **ground crew** from being cut (i.e. reverse hanger rash!)



- Using Prandtl-Glauert slender airfoil theory at **Mach 2**, estimate the supersonic C_l and C_d polar.



- Compare with your undergraduate Oblique shock table and Prandtl-Meyer expansion fan methodology. Compare at $AOA = \{0, 5, 10, 25\}$ degrees.

