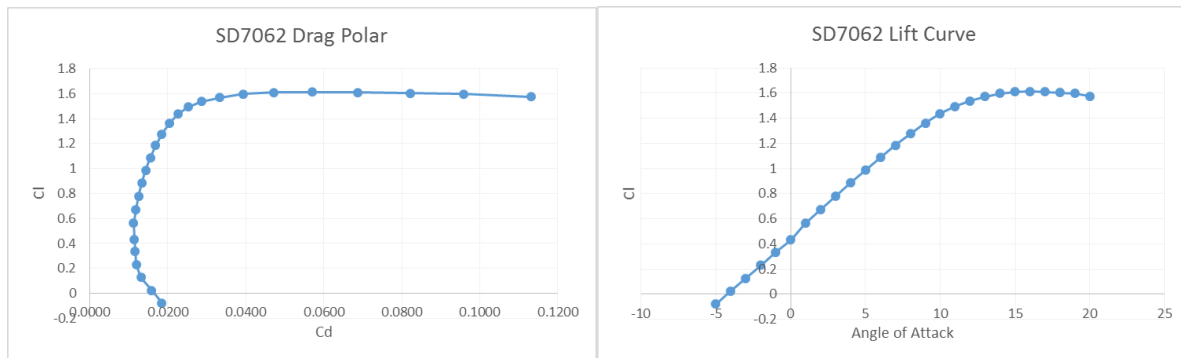


AEM 313 Problem Set #5

Due: 15th October 2016 by 5:00pm

- Using XFOIL analyze and plot for both the **NACA 4414** and **Selig Donovan SD7062** at $Re=200000$.
 - Lift Curves: C_l versus α
 - Drag polars: C_d versus C_l
 - Airfoils with boundary layer thickness and velocity profile at $C_{l_{max}}$ (separate plots)



- Use Thin Airfoil Theory to estimate the zero lift angle of attack and C_m at the quarter chord for a flat airfoil with a 20% flap deflected to 20 degrees.

