

Recitation 12 (12/12/02) Outline

Problem Solving for Lifting Surfaces

- Thickness problem
 - Distribution of source strength based on thickness variation
 - Boundary conditions
 - General procedure to obtain a solution
- Lifting problem
 - Distribution of vorticity strength based on camber line
 - Boundary conditions
 - General procedure to obtain a solution
 - Simple cases:
 - Flat plate with an attack angle
 - Parabolic camber
 - Combination of the above two
 - Velocity, vorticity, force, moment