# Flow Visualization Lab

Student Name

Date

**Figure 1a.** Streaklines around a circular cylinder at a Reynolds number based on cylinder diameter of =XXXX. The streaklines are marked by neutrally-buoyant dye injected from a small hole at the front of the cylinder. Flow is from left to right.

[copy and paste your figure 1a here]

**Figure 1b.** Streaklines around a circular cylinder at a Reynolds number based on cylinder diameter of =XXXX. The streaklines are marked by neutrally-buoyant dye injected from a small hole at the front of the cylinder. Flow is from left to right. A sequence of three snapshots are shown with a time of XX ms between each snapshot.

[copy and paste your figure 1b here]

[copy and paste your figure 1c here]

**Figure 1d.** Streaklines in the boundary layer developing along a flat plate: (left) laminar case, (right) turbulent case. The streaklines are marked by neutrally-buoyant dye injected from a series of small holes along the plate. Flow is from left to right.

[copy and paste your figure 1d here]

**Figure 1c.** Streaklines in the boundary layer developing along a flat plate. The streaklines are marked by neutrally-buoyant dye injected from a series of small holes along the plate. Flow is from left to right. The arrow indicates the approximate location of transition from laminar to turbulent flow. At this location, the Reynolds number based on distance from the leading edge of the plate is =XXXX.

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**Figure 1e.** Streaklines around an airfoil at an angle of attack of 8o and Reynolds number based on chord length of =XXXX. The streaklines are marked by neutrally-buoyant dye injected from a small holes along the surface of the airfoil. Flow is from left to right.

[copy and paste your figure 1f here]

**Figure 1f.** Streaklines around an airfoil at a Reynolds number based on chord length of =XXXX, and three different angles of attack: (left) 0o , (middle) Xo, (right) Xo. The streaklines are marked by neutrally-buoyant dye injected from a small holes along the surface of the airfoil. Flow is from left to right in each image.

[copy and paste your figure 1g here]

**Figure 1g.** Streaklines in the flow over a XXXX. The streaklines are marked by neutrally-buoyant dye injected from XXXX. Flow is from left to right. The Reynolds number based on XXXX is =XXXX.