WELCOME TO AERODYNAMICS

Visit the aircraft and exhibits listed below and attempt to answer the questions. Good luck!

Wright Flyer – Atrium

1. Observe the pilot flying the replica 1903 Wright Flyer hanging from the ceiling. What is unusual about the pilot’s flying position?

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2. Look carefully at the control lever the pilot is grasping. What part of the airplane is it attached to? What might it do?

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Montgomery Gliders

3. How did the pilots of John Montgomery’s first gliders (the ones hanging) control their aircraft? What is different about the controls of the Evergreen glider below them?

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Wright Model B Simulator

4. Take the controls of the Wright Model B (Vin Fiz) simulator. How does the airplane turn left and right?

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5. Pitch the airplane’s nose upwards. What happens if pitch is increased too far?

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XH-44 Helicopter

6. Compare the yellow XH-44 helicopter replica with the UH-12 helicopter (carrying the stretchers) immediately above it. What is different about the rotors of the two helicopters?

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Aerodynamics Exhibit (Behind Sky Portal)

7. What two ingredients does a wing need to create lift?
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   __________________________________________

8. Observe the video segment of a Boeing 747 conducting stall tests. What direction does the nose pitch when the wing stalls?
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   __________________________________________

9. Adjust the engine power of the simulated small airplane. What happens when the throttle is advanced up to full power?
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10. What do you think is the most interesting aircraft that you saw at the Hiller Aviation Museum today, and why?
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Congratulations! You finished the safari!