Aviation Prerequisites

1. Do the following:
    a. Define “aircraft.” Describe some kinds and uses of aircraft today. Explain the operation of piston, turboprop, and jet engines.
    b. Point out on a model airplane the forces that act on an airplane in flight.
    c. Explain how an airfoil generates lift, how the primary control surfaces (ailerons, elevators, and rudder) affect the airplane’s attitude, and how a propeller produces thrust.
    d. Demonstrate how the control surfaces of an airplane are used for takeoff, straight climb, level turn, climbing turn, descending turn, straight descent, and landing.
    e. Explain the following: the sport pilot, the recreational pilot, and the private pilot certificates; the instrument rating.