III. Solo Work.

- **A.** Upon completion of training, the pilot will complete pickups and drops while the instructor monitors the maneuvers from a ground location near the pickup poles and provides instruction as necessary.
- **B.** The pilot should include upper-air work including power-on and power-off stalls, slow flight, and steep turns, as well as takeoffs and landings. This provides awareness and appreciation of the flight characteristics of the aircraft.

IV. Proficiency Flight Check.

- **A.** Administered by an experienced banner tow pilot.
- **B.** Conducted in one of the aircraft to be used for banner towing.
- C. Flight profile should include the following maneuvers: flight at critically slow airspeeds, maximum performance maneuvers, and emergency procedures, to include equipment malfunctions and safety considerations during banner pickups and drop-offs. Evaluate these maneuvers using Commercial Pilot Airman Certification Standards (ACS).

FIGURE 5-2. SUGGESTED AIRPLANE FLIGHT MANEUVERS

A. The Banner Pickup. (All procedures should be adjusted for different aircraft performance.)

- 1. After takeoff and the grapple hook is dropped, the pilot should visually inspect the grapple line and hook to ensure it did not become entangled in the tail section of the aircraft during deployment.
- **2.** The airplane approaches the poles at 250 feet above ground level (AGL) at 1.6 times the airplane stall speed.
- **3.** At the point where the down-line is initiated, the airplane is pitched down at a minimum of 5 degrees and maximum of a 15 degree angle while reducing the engine power to maintain proper airspeed.

NOTE: Where to initiate the down-line varies depending upon wind conditions.

- **4.** At the point of the mast poles, full throttle should be selected to ensure a safe climb-out. (If the banner should snag another banner or object on the ground, the pilot would have a better chance of reacting to this situation.)
- **5.** Minimum airspeed through the pickup poles should be 1.6 times the stall speed.