

STETSONS AEROBATIC TRAINING:

BASIC AEROBATIC MANOEUVERS:

- 1. Level pass upright**
- 2. Aileron Roll**
- 3. Loop (inside)**
- 4. Sharks Tooth**
- 5. Hammerhead**
- 6. Immelman**
- 7. Teardrop**
- 8. Half Cuban**
- 9. Humpty Bump**
- 10. Stall Spin (upright)**

POSITIONING THE MANOEUVERS:

Dead Line is 100 ft. out from pilot station.

Left and Right ends are approximately at each end of the field.

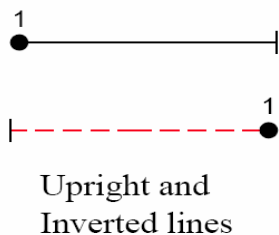
Fly high enough to be safe: one to two mistakes high.

Fly in your COMFORT ZONE at all times.

Enter manoeuvres from straight and level.

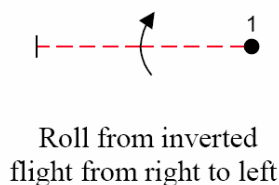
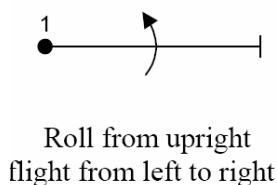
BAIL OUT and try again if it gets hairy!

1. Level Pass upright:



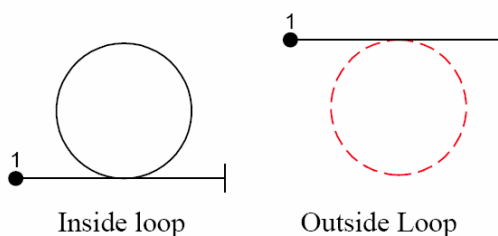
Straight and level, minimize movement. WINGS LEVEL at all times. Practice both directions. Rudder correction for cross winds required.

2. Aileron Roll:



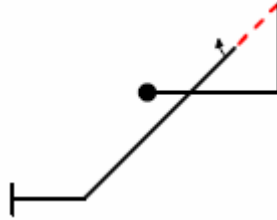
From straight and level pass, roll 360 degrees back to straight and level. One roll in 2 seconds is a good speed. Watch for nose to drop as you go inverted. PUSH (bump) down elevator a bit to correct. A slight nose up attitude for your first rolls is more comfortable.

3. Loop (inside):



From straight and level, pull up elevator smoothly and hold about 1/3 up elevator. Add power as airplane climbs. As airplane goes over the top, reduce throttle to 1/4 on the backside of the loop. Near the finish, apply power back to initial setting. One loop in 4 to 6 seconds is a good speed. WINGS LEVEL at all times.

4. Sharks Tooth:



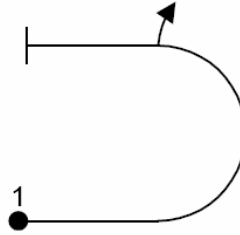
From straight and level, pull up elevator smoothly and do $\frac{1}{4}$ loop to vertical up line. Add full power to maintain upline speed. At top of upline, pull up elevator and hold until aircraft is on 45 degree downline, and inverted. Reduce throttle to $\frac{1}{4}$. Halfway down the 45 line, roll $\frac{1}{2}$ to upright and maintain 45 downline. Pull up elevator smoothly to return to straight and level. Add power to original setting. WINGS LEVEL at all times.

5. HAMMERHEAD:



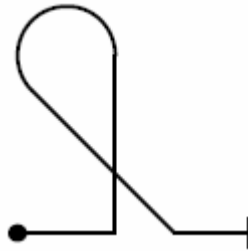
From straight and level, pull up elevator through $\frac{1}{4}$ loop to vertical up line. Add full power to hold speed on upline. At top of upline, reduce power to $\frac{1}{4}$. Wait for airplane to slow to almost full stop, pointing up. Apply full LEFT RUDDER and hold until aircraft pivots to straight down. Release $\frac{1}{2}$ the rudder, then slowly release the rest of the rudder as aircraft drops straight down. Keep downline straight. Pull up elevator $\frac{1}{4}$ loop to finish upright straight and level. Return power setting to original.

6. IMMELMAN.



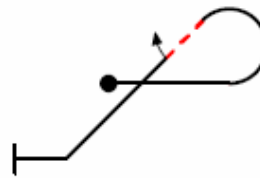
From straight and level, pull 1/3 up elevator through 1/2 loop. Release elevator as aircraft finishes 1/2 loop inverted. Roll 1/2 to upright and finish straight and level. Keep WINGS LEVEL at all times.

7. TEARDROP:



From straight and level, pull up elevator through 1/4 loop to vertical upline. Full power. At top of upline, pull smooth up elevator through 5/8 loop to a 45 degree downline. Reduce power to 1/4 on downline. Pull up elevator to straight and level and add power to original settings. Wings Level at all times.

8. HALF CUBAN:



From Straight and level, pull up elevator through 5/8 loop to a 45 downline. Aircraft is inverted. Reduce power to 1/4 on downline. Slight PUSH on elevator may be needed to hold a straight line.

Halfway along 45 downline, roll 1/2 to upright. Maintain 45 downline. Pull to straight and level at bottom of downline. Return power to original setting.

WINGS LEVEL at all times.

9. Humpty Bump:



From straight and level, pull up elevator through 1/4 loop to vertical upline. Full power to maintain speed on upline.

At top of upline, pull up elevator through 1/2 loop to vertical downline. Reduce power to 1/4. You are now looking at the bottom of the plane.

Halfway down, roll 1/2 and see top of plane.

Pull up elevator through 1/4 loop to straight and level. Power up to original settings.

Wings STRAIGHT and LEVEL at all times.

10. Stall Spin (upright):

This spin shows
One and a half
rotations.



From HIGH Straight and Level, reduce throttle to idle.

Slowly increase up elevator, holding aircraft level and straight.

As aircraft slows to a stop, maintain full up elevator.

When one wing drops, add FULL RUDDER in the direction of the dropped wing. Hold full up elevator and full rudder.

Aircraft will enter a spin. Count the spin rotations you wish to complete and release all controls just before the plane reaches this point.

Push down elevator as required to a vertical downline.

Pull up elevator through 1/4 loop to straight and level. Resume power to original settings.