Stalls

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Power On Stalls

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POWER ON STALL: We practice the power on stall to simulate a stall after takeoff. One thing you will want to do is start using the wing as a reference point. If you bring the nose up and don't add any rudder, you will find that the wing will tend to yaw to the left. This is very evident if you watch the wing against the horizon. Just by watching the wing you can tell if the wings are level and if you are coordinated. The procedure below follows the same basic flow as minimum controllable airspeed. Once again you will want to memorize the procedures. These procedures are the basis for your emergency procedures.

LINE THE NOSE ONA REFERENCE POINT THEN LOOK STRAIGHT UP AND FIND A CLOUD AS AREFERENCE ONCE YOU START TO BRING THE NOSEUP.

1: FUEL- ON

2: FLAPS- UP

3: MIXTURE- RICH

4: POWER-1500 RPM

5: CARBURETOR HEAT- OFF

6: MAGNETOS- CHECK ON

7: PRIMER- LOCKED

8: PITCH UP FOR AIRSPEED TO SLOWDOWN

9: WHEN AIRSPEED REACHES TAKEOFF SPEED- POWER FULLAND PITCH UP GENTLY

10:STALL: Once the aircraft stalls the nose will drop. Don't worry, we are not going to fall out of the sky. One thing to remember is to make sure the aircraft is coordinated. The first thing you want to make sure of is that the wings of the aircraft are level. Once this is established, watch the nose of the aircraft. Make sure the nose of the aircraft is lined up on the reference point, then if you see any yawing that is your rudder or lack of it.

STALL RECOVERY: The recovery is simple. When the plane stalls the nose will drop. When it begins to drop you will need to increase forward elevator to maintain the pitch attitude for a cruise descent. As the airspeed begins to build up the nose will want to come up again. You do not want this to happen because it will result in a secondary stall, you just want to hold the nose at descent attitude for about a second or so, then begin to bring the nose just up to climb attitude. It should take about six seconds from the stall to the nose up attitude. Just count in your mind: stall, 2, 3,4, 5, 6.

1: NOSE- JUST BELOW THE HORIZON: 2, 3, 4, 5.

2: PITCH– CLIMB ATTITUDE (6)

Power Off Stalls

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POWER OFF STALL: The purpose for the power off stall is to let you see how the aircraft reacts when it stalls in the landing configuration. With the exception of the recovery, the airplane will react almost the same as the power on stall. I have explained the differences in the recovery description. Entering the stall is the same with the exception of adding flaps and there is no power.

LINE THE NOSE OF THE AIRCRAFTUP ON A POINT THEN LOOK UP AND FIND A REFERENCE POINT IN THE SKYJUST LIKE THE POWER ON STALL

1: FUEL-ON

2: FLAPS- UP

3: MIXTURE- RICH

4: POWER-1500 RPM: DON'T STARE AT IT. LISTEN FORYOUR DESCENT TO LAND POWER.. The only reason the power is pulled back is to slow the airspeed until it is within the white arc of the aircraft. Therefore, 1500 RPM is just a reference number.

5: CARBURETOR HEAT- ON

6: MAGNETOS- CHECK

7: PRIMER- LOCKED

8: WHEN THE AIRSPEED IS IN THE WHITE ARC- FLAPS TO30 DEGREES

9: NOSE-ABOVE THE HORIZON

10: STALL

POWER OFF STALL RECOVERY:I use the same method of counting for the recovery. The only difference is the adding of power and the retracting of flaps. Another thing you want to remember is that you will have to pull back on the control column (SLIGHTLY) in order to maintain the same angle of attack. This is why you don't want to start retracting the flaps until you have started to gain some airspeed.

1: NOSE- JUST BELOW THE HORIZON / DESCENTATTITUDE

2: POWER- FULL

3: NOSE– DESCENT ATTITUDE

4: FLAPS- FIRST 10 DEGREES UP AS YOU BEGINTOBRING THE NOSE UP

5: AIRSPEED- CLIMB ATTITUDE WILL GIVE YOUAPPROXIMATELY Vy

6: FLAPS– UP 10 DEGREES AT ATIME
You will want to use the same count as you did on the power on stall.
STALL, 2,3,4,5 Climb attitude.

ABOUT STALL RECOVERY: One thing you will notice is that the aircraft will tend to be uncoordinated, one wing will drop when the aircraft stalls. Don't let this bother you. When you are bringing the nose of the aircraft forward and if the wings are level, the nose will yaw if you don't have enough rudder. Apply rudder until the nose stops yawing. This way you won't have to stare at the turn coordinator.

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