

FLIGHT TRAINING SUPPLEMENT – TAKEOFF

NORMAL TAKEOFF

Prior to taking runway

A Check Wind Sock

B Complete the before takeoff checklist i.e. Flaps position 1, Trim neutral

C Check for traffic

D Make Radio call, "Raleigh Executive Traffic Allegro 50631 Departing Runway () Raleigh Exec"

Align the aircraft on runway

Apply FULL Power

Right Rudder as needed for left turning tendencies

Rotate at 55

Retract Flaps before reaching 70

Climb at 70 to 90 mph

Maintain Right Rudder as needed to compensate for the left turning tendencies throughout the climb

Prior to taking runway

A Check Wind Sock

B Complete the before takeoff checklist i.e. Flaps position 1, Trim neutral

C Check for traffic

D Make Radio call, "Raleigh Executive Traffic Allegro 50631 Departing Runway () Raleigh Exec"

Align the aircraft on runway

Apply FULL Power

Right Rudder as needed for left turning tendencies

Rotate at 55

Retract Flaps before reaching 70

Climb at 70 to 90 mph

Maintain Right Rudder as needed to compensate for the left turning tendencies throughout the climb.

CROSS WIND TAKEOFF

Prior to taking runway

A Check Wind Sock

B Complete the before takeoff checklist i.e. Flaps position 1, Trim neutral

C Check for traffic

D Make Radio call, "Raleigh Executive Traffic Allegro 50631 Departing Runway ()
Raleigh Exec"

Align the aircraft on runway

Aileron into the wind

Apply FULL Power

Right Rudder as needed for left turning tendencies

Take out Aileron as speed approached rotation speed (55mph)

Rotate ant 55

Retract Flaps before reaching 70

Climb at 70 to 90 mph

Maintain Right Rudder as needed to compensate for the left turning tendencies
throughout the climb.

Soft Field Take Off

Prior to taking runway

A Check Wind Sock

B Complete the before takeoff checklist i.e. Flaps position 1, Trim neutral

C Check for traffic

D Make Radio call, "Raleigh Executive Traffic Allegro 50631 Departing Runway () Raleigh Exec"

Taxi the Aircraft onto the runway with the stick back to reduce nose wheel down pressure

DO NOT STOP the taxi.

Apply FULL Power and verify RPM reaches Max RPM

Right Rudder as needed for left turning tendencies

As nose begins to rise relax the back pressure a bit to avoid the tail hitting the ground.

Keep the nose wheel just off the ground. This is to reduce drag created by a wet grass or snow covered runway.

As the main gear come off the ground level off quickly and smoothly and buzz the runway just a few feet above the ground until the speed build up in ground effect. (3 to 5 seconds)

Climb at 70 until clearing any obstacles

Retract flaps after clearing the obstacle

Maintain Right Rudder as needed to compensate for the left turning tendencies throughout the climb.

Climb as normal 70 to 90 mph

Short Field Take Off

Prior to taking runway

A Check Wind Sock

B Complete the before takeoff checklist i.e. Flaps position 1, Trim neutral

C Check for traffic

D Make Radio call, "Raleigh Executive Traffic Allegro 50631 Departing Runway ()
Raleigh Exec"

Align the aircraft on runway utilizing all available runway

Hold the breaks

Apply FULL Power and verify RPM reaches Max RPM

Release the breaks

Right Rudder as needed for left turning tendencies

Rotate at 55

Climb at 70 until clearing any obstacles

Retract flaps after clearing the obstacle

Maintain Right Rudder as needed to compensate for the left turning tendencies throughout the climb.

Climb as normal 70 to 90 mph

TAKEOFF AND DEPARTURE STALL or POWER ON STALL

At 3000 feet or more **Do some clearing turns!!!**

Establish steady flight with a reference point straight ahead at.

Begin by simulating a takeoff

Slow the plane down below 70 and apply flap 1 as if you are taking off

i.e. reduce power, apply rudder as needed to compensate for lost torque, raise the nose to slow down apply flap below 70

Apply power to 4800 rpm to simulate full power. 4800 will give you a climb more like a Cessna without sending you ballistic.

Begin a climb remembering to add rudder to compensate for the high power and decreasing airspeed. Steer only with the Rudder. USE OF AILERON creates adverse yaw aggravating the stall. Keep the stick centered left to right during the maneuver.

As you approach the stall speed and before you lose directional control bring the stick all the way back to force the stall to break on queue. When you feel the plane buffet or the wing drops relax the stick pressure to arrest the stall. Allow the nose to drop just to the horizon or a little below. As Airspeed builds back up retract the flaps and raise the nose to a normal climb attitude.

The maneuver is not complete until the flaps are up and the plane is in a steady climb.

FLIGHT TRAINING SUPPLEMENT - CLIMBING

Once airborne, establish an indicated airspeed of 75 to 80 mph (65 to 70 kts). This airspeed will achieve the aircraft's best rate of climb, resulting in a 1100 to 1300 ft/min climb rate. During the climb it is essential to watch oil- and water (CHT) temperatures. Adjust the oil temperature regulation flap as required.

Climbing after takeoff

If you have to climb in cruise, select an airspeed between 80 to 92 mph (70 to 80 kts). At these speeds, the aircraft will climb between 600 to 800 ft/min, depending on weather conditions, altitude and weight of the aircraft.

It is strongly recommended to watch oil- and water (CHT) temperatures. Under no circumstances should any of the engine temperature limits be exceeded, otherwise, an engine failure may result.

Climbing while in cruise

If you have to climb at a maximum angle due to any circumstances, we recommend to establish an indicated airspeed of 57 to 63 mph (50 to 55 kts) with maximum power setting (yellow triangle on the airspeed indicator). This will give you the maximum angle of climb at a minimum horizontal speed. Watch engine temperatures during the climb!

Climbing over 50 ft Obstacle

FLIGHT TRAINING SUPPLEMENT - CRUISE

Normal cruise

The maximum continuous cruising speed in level flight and calm weather conditions is 123 to 126 mph (107 to 110 kts). To achieve these airspeeds, a 75% power setting is required, which results in an average fuel consumption of 3.5 to 4.0 gallons per hour. Fuel consumption is variable, depending on external circumstances like temperature, air pressure and payload of the aircraft.

The most effective economic cruise speed is at an indicated airspeed of 115 mph (100 kts). At this speed a fuel consumption of 3.2 gph or less will result, giving you a maximum range up to five hours of flight time.

Once the aircraft is trimmed well, it will maintain its altitude and heading without doing any correction to the control stick for extended periods. If required, the aircraft is capable of achieving an airspeed up to 138 mph (120 kts) at full power setting. If doing so, it is strongly recommended not to exceed the maximum continuous engine rpm for more than five minutes (Please refer also to the latest engine operators manual).

Cruising in gusty conditions

When flying in gusty weather conditions the maximum permissible airspeed of 115 mph (100 kts) should not be exceeded for safety reasons. The ALLEGRO(R) LSA offers very stable flight characteristics even in heavy weather conditions, similar to that of a Cessna 172.