

Flight Training Program of Instruction

A typical training schedule for the beginning pilot

Below is a typical, hour by hour, training schedule. It is an outline, used for standardization. Every one is different, with different needs, abilities, learning curves, in other words, this schedule is adapted to the individual. While some people will require more practice in coordinated flight, others may need more landing practice. Whatever your individual needs, the instructor will adjust the schedule to suit you. As you look through the schedule, you may ask yourself;

Learn to fly.... How can I possibly learn this????

Well, a simple comparison might be like the first time someone that learns to ride a motorcycle. At first coordinating balance and hand and foot movements seems difficult. It surprises you how the bike reacts when you let out the clutch too quickly. If you have too much throttle applied, the bike will jerk forward, too little throttle and the motor dies. What it does when only the front brake is applied on dry concrete as opposed to sand or wet pavement; and many other coordinated movements required to operate a motorcycle.

But then, after a few hours riding, everything becomes automatic habit, and you can accelerate smoothly from a dead stop, brake efficiently (whether on dry or wet pavement), operate the turn signals, throttle, clutch without looking for the controls and you know how the bike will respond if you lean to the side.

You have "learned" to ride the motorcycle.

The same learning process can be applied to learning to fly ultralights. At first all the required coordination between hands, feet, ears and eyes can seem overwhelming. But it's simply a matter of practice and learning. Soon you will know how the aircraft will react given a certain control movement and everything falls into place.

All 5 senses are used in the learning process....

Sight.... Most important... what you see causes you to react, although maybe not correctly at first, everything happens all at once... 'The nose is coming up, airspeed dropping a little, RPM is a little low, check the tach, ooops, now the nose is too low, airspeed is climbing, RPM... where the heck is that tach? But soon corrections become automatic.

Sound.... A whole chorus of sounds assaults your ears... Engine noise at different RPM's, wind rushing by, instructor screaming (again), many different sounds for your brain to categorize and react to...

Touch.... You feel the aircraft respond. Updraft, feel pressed into the seat, oops, now a slight downdraft... feel light, turning, sliding; you've never felt this many different sensations all at once.... It feels... good.

Smell and Taste.... The feeling of flight is so powerful, you can taste the excitement, smell the freedom, it's a feeling that can't be described, it must be experienced...

During the learning process you will encounter many new feelings and sensations that will soon become a part of you.

Your instructor will guide you through this process. You may question many things at first as he makes seemingly random "suggestions" during the flight-- "Bring the nose down" -- What nose, you think, we ARE the nose.

"Forced landing" That sounds ominous, am I ready for something like this? Why does it have to be a "coordinated" turn, why can't I just turn and go over there?

"Keep your eyes outside, scan" What "outside" you think, we are already as "outside" as we can get in this ultralight.

"Correct traffic pattern". What pattern, it's just a few turns and we are landing again, and everyone quit flying when we took off, so there's no "traffic"... hmhhh.

Scan, Clear, Check instruments, Airspeed, Trim, Fuel, Attitude, Scan -- do everything again. When does the flying part start? But everything WILL come together, and soon you will be soaring effortlessly...

Ultralight Training Schedule

FLIGHT SYLLABUS (typical example)

HOUR 1 Maneuvers (Explain controls and functions)

Straight and level flight
Level 90 degree turns
Rectangular patterns at altitude

Objectives

Attitude control (Altitude)
Airspeed control (Constant)
Power control (As required for maintaining Alt)
Ground track (Wind effect on ground track) (Crabbing to maintain straight track)
Collision avoidance
Scanning techniques

HOUR 2 Maneuvers

Climbs to level off
Descents to level off
Climbing 90 degree turn
Descending 90 degree turn
Rectangular patterns with climbs and descents
Follow through on take-off and landings

Objectives

Throttle management
Airspeed and attitude management
Coordination maneuvers
Collision avoidance
Scanning techniques

HOUR 3 Maneuvers

Stalls (Take-off power, power off, turns)
Slow flight
Slow flight turns
Landing procedures

Objectives

Recognizing stall warnings
Stall recovery
First landing practice, pattern entry, low passes, glide to full power climb, effects of turbulence near the ground

HOUR 4 Maneuvers

Taxi to runway
Traffic Pattern
Engine failure (at altitude, cruise speed and power, no turns, into the wind, showing proper glide attitude with no power)
Crosswind landings (winds permitting)

Objectives

Touchdown landing practice (IP assisted)
Engine failure procedures
Crosswind landing techniques

HOUR 5 Maneuvers

Stall procedures and practice (power on and off)
Engine failure (Take-off conditions at altitude, straight ahead and with turns into the wind)
Full Stall landings

Objectives

Importance of stall recovery procedures
Landing practice (IP assisted)
Engine failure procedures (extreme conditions)
Crosswind landing techniques

HOOR 6 Maneuvers

Traffic pattern
Engine failure (Take-off, downwind with 180 degree turn into the wind, approach)
Power off landings (engine at idle and IP assisted)

Objectives

Landing practice (IP assisted as required)
Engine failure procedures (all conditions)
Crosswind landing techniques

HOOR 7 Maneuvers

Flight to and landing at nearby airport
Instructor assisted review in preparation for supervised solo. Maneuvers as required by the instructor.
Unassisted landings

Objectives

Procedures for determining landing direction
Insure all maneuvers are satisfactory

HOOR 8 Maneuvers Supervised Solo (w/o instructor assistance unless required)

Pre-Solo Test
Normal take-off
Departure from traffic pattern
Flight to point as briefed by instructor
Re-enter traffic pattern
Conduct landings and take-off
Repeat departure and re-entry of traffic pattern

Objectives

Supervised solo

HOOR 9 Maneuvers (w/o instructor assistance unless required)

Normal take-off
Departure from traffic pattern
Slow flight to point as briefed by instructor
Re-enter traffic pattern
Conduct landings and take-off

Objectives

Supervised solo

HOOR 10 Maneuvers (w/o instructor assistance unless required)

Normal take-off
Departure from traffic pattern
Flight to nearby airport, land and return
Re-enter traffic pattern
Conduct landings and take-off

Objectives

Supervised solo

UL GROUND SCHOOL REQUIREMENTS

The following ground school classes are typical training requirements.

1. Flight Service weather briefing services and effects of weather on flying.
2. Aerodynamics and control functions.
3. Aerodynamics in a turn and compensation required.
4. Lift, weight, thrust and drag correlation as forces acting on the aircraft at all gross weights.
5. Minimum airspeed, stall indications, entry and recovery.
6. Wind shear, gusts, thermals, mechanical turbulence.
7. Wing tip vortices.
8. Wind direction indicators, operations into the wind, and downwind maneuvers.
9. Aeronautical chart, symbols and airspace class definitions.
10. Traffic patterns and tower light signals.
11. FAR (Federal Aviation Regulation) part 103 requirements for ultralights.
12. Pre-solo test review.
13. Pre-pilot test review.