

New Pilot Training
Instructor Guidelines
Highland Lakes Flyers Safety Committee
January 2009

Following is a listing of areas a new pilot (student) should be exposed to during training. A simplified document – New Pilot Training Criteria – outlines those areas, including many of the following, where proficiency must be demonstrated prior to the student being approved for independent flight at the Highland Lakes Flyers field and at sanctioned club events.

1. Preflight
 - Received copy of and understands safety rules, inspection checklist and field operation rules
 - Completed review/tour of first aid supplies and safety equipment
 - Completed "ground school", including discussion and demonstration of transmitter and model control operation
 - Student's trainer-type aircraft has passed the required safety inspection

2. Preflight Preparation
 - Demonstrates knowledge of ground support equipment and safe glow engine starting and /or demonstrates safe arming and disarming of electric models
 - Demonstrates ability to set up buddy box, including trims, without instructor help

3. "Parallel" Pattern
 - Can fly the model parallel to the runway in both directions, while maintaining constant altitude and maintaining course

4. Horizontal Figure 8
 - Can fly a Figure 8 pattern while maintaining constant altitude and reasonably symmetric circles
 - Control inputs are smooth and without excessive motion (does not over control the model)

5. Take-off
 - Demonstrates ability to taxi model from staging area to runway and back, aligning model with centerline of runway
 - Performs smooth take-offs and effectively uses the rudder to maintain a relatively straight line during the take-off roll
 - Performs smooth liftoffs, with an appropriate climb rate and controls the tendency of the aircraft to veer off course at liftoff
 - Climbs smoothly to a safe altitude and speed before transitioning to cruising conditions
 - Demonstrates these abilities in both left and right hand take-offs

6. Throttle Control
 - Demonstrates ability to fly proficiently at various throttle settings
 - Demonstrates ability to perform a power-off stall and recovery
 - Demonstrates ability to self-correct errors with minimal instructor input

7. Steep Turns
 - Demonstrates ability to make steep (50 degree or more) turns while maintaining altitude and control (maneuver completed with wings level)

8. Loops and Rolls
 - Can complete a reasonably round loop while maintaining approximate heading
 - Can complete a roll which is reasonably axial (will depend somewhat upon the model's capabilities) and which is completed with wings level
 - Altitude at completion of each maneuver is similar to that when the maneuver began

9. Approaches, Touch-And-Goes, Landings
 - Demonstrates ability to line up with the approximate centerline of the runway
 - Demonstrates ability to lower airspeed and smoothly decrease altitude
 - Demonstrates ability to maintain aircraft direction and appropriate attitude as speed decreases
 - Transitions into touch-and-goes and landings and knows when to power up and "go around."
 - During touch-and-goes makes smooth touchdowns and transitions smoothly to take-off
 - Demonstrates ability to land parallel to runway and either on the runway or on the grass to the west of the runway
 - A successful landing means the plane lands on its wheels, without a prop or wing touch and typically could be taken off again (not counting unrelated engine outs, low fuel/battery, etc)
 - Demonstrates these abilities in both right and left hand situations and can land the craft in moderate crosswinds, when necessary

10. Dead Stick Landing
 - In a simulated setting (glow engine at idle; "0" throttle for electric), student demonstrates ability to control airspeed by judicious use of elevator and to align aircraft for a probable safe landing (recognizing that depending on location of power out, a runway landing may not be possible)
 - Practice in the use of rudder during these maneuvers is desirable if the student shows sufficient proficiency to attempt it
 - Actual landing desirable but not required – completion based on instructor assessment

11. Flight line communications
 - Consistently and loudly communicates his or her intentions to other pilots either on the flight line or preparing to fly (that is, always communicates intentions)
 - Includes take-offs, landings, approaches, low passes, dead sticks, entering or crossing the runway and so forth

12. Guide
 - Exposure to all of the above maneuvers during training is highly desirable. However, the decision to release the student to independent flight will be based on the criteria and standards established in the New Pilot Training Criteria.