

**PILOT
TRAINING
INFORMATION**

“Purposeful Flight”

Does your club hold a “training night” on a regular basis to help new club members learn to fly? What kind of training is accomplished during these sessions?

Many clubs hold training sessions at regular intervals during the flying season. During the flying season, most training seems to consist of just getting airborne and back on the ground with a flyable aircraft. I’ve seen takeoffs, circles, horizontal eights, loops, rolls, and landings practiced.

Is this really enough? I know that some clubs must do this, but I have never personally seen any club provide a “ground school” before a “newbie” was allowed to put their airplane in the air. I’ve seldom seen flight emergencies like out-of-trim airplanes, failed servos, or even engine out emergencies taught or practiced. I’ve seldom seen anyone practicing crosswind take-offs and/or landings. Yet the students get signed of as “Solo” pilots without this training.

I have seen newly “soloed” pilots crash aircraft unnecessarily due to some fairly routine problems. I have even seen them crash in low crosswind situations because they were never trained to fly in the wind.

Some might say that it is too hard to learn all of these things...this hobby is suppose to be fun, not work. I can understand that...but I also feel that learning to be a proficient and safe pilot doesn’t have to be work, it can be fun.

I know that not everyone is into competition, but we can all still learn things from competitors. Watch the way a competitor practices. I don’t care if it is RC Pattern, or C/L Stunt, or what it is. They all have one thing in common...purposeful flight. They fly with specific goals in mind. They practice until they have mastered those goals to the best of their abilities. Should we be any less demanding of ourselves as instructors or students?

The next time you observe your club training night, ask yourself what is really being taught and what is really being learned. Are the students being trained to the best of your clubs’ abilities? Are they developing the skills necessary to become proficient and safe pilots? And when they get there solo sign-off...will they be assets or liabilities to the club and to themselves?

As always, if you have any question, give me a call at 765-287-1256 Ext 515



Academy of Model Aeronautics

5161 East Memorial Drive
Muncie, Indiana 47302
(765) 287-1256 – Business
(765) 289-4248 – Fax
(800) 435-9262 – Membership Services
<http://www.modelaircraft.org>

AMA Guide for Introductory Pilot Instructor Selection Criteria and Flight Proficiency Demonstration

Question: What is the most important decision any pilot can make?

Answer: When *not* to fly.....

Explanation: If the pilot isn't ready, if the equipment isn't ready, or if the conditions aren't right..... *do not fly!*

These are good words to go by no matter what kind of airplanes you fly.....full scale or models.

Are you an R/C instructor? How did you get the job? Were you asked by your club president? Were you the only one willing to do it? Do you like the prestige of being a club instructor? Are you the best instructor in your club?

When successfully introducing newcomers to the hobby/sport of aeromodeling or helping intermediate pilots improve their skill level there are various items that need to be considered. Choosing an effective, efficient and experienced instructor is very important.

People vary greatly on their ideas of what makes a good instructor. Some think that good instructors are born and possess a kind of charismatic presence that results in highly motivated learners. This view tends to result in instructors that are more likely to credit their own performance as the key to learning instead of the ability of the learner.

Some believe that instructional ability is something acquired, involving training, discipline, and a good deal of patience. They strive for instructional excellence, and assess their effectiveness by how well the learner performs.

Most agree, however, that good instructors share a love for instructing and learning, and that a good instructor must be a learner, and must possess strong motives and a positive attitude toward learning.

There is a tie between effective instruction and effective learning, but instructors only enhance learning. They set up a situation that provides the student with the opportunity to learn. Effective instructors are often those who look for ways of matching individual learning styles to their own instructional style.

**FLIGHT PROFICIENCY DEMONSTRATION
FOR INTRODUCTORY PILOTS**

- | | |
|--|---|
| 1. Preflight | <ul style="list-style-type: none">• Demonstrate knowledge of aircraft systems and perform preventive maintenance inspection on aircraft. <input type="checkbox"/> |
| 2. Engine Start | <ul style="list-style-type: none">• Demonstrate knowledge of ground support equipment and perform a safe engine start. <input type="checkbox"/> |
| 3. Take-off | <ul style="list-style-type: none">• Perform take-off while maintaining heading (no more than two wingspans from runway centerline) <input type="checkbox"/>• Perform a smooth rotation <input type="checkbox"/>• Perform a controlled transition to level flight at predetermined altitude and heading <input type="checkbox"/> |
| 4. Rectangular Pattern (at altitude) | <ul style="list-style-type: none">• Perform rectangular pattern while:<ul style="list-style-type: none">• Maintaining constant altitude <input type="checkbox"/>• Compensating for drift <input type="checkbox"/> |
| 5. Climbing and Descending Turns | <ul style="list-style-type: none">• Perform climbing and descending turns while:<ul style="list-style-type: none">• Maintaining smoothness of control <input type="checkbox"/>• Compensating for drift <input type="checkbox"/>• Controlling airspeed <input type="checkbox"/> |
| 6. Horizontal Figure 8 (from both directions) | <ul style="list-style-type: none">• Perform horizontal Figure 8 while:<ul style="list-style-type: none">• Maintaining constant altitude <input type="checkbox"/>• Compensating for drift <input type="checkbox"/>• Maintaining symmetrical circles <input type="checkbox"/> |
| 7. Stall Recovery (at altitude) | <ul style="list-style-type: none">• Perform power-on stall & recovery (at safe altitude) <input type="checkbox"/>• Perform power-off stall & recovery (at safe altitude) <input type="checkbox"/> |
| 8. Steep Turns (bank angle greater than 50 degrees) | <ul style="list-style-type: none">• Perform (3 each direction) high G-turns while:<ul style="list-style-type: none">• Maintaining constant altitude <input type="checkbox"/>• Compensating for drift <input type="checkbox"/> |

Student Pilot Training

Basic Flight Training Phase I

Task #1 Ground support equipment, engine starting, & taxi training

Dual Control

Goals:

- Perform aircraft preparation and inspection.
- Perform engine start and radio checks.
- Perform taxi course.

Task #2 Orientation Flight

Dual Control

Goals:

- Observe orientation flight.
- Note ground and flight safety restrictions.

Task #3 Basic flight skills development

Dual Control

Goals:

- Become familiar with speed, yaw, pitch, and roll commands.
- Become familiar with flight trim techniques.
- Execute straight and level flight.
- Execute left and right turns.
- Initiate stall or unusual attitude recovery.

Task #7 Landing pattern and go-around

Dual Control

Goals:

- Execute upwind landing patterns.
- Execute crosswind landing patterns.
- Execute downwind landing patterns.
- Perform go-arounds at a 2 – meter height on final approach.

Task #8 Touch-and-go landing

Dual Control

Goals:

- Perform traffic pattern(s), final approach, and touchdown, followed by power application and pattern reentry.
- Perform normal and crosswind traffic patterns with touch-and-go maneuvers.

Task #9 Full stop landing and supervised solo

Dual / Solo Control

Goals:

- Execute full stop landing followed by taxi back and takeoff.
- Execute simulated engine failure landings.
- Perform a supervised solo flight.
- Be prepared for simulated engine failure calls from instructor regardless of position in pattern. Upon receiving call, immediately pull throttle to idle and safely land aircraft on runway.

Task #14 Power-Off (Idle) Spot Landings

Dual / Solo Control

Goals:

- Perform a near stalled touchdown on the runway with power off (idle).
- Adjust landing pattern to touch down within 2 meters of runway centerline with power off (idle).
- Adjust landing pattern to touch down within 2 meters of runway centerline and within a 30-meter long touchdown zone.

Task #15 Final Flight Evaluation Demonstration, practice, evaluation, and critique

Dual / Solo Control

Goals:

- Practice all maneuvers accomplished during tasks 1-14 of Basic Flight Training Phase I.
- Perform the Phase I Final Evaluation Flight.
- Review flight test results and critique with instructor(s).

- Execute a takeoff maintaining centerline tracking, and rotating directly in front of the pilot position.
- Perform both rectangular and 360° overhead landing patterns in normal and crosswind conditions.
- Execute low speed upwind and crosswind landing patterns.
- Perform a touch-and-go, touching within a 3-meter x 15 meter touchdown zone.
- Execute a go-around if overshoot conditions exist.

Task #20 High Idle Landing Patterns

Dual / Solo Control

Goals:

- Execute a high engine idle trim airspeed emergency, landing near runway centerline within a 30-meter long touchdown zone, progressing to a touchdown within one wing span of centerline and within a 15-meter long touchdown zone.
- Perform a go-around if overshoot conditions exist.

Task #21 Engine Failure Flight Emergency

Dual / Solo Control

Goals:

- Perform an emergency runway landing after simulated engine failure at a high safe altitude.
- Perform a spot landing within 2 meters of runway centerline and within 20-meter long touchdown zone after simulated engine failure at a high safe altitude.
- Execute emergency landings after simulated engine failure in the traffic pattern and/or immediately after takeoff.

Task #22 Mid-phase II Evaluation Practice

Dual / Solo Control

- Perform a runway landing after an engine failure (actual) from approximately 500 feet AGL.
- Perform a runway landing (if feasible) after an engine failure (actual) from anywhere in the traffic pattern. If a runway landing is not possible, land aircraft in the safest manner and location possible.

Task #27 Flight Trim Emergency

Dual / Solo Control

Goals:

- Fly figure eight, rectangular pattern, and traffic pattern with flight control trims slightly, then fully deflected to simulate flight control malfunctions.

Task #28 Final Evaluation Review

Dual / Solo Control

Goals:

- Practice maneuvers covered in tasks 23-26 in preparation for Phase II Final Evaluation.

Task #29 Final Evaluation Flight

Solo Control

Goals:

- Execute Phase II final evaluation flight.
- Complete course critique.

Student Pilot Training

Task # _____ Club _____

Student _____ Instructor _____

Task Start Date _____ Task Completion Date _____

Task Objective: _____

Flight Log

Flt #	Date	Flt Time	Dual	Solo	Grade	Instr	Remarks
							Total Task Time:

A – Outstanding B – Above Average C – Average
D – Below Average F - Unsatisfactory