

# BAMS Sponsor and Student Flight Instruction Guide

June 2016

## AIRCRAFT INSPECTION

Start at the front of the aircraft.

- Spinner, prop & prop nut.
- Engine, mount, muffler
- Interior: fuel tank, batteries, control rods, clevis', cables, servos.
- Surfaces: hinges, seals, horns, clevis', keepers, jam nuts. Pull test.
- Wheels, landing gear, pants.
- Wing incidence & hold downs.
- Balance and wing loading: CG, lateral balance, calculate load.
- General building quality.
- Transmitter settings check: movement, expo, differential, rates, trims, and Buddy Box system.

## INSTRUCTOR GUIDE

The following is a guide the instructor should use for the purpose of training student pilots. The guide should be followed step by step, and the student should complete each section before moving on to the next. This will help the student progress in an organized manner. The instructor should work with the student until the student can perform each task without being helped.

The first two sections do not require any flying skill. At the beginning of each item is an area where the instructor can initial after the student has successfully completed that item.

The instructor should keep in mind that he may not always be the one to instruct the student, so it is very important to sign off on every completed item. The student should not attempt to fly on his own until he has fully completed this program. This program is designed to help the student learn to fly quickly and safely.

## EQUIPMENT CHECKOUT

\_\_\_\_\_1. The equipment is installed properly and is in good working order. All servos are installed, all wires plugged in correctly, battery has a fresh charge, and the radio has been range tested properly.

\_\_\_\_\_2. All clevises are connected, all pushrods are properly installed and do not bind, all servo screws are in place and servo rails are installed properly.

\_\_\_\_\_3. Engine mount is properly installed. All engine mounting screws are secure and tight. The prop nut is tight and not cross threaded.

\_\_\_\_\_4. All items/accessories are attached securely to the aircraft. The center of gravity is located as recommended by the manufacturer.

\_\_\_\_\_5. The wing is properly secured with rubber bands or wing bolts. There does not appear to be any warps or flaws in the wing or the fuselage that may hinder the flight of the aircraft.

\_\_\_\_\_6. The control surfaces move in the correct direction and all hinges are secure.

\_\_\_\_\_7. The motor runs reliable and idles properly. The student may want to make sure the motor is broken in before moving on to the next section.

\_\_\_\_\_8. Overall, the aircraft appears to be "airworthy" with no major flaws that will jeopardize the success of the first flight.

## GROUND SCHOOL

Congratulations!!!!

You have successfully completed the first part of your training. It is now time to put all your hard work in the air. The instructor will now get your airplane in the air and hopefully back on the ground in one piece!! Please remember we can offer only our best and sometimes accidents happen...no guarantees. **GOOD LUCK!**

\_\_\_\_\_1. The student has learned how to start the motor with ease and uses the proper safety precautions on the assembly and starting tables.

\_\_\_\_\_2. The student has learned to taxi the aircraft safely without endangering other pilots at the flight line. The student should be able to taxi the aircraft into position for takeoff at this point. The student should also be able to taxi away from and toward themselves.

\_\_\_\_\_3. At this point the instructor should demo takeoffs and landings and fly the aircraft and trim the controls. The student should follow along with the instructor to develop a "feel" for the airplane. PLEASE BE PATIENT!!!!

\_\_\_\_\_4. Upon landing the aircraft, the student and instructor should perform a post flight check and review the flight area boundaries.

## LEARNING TO FLY

The student will learn the following maneuvers:

\_\_\_\_\_a. Straight and level flight for a reasonable distance.

\_\_\_\_\_b. Left turns Right turns

\_\_\_\_\_c. Climb and Descent

\_\_\_\_\_d. Fly towards yourself and turn left and right.

\_\_\_\_\_e. Move the throttle to full, middle, and idle, maintaining a level flight altitude.

\_\_\_\_\_f. How to handle a stall at different throttle settings.

\_\_\_\_\_g. How to fly left and right figure "8's", circles, and make a takeoff and a landing.

\_\_\_\_\_h. Student must time the aircraft flight according to fuel tank size (land with a safety margin).

At this point the instructor may want to introduce a few simple aerobatics (loops and rolls). This should depend on the type of aircraft being flown and the comfort level of the instructor and the student.

The student should now be able to take off. The student should not need any help in order to check off this item, and be able to choose the proper direction of takeoff.

## LEARNING TO LAND

This section may take several flights to be able to perform safely. .

\_\_\_\_\_1. The student should be able to fly the aircraft slow at idle for an extended period of time (1 or 2 minutes) at a reasonable altitude. The student should be able to do this without stalling or falling off course.

\_\_\_\_\_2. The student should be able to work the throttle effectively and bring the aircraft back to the field to set up an approach.

\_\_\_\_\_3. The student should be able to set up an approach to landing (making a rectangular pattern) & be able to trim the model for landing.

\_\_\_\_\_4. The student should be able to make a low approach and go around.

\_\_\_\_\_5. The student should now be able to set up an approach and land on the runway.

\_\_\_\_\_6. This is the time to practice a "dead stick" landing.

\_\_\_\_\_7. The instructor should demo a cross wind landing.

\_\_\_\_\_8. The flight training is now complete and the instructor should now allow the student to solo.

## FINAL SAFETY CHECK OUT

## CONGRATULATIONS

You have successfully learned fly a model airplane! You are now able to fly on your own without an instructor! Feel free to fly anytime the park is open. You will be introduced at the next club meeting as a soloed pilot!

## CERTIFICATION

By signing below, the instructor certifies that the student has completed the flight course and has shown the ability to safely operate a model aircraft. The student's signature indicates compliance with all club and AMA rules and safety codes.

Instructor \_\_\_\_\_

Student \_\_\_\_\_

Date \_\_\_\_\_