

Training Manual

When arriving at the field if you are flying on 72 MHz get the PIN for the channel you will be using. If you share a channel insure your transmitter is off and place it in the impound station. If you are flying Spread Spektrum on 2.4 GHz place your AMA card in the Spektrum card holder. After you have the PIN **OR** placed your transmitter in impound **OR** placed your AMA card in the Spektrum card holder set up the plane or planes you intend to fly. Do not turn on your transmitter if the PIN is not in your possession.

Student Pilots

- Obtain and setup the buddy box system as taught by your Instructor.
- Do your preflight inspection as instructed.

Flight Control Basics

- Familiarizing the student with the controls.
- Do race track ovals while maintaining altitude.
- Gentle pressure on the control sticks, how does the airplane react.
- Keep the aircraft at a constant altitude.
- Introduce rudder turns.
- Do figure 8's keeping altitude constant.
- Use the throttle and elevator to control altitude and speed.

Ground Reference Maneuvers:

- Keep the aircraft in front of the deadline.
- Fly specific ground reference patterns.

Slow Flight Characteristics:

- Fly just above stall speed doing left and right turns.
- Practice stall and recovery.
- Practice use of the throttle.
- Flat Figure Eights.

Take Off and Landings

When you think the student is confident in his ability to fly at low level:

- Have the student take off and climb to pattern altitude. Instructor lands the airplane and continues to have the student practice take offs until the student is proficient.
- Have the student practice landing approaches and go a rounds until the student is able to complete an approach pattern to the center of the runway consistently.
- Have the student land, full stop, taxi back and take off until the student can land smoothly on the runway.
- Have the student do touch and goes until proficient.
- Have the student do simulated dead sticks from various altitudes.

When you are satisfied the student can control the airplane!
Solo the Student.

Air Worthiness Check List

INTERNAL (Wing Removed)

1. Check all servos, mounts, and servo arms.
2. Check that pushrods are secure.
3. Check receiver and battery- padded and secure.
4. Check for loose items.
5. Check for fuel leaks.

WING

1. Check for breaks, warps, and other defects.
2. Inspect the center section for cracks.
3. Check aileron pushrods and clevises.
4. After wing is in place, check for proper security.

ENGINE AREA

1. Check prop for nicks, cracks, or other defects.
2. Check the nose or tail wheel steering mechanism.
3. Check the engine mount.
4. Check the throttle linkage for throw and binding.

TAIL SECTION

1. Check vertical stabilizer, rudder, and clevis.
2. Check horizontal stabilizer and elevator.

BALANCE

1. If changes in weight distribution were made perform a CG check.
** Correct a tail-heavy plane before flight and insure the plane is balanced slightly nose down.

FLIGHT CONTROL and RANGE CHECK

1. Ensure that batteries have been properly charged.
2. If on 72 MHz **do not turn on the transmitter** without the frequency pin.
3. Check flight control surfaces for reasonable trim.
4. First flight of the day. Secure the plane, Start Engine and perform a range check. If the plane does not pass this check **Do Not Fly.**
5. Shut the engine off and go to the *preflight check list* **DO NOT SKIP THIS STEP.**

Preflight Check List

Required prior to every flight.

Full scale pilots perform a walk around inspecting the plane. A written procedure is followed. Modelers accomplish this by following the **Air Worthiness Check List**. Once in the cockpit a written/verbal checklist is followed. The pilot talks to the plane, why, because it is easy to ignore an erroneous result if you are not concentrating on the task at hand. Modelers should follow is procedure.

1. Stand behind the plane.
2. Set all switches to their pre-taxi position.
3. Pull the **ELEVATOR** stick back, say out loud **UP**, insure the elevator is in fact in the **up position**.
4. Push the **ELEVATOR** stick forward, say out loud **DOWN**, insure the elevator is in fact in the **down position**.
5. Push the **RUDDER** stick to the right, say out loud **RIGHT**, insure the rudder is in fact in the **right position**.
6. Push the **RUDDER** stick to the left, say out loud **LEFT**, insure the rudder is in fact in the **left position**.
7. Push the **AILERON** stick to the right, say out loud **RIGHT UP – LEFT DOWN**, insure the ailerons are in fact in the **right up position** and the **left down position**.
8. Push the **AILERON** stick to the left, say out loud **LEFT UP – RIGHT DOWN**, insure the ailerons are in fact in the **left up position** and the **right down position**.
9. Push and Pull the **THROTTLE** stick, say out loud **throttle**, you hear the throttle and the throttle linkage move. Make sure it **sounds normal**.

Mixes controlled by switches. The procedure will vary depending on the mix used. For example a takeoff procedure adding 5° right rudder using the AUX 1 a 3 position switch where position 0 and 1 is off and position 2 is on the procedure will be:

Move **Aux 1 to the 2 position**. Say out loud **RUDDER 5° RIGHT**, insure the rudder moves to the **right**.

Work out your own verbal system for any other mixes you may have.

Start your engine.

Taxi out to the run up area, for larger planes this is out by the runway turned away from the benches so prop wash does not blow crap on other peoples planes and equipment.

Announce your intentions, when clear taxi out on the active runway, do one more control surface check, **say it while doing it**, elevator UP/DOWN, rudder RIGHT/LEFT, aileron RIGHT UP/LEFT DOWN – LEFT UP/RIGHT DOWN.

You have the Runway – go for it and fly well

Student Pilot Log

Flight Training	Date	Instructor
Preflight Procedures	_____	_____
Perform Maneuvers	_____	_____
Slow Flight & Stalls	_____	_____
Recovery Unusual Attitudes	_____	_____
Landing procedure drill	_____	_____
Left & Right approach drill	_____	_____
Take Off	_____	_____
Landing	_____	_____
Solo Flight	_____	_____