

R/C FLIGHT INSTRUCTION PROGRAM for Student Pilots

The RAMS student pilot program is intended for an individual having their own aircraft, radio system, and related flight equipment and who has not been trained/certified by a sanctioned AMA club. The student pilot must be a current member of AMA and Flagler County RAMS prior to the commencement of flight training. A student pilot is only permitted to fly when a RAMS instructor is present on the flight line with them.

The purpose of this training program is to teach a student pilot, who is new to fixed/rotary wing radio controlled aircraft, how to successfully pilot their aircraft in a safe manner while demonstrating good airmanship and proper procedures. It should be noted that the amount of time required toward learning to fly varies with each individual. Some may become proficient enough to solo in a few sessions at the field. Other students may take longer.

There are several phases in the training process. Each phase will be described in the Phase Section of this program. Each phase must be completed successfully by the student before beginning the next training phase. It is the responsibility of the instructor to determine if the student understands and can perform the required maneuvers described in each phase.

THE ELEMENTS

The philosophy of the RAMS training program is based on four essential elements:

SAFETY – There are two fundamental safety considerations for a RAM trainee.

First: Safety related to the equipment associated with the flight. Properly built, maintained and flown radio controlled aircraft are not a risk to property or people. Preflight checks of all equipment must be made prior to flight.

Second: In the hands of an inexperienced/untrained pilot, an aircraft can cause considerable property damage and/or personal injury. Safety related to the environment in which the aircraft is operating and proper training regarding altitude restrictions, flight line safety, responsible airmanship while flying, tower notifications are essential considerations.

Safety will always be the primary consideration in the training program.

SUCCESS – Learning to fly R/C aircraft is a challenging undertaking, but one that can be met by almost everyone. However without an instructor and proper training, the beginner is virtually guaranteed of failure. It is the intention of the RAMS training program to progress the student successfully through the training program and the final solo.

PROGRESS – The training process is a designed set of training phases ending with a solo flight and final certification. There is a logical sequence to the various phases that allow the student to learn and accomplish basic airmanship and build on the progress as the training program proceeds. There may be times when progress may be slower than anticipated, however, with persistence comes accomplishment and success. It is important to keep a positive attitude about training and not be discouraged by periodic minor downturns in personal progress. Every pilot who has learned to fly R/C aircraft has experienced this. It is a normal phenomenon.

FUN – The whole point of this hobby is to have fun. Each time you master a new skill, if you will find personal satisfaction in your accomplishments. With this satisfaction comes enjoyment.

FINAL NOTE: Please keep in mind that the RAMS instructors are not responsible for your aircraft, per se. The individuals that volunteer their time for the purpose of teaching you to fly are competent pilots. They will check your aircraft, radio etc., and instruct you in the safe operation of your aircraft. A “Buddy Box” provided by RAMS will be used during your training sessions. It is the safest way to learn how to fly R/C. If for some reason there is a mishap, the repairs and associated costs are the student’s responsibility. Your instructor and other RAM members will be happy to provide you with advice on how best to accomplish the required repairs.

THE NUTS AND BOLTS.

Aircraft Preparation:

Use the information with your airplane to be sure it is properly set up before coming to the field. Confirm all control surfaces operate properly and the surface throws are as recommended by the manufacturer. Control surfaces must be “free and correct”. Check to verify that the aircraft CG is within the limits defined by the manufacturer. Use the information provided by the engine manufacturer to prepare your engine for flight. The more time you spend getting familiar with your airplane and the items you will need at the field, the more likely you are to have a fun and successful training session. Think ahead and be prepared. You should have spare propellers, enough fuel, fully charged batteries, etc. so that there are minimal delays in your training session.

IMPORTANT: your AMA and FAA numbers must be displayed on the exterior of the aircraft. Owner information must also be attached within the fuselage.

Read and Understand Notices, Rules and Instructions:

Prior to commencement of training, the student pilot must read and become familiar with the AMA safety code on the AMA site and the safety notice and field rules on the [Flagler County RAMS web site](#).

The instruction program begins with an instructor inspection of your aircraft at the club field, to ensure that it is ready to fly. Any suggested adjustments or modifications must be completed prior to commencement of training flights.

If you have difficulties performing the suggested adjustments or modifications, your instructor or any of the club's experienced pilot members can assist you. Observe and learn so that you will be able to correct aircraft deficiencies.

The Buddy Box System:

The "buddy box" system almost eliminates risk to your aircraft and provides a more relaxed and enjoyable learning experience. Two transmitters are used; your transmitter and a 'buddy box' transmitter. The club has "buddy box" transmitters and cables for the more popular radio brands. The instructor controls the aircraft to a safe altitude (less than 200 feet) using the primary transmitter. When the instructor depresses a switch on the primary transmitter, he will then be transferring control of the aircraft to the student. Should the student put the aircraft in an unsafe situation, the instructor will release the switch and fly it back to a safe altitude/attitude. These are line-of-sight evolutions. You must have the aircraft in sight at all times.

Instruction Time:

It is highly recommended that the student make scheduled training periods sessions with an instructor prior to going to the field. Contact information is provided for all instructors. If you are scheduled for a training session and do not show up without notifying your instructor there may be priority/scheduling issues with your future sessions.

If a student just shows up at the field without a scheduled instructor appointment, it may be possible for the student to enlist the aid of another instructor should one be available.

You are encouraged to work with different instructors. This will allow you to get differing flying perspectives and techniques.

To make your time as a Student R/C pilot more productive and enjoyable do the following:

Inspect your aircraft at home (to the best of your ability) and correct any deficiencies. It is best if you do not wait until you get to the field to correct problem areas, unless you need assistance in doing so.

The instructor will do a preflight check of your aircraft before the first and subsequent training flights.

Consider the purchase of R/C flight simulator software for your PC, if you have one. Time spent on an R/C flight simulator could greatly reduce your learning time. It is a good tool to start developing hand eye coordination before starting actual flight training using your aircraft. A simulator is also an excellent way to practice and learn new flying skills before attempting them during actual flight. Format is available for fixed and rotary wing aircraft.

A simulator is available to RAMS members at the field. The simulator is located in the shed. A flight instructor can teach you the proper operation of the simulator. The club simulator is an older version of the Real Flight software and the graphics may not be as up to date as the current generation.

Read the instruction manual for your transmitter. Instructors can't be expected to know how all the transmitters on the market function. Especially understand how to enable the "trainer" function on your transmitter.

Glow Engines: Read the instruction manual for your engine. Perform the break-in EXACTLY as instructed. Ask your instructor for any guidance concerning the operation of the engine. Almost all engines can be broken in while flying the aircraft. If breaking-in the engine at the field, be considerate and do so at the break-in stand at the south end of the field.

Electric Motors: Read the instruction manual for your ESC and know how to set its parameters. Read the instructions for your battery charger and know how to safely charge your aircraft batteries. It is extremely important that the battery charging be done in accordance with the manufacturer's instructions.

Bring with you all applicable instruction manuals related to your radio, aircraft, engine, ESC and Charger as applicable. Review and become familiar with all pertinent instructions.

If you make **ANY changes** to your aircraft between instruction sessions, inform your instructor of these changes.

Through the instruction process and beyond, the more you put into the training process, the more you will get out of it. Join in as many of the club activities as your time permits.

R/C aviation is an enjoyable and exciting experience. By talking with other club members about their experiences you will learn a vast amount of knowledge that will help you achieve your R/C goals.

RAMS FLIGHT TRAINING STAFF

The following is a list of the current RAMS instructors. Contact one of them for more information, and an appointment:

Tom Kerr (FW) Chief Instructor	iflytd@gmail.com);	386-445-4332
Bill Semonovick (FW/QC)	Wingit290@aol.com);	386-445-7590
Bob Thierwechter (FW)	jbtheo@bellsouth.net);	386-447-8285
Victor Dumet (FW)	vdumet@hotmail.com);	386-673-4735
Jim Houston (FW)	jhouston45@gmail.com);	386-313-1374
Tony Leto (H)	djlucid@cfl.rr.com);	386-235-4137
Steve Olson (H)	olsonjko@cfl.rr.com);	386-295-6409
Medwin Nazif (FW)	medwin@visitingangels.com);	386-986-9666

Legend:

- FW-** Fixed wing
- QC-** Quadcopter/drone
- H -** Helicopter