



# **Kingston Radio Control Modellers R/C Flight Training Course**

## **The Instructors Role**

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## Flight Training - The Instructor's Role

### Introduction:

The instructor, is one of the most important assets of the club. Your time and skill are in very high demand by new members, when they first become active. This responsible and demanding job entails a large amount of effort, and time on your part, however, it does have its rewards; when you see a student progress to be a fully trained member of the club, and enjoy this great hobby to its fullest.

### Advice to the Instructor:

This new course is a very structured and demanding programme, which takes the new student from a complete novice, to a fully competent R/C flyer in the shortest possible time; however this is only achievable if the instructor is keen, knowledgeable, and has the ability to teach the course in its entirety, and in the intended sequenced structure. Students will be assigned to you by the C.F.I., and will have been pre-briefed on their responsibilities, and the items required for the training. You the instructor will be responsible for the inspection and flight testing the students model, prior to the commencement of training, only good, serviceable, safe, and reliable aircraft, are to be used. It is in your interest as well as the students to work together, and keep his/her training record up to date, this will ensure that time and effort will be saved by not repeating steps over and over.

This new method of teaching R/C flying may be unfamiliar to you as an instructor, however you will quickly understand that it has been fashioned after a time tested way of teaching a large procedure in a small step by step method that ensures that no required items are overlooked.

The structure is quite simple, consisting of many small lessons, in that it has a purpose, an objective, elements, and the evaluation of each lesson. The purpose and objective (the standard **or** requirement) are self explanatory. The elements **or** check list within the lesson is the **"key"** to teaching this method. The instructor can use this element list as a found lesson plan, that will ensure the student will learn all the requirements of each lesson. Use the small check blocks beside each element as your training record and aid.

The instructor is requested to read over the entire programme, and ensure full understanding of how each lesson will fit into the overall plan of the course.

### A Good Instructor Will:

1. Review and have complete understanding of the lessons, and the importance of the step by step method of this curriculum;
2. Utilize the lesson's teaching points, to make your own lesson plans, and determining the best method for you to teach the required objectives listed.
3. Familiarize yourself fully with all the KRCM club, MAAC safety, and etiquette codes; it's imperative that beginners are exposed to the correct principles of safety from the very outset, and they are practiced on a regular basis.
4. Insure students are given a goal to work toward, on each flying session. Students who are given specific objectives, will advance much more quickly than students who are not. All lessons in this course if followed in sequence are directly related to the MAAC levels of flight training, and seems to work very well.
5. The time tested 3 step method of teaching, is an excellent way to achieve a fully understanding, and trained student.

### **Step 1 - Explanation:**

Fully explain the objective *or* lesson to be learned, then confirm that the student fully understands the requirement.

### **Step 2 - Demonstrate:**

Demonstrate the required action or procedure and ensure student understanding of the action.

### **Step 3 - Confirmation:**

Have the student perform the action that was demonstrated, to confirm his/her ability to perform the objective. Repeat the three step method if confirmation is not achieved the first time.

6. Coordinate your training with other instructors, and keep the C.F.I. informed on the progress of students at all times.
7. Insure you comply with all safety and etiquette codes it's a known fact that the most easy thing to teach a student is the instructor's "bad habits", you, the instructor can go a long way to making the new member feel welcome, and teach him the correct safety habits required by MAAC and the KRCM club.

### **The Human Side of the Beginner:**

The phases that a beginner will go through will enable you to recognize just where the student stands in the flight training programme.

- a. **Undercontrol:** At the start the beginner is apprehensive about controlling his aircraft. This is exhibited by a short period where he undercontrols the aircraft and appears very nervous about any deviations in flight from what he is expecting. Not all beginners show this characteristic, however, the ones that will progress the quickest usually go through this phase.
- b. **Overcontrol:** Beginners who start to gain familiarity with their aircraft soon start to want to control every aspect of flight. They are often unwilling to let the airplane fly itself and can be quite surprised when you demonstrate that the aircraft will fly for long periods with no one touching the controls at all. Some older modellers will be especially prone to violent overcontrol of their models. For these individuals it is suggested that the control surfaces be desensitized as much as possible to prevent them from overcontrol. Modellers who display violent overcontrol tendencies will usually be difficult students and will take longer than average to become proficient pilots. Overcontrol should be prevented from the outset since beginners will tend to harden their approach to flying based on their earliest first flights.

**c. Span of Attention or Control:**

Especially in the first flights you will notice that the beginner is doing fairly well during the first portions of his flight but his control rapidly diminishes until at the end he is barely in control of his model. Once a beginner starts to fight his model you should terminate the flight since he will not learn anything more during this flight and if he continues for too long he will lose confidence and will become very apprehensive about continuing. It will also take a beginner a few minutes to recover his ability to concentrate on flying and beginners should be given some 15-20 minutes of rest between flights otherwise they will use up their concentration ability and will not be in control right from the start of the next flight.

**d. Overconfidence:**

As the beginner starts to gain familiarity with his setup, he may begin to feel that this is pretty easy stuff. He has not yet experienced getting his airplane into serious trouble and solving the problem in time to save the day. As an instructor you may find that the student has ventured out on his own and attempted a flight usually with some damage to the aircraft. Occasionally the student will begin to disregard your instructions while flying, preferring to try aerobatics or some such effort. Discourage the student from doing this unless you are prepared to be surprised by the student. Quick attempts at loops, rolls or landing without your guidance can be dangerous.

**e. Successful Adaptation:**

If the student has been overcoming his problems he will begin to display confidence in his abilities and this will be evident by smoother and smoother flight operation of the aircraft. Once a beginner gets to this stage he is well on his way to flying on his own.

## **Student Evaluation Progress.**

The successful instructor will be constantly evaluating the student. All students are not the same, some will learn and progress much more quickly than others, some will be average, and some will have trouble in some areas and will not develop the required skills, to progress beyond some point in the training. The instructor will always give the student all the benefit of the doubt, however, your time is valued time, and after full consideration, any student that fails to progress will be given back to the C.F.I. for further consideration. Hopefully these students will be few and very far apart, and your training will go well and be an enjoyable task.

## **Test for K.R.C.M. Instructor Wings**

The objective of this test is to demonstrate to the examiner, the safe flying and overall total control of the model, in all positions, and attitudes, required to teach the R/C flight training course.

1. On the command from the examiner, the examinee will fly three right circuits (touch and go each time) land full stop after third;
2. Fly three left circuits (touch and go each time) land full stop after third;
3. Fly three straight flights (stretched figure eight) into wind, right turn, down wind left turn. Refuel if necessary;
4. Fly three inverted straight flights, stretched figure eight into wind, left turn, down wind, right turn;
5. Perform spins with triple reverse of direction (e.g.) three turns left, three turns right, three turns left, three turns right) and recover to level flight;
6. Perform dead stick landing from 500 feet with engine on idle setting. Aircraft must touch down near centre of field;
7. Examinee must demonstrate the full knowledge of all K.R.C.M. and M.A.A.C. safety and etiquette codes, including frequency control, and field rules.

### **NOTES:**

1. The chief flying instructor will determine the competence and ability of examinee, to meet the requirements of an instructor.
2. This test cannot be repeated on the same day, in the event of a questionable performance.