

# **Burnaby Lake “Hoods-Up Flyers” Wings Program (Fixed Wing Aircraft)**

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## **Introduction**

Welcome to the Burnaby Lake Flyers Association/Model Aeronautics Association of Canada training program. This program will teach you the basic of flying radio controlled model aircraft and is MAAC's best effort to assist you in the process.

There is nothing in this program that guarantees that you will become a successful R/C pilot. Nor, are there any expectations on how long it will take to complete this program. Like everything else, your success will all depend on your willingness to spend the time and practice.

This program is a series of lessons designed to build upon previous lessons to develop the skill and confidence, which will allow you to thoroughly enjoy your new hobby.

Upon completion of these lessons, you will be ready to take your "A Wings" test. This test is designed such that you can demonstrate to the club's satisfaction that you are able to control your plane safely. After passing this test, you will be allowed to fly without an instructor present.

Hopefully, the completion of your "A Wings" is only the beginning of your learning and will serve as an incentive to get out and fly. Where you go from here is up to you. Good Luck!

### **Reminder:**

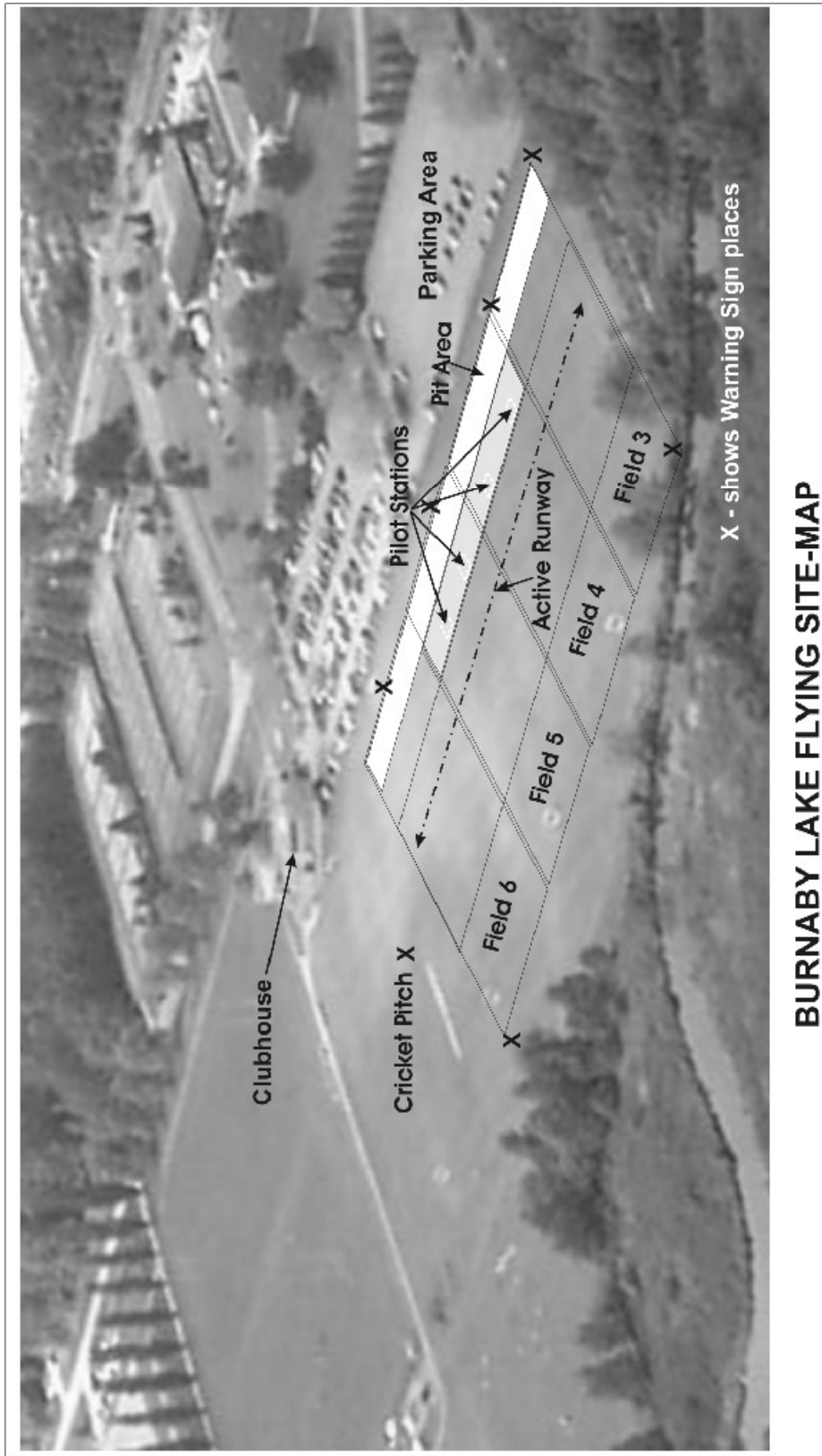
You must learn to crawl before walking and walk before running. For this reason, MAAC strongly recommends that you start your flight instruction on a trainer and then evolve to more advanced planes.

A trainer will enable you to learn easier and it will simplify your instructor's roles. Your plane will last you longer with less chance of a serious crash.

Remember, even the jet fighter pilots learn to fly in trainers before advancing to jets. So leave the scale planes until after you have learned to fly.

**REMEMBER- SAFETY FIRST, FUN SECOND**

# BURNABY LAKE FLYING SITE LAYOUT



**BURNABY LAKE FLYING SITE-MAP**

## Student Responsibilities

You are about to embark upon the Primary Flight Training Course of the Burnaby Lake Flyers in conjunction with Model Aeronautics Association of Canada. This program will enable you to achieve your MAAC "Wings" certificate through the club.

Although you may seek instruction from any club instructor your primary instructor is:

Name: \_\_\_\_\_

Phone: \_\_\_\_\_ E-Mail \_\_\_\_\_

He will work with you and monitor your progress.

Your instructor has met the qualifications of MAAC. He has accepted the responsibility to teach you to become a responsible and safe pilot who can be proud of his flying abilities and an enjoyable fellow club member. If the instructor ignores his responsibility, you may be a pilot who is a hazard to yourself and other persons wherever you fly. You may seek training assistance from any other club instructor. However you should look to your designated instructor as your primary source of assistance.

You may not take your "A" Wings test until your instructor, or the Chief Instructor has signed below indicating that you have completed the elements of your primary training program and you are ready for your "A" Level Wings test. You must pass your "A" Wings test before you are allowed to fly at the club field without supervision.

As a student, you have shown the diligence to build your first trainer, seek out the Local Club and join this training program. It is your responsibility to apply yourself diligently to learn and apply the material presented in this course. By doing so, you will learn the minimum amount of information and skills to allow you to safely enjoy radio controlled flight.

Each section of this course deals with a different aspect of flying a radio controlled model aircraft. Your instructor will explain and demonstrate each element of each lesson. Where applicable he will demonstrate the element in the air, using your aircraft. You will have opportunities to perform each element and receive an evaluation from your instructor. In each lesson there is a space for a club instructor to "initial" that the material has been reviewed with you. It is important that you keep your training program with you at all times and ensure that instructors initial elements after they have been covered. Other club instructors will use the initials and notes to assist you when your instructor is absent.

I recommend that \_\_\_\_\_ take the MAAC "A" Wings test

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Instructor

Date



## Lesson 2: Radio and Field Procedures

### Purpose:

To familiarize the student with all safety aspects associated with model aircraft both on the ground and in the air.

### Objective;

At the completion of the lesson the student will be aware of all MAAC and MMC safety rules and field procedures. The student shall also be able to perform a pre-flying session and pre-flight check list.

### Elements:

#### MAAC SAFETY AND FIELD RULES

- Current MAAC membership card must be shown prior to flying. MAAC insurance is mandatory to fly.
- Student must have his/her "A" Wings qualification before solo flying.
- No taxiing in the pit area. Motors disarmed when clear of runway after landing.
- There will be absolutely **NO FLYING:**
  - a) Over any general area where field workers or equipment are active.
  - b) Behind the flight line no matter how far away from the runway.
  - c) No flying over the pits, car parking.
  - d) No flying over other Sports user groups on the field at any time

**Note: The presence of active field workers could easily require that no flying take place at all.**

- Maximum of five aircraft flying at a time.
- Pin possession time is limited to 15 minutes per flight.
- All Aircraft shall be flown in a safe manner with consideration to others at the field
- Unaccompanied spectators (any observer who is not a club member unless invited) and animals must stay out of the pit area.
- No transmitter shall be switched on without the frequency pin (with pilot name and channel number) first being attached to the frequency board. When the transmitter is turned off, the pin is to be removed from the frequency board by the pilot and the transmitter. Currently 2.4 Ghz radio pins will reside in the 50 Mhz area of the board.
- No flying on un-allotted (unscheduled) days if other users are present on the field
- Pilots shall announce their intention to land or take off. Landing aircraft shall have the "right of way".
- When in the pit area, aircraft shall be placed between the pilot and the runway to enhance awareness of the potential hazards posed by already flying aircraft.
- Aircraft will all circle in either a clockwise or counter-clockwise direction. This is called "flying the circuit". The direction is determined by the prevailing wind direction or the consensus of the pilots.
- Taxiing towards the pit area is strictly prohibited.
- Safety signs must in place before flying.
- When more than 3 pilots are flying then spotters are required.

- Turning on a radio in the parking lot is not permitted.
- Pilots must fly from the pilots station (flags).

## CHECK LIST

### Before each flying session:

- a) Radio range check.
- b) Field workers.

### Before each flight:

- Frequency Board - Peg In Place
- Receiver Battery (if applicable) - Voltage Check
- Radio Antenna (if applicable) - Out
- Radio Transmitter - On and Checked for Interference
- Radio Receiver - On
- Aircraft Controls - Transmitter Operation Check

### Start

- If possible arm the aircraft at the flight station or better yet plug in the flight battery at the flight station.
- It is recommended aircraft utilizing 6 or more LIPO cells (6S) have an externally mounted arming shunt.

### Pre-Takeoff

- Motor - Full Power Performance OK
- Controls - Free and Correct
- Rate Switches - Set
- Trims - Set for Take-off (if applicable)
- Timer-On
- Field Workers - Checked
- Wind Sock - Checked
- Runway - Clear
- Announce intention to take off to other pilots on flight line.

### Evaluation: Student should be able to perform lesson objectives.

**THIS LESSON SHOULD BE REVIEWED AS NECESSARY AT THE START OF ALL LESSONS IN THE PRIMARY TRAINING COURSE.**

### Notes

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## Lesson 3: Flight Familiarization

### Purpose:

To introduce the student to controlling the model in flight.

### Objective

To allow the student to become familiar with the model's controls and their use in flight.

### Elements

- On the ground, instructors familiarize the student with the controls (pitch, yaw and power) and what kind of affect they will have on the aircraft in flight.  
The procedures used by the instructor to give the transmitter to the student and take it from him during the flight will be explained.  
Note: As each Instructor has different preferences concerning the process of exchanging the transmitter the student should ensure that he/she has reviewed and understands this procedure with new instructors.
- Instructor flies and lands the student's model to evaluate its performance and airworthiness. This flight determines any changes necessary for control throws and trims. If the instructor can trim the aircraft without landing the aircraft, the transmitter will be passed to the student or the use of a buddy box is strongly recommended.
- With the assistance and direction of the instructor, the student will start the process of becoming familiar with the controls.
- The student will strive to keep the model in level flight and follow turning instructions given by the instructor.
- When the student becomes tired or disoriented, pass the transmitter back to the instructor or ask the instructor to take the controls from the buddy box.

Note: It is the student's responsibility to pass the transmitter back to his/her instructor in time for the instructor to take corrective action to prevent a crash. Concentrate on flying within your ability. If you become disoriented or confused, pass the transmitter back to the instructor.

### Evaluation:

The lesson is complete when the instructor has determined that the student is able to determine and execute proper control inputs to achieve a desired change in the model's attitude. Proficiency and accurate control are not critical at this point.

Notes: \_\_\_\_\_

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## WINGS TEST

Check off the correct answer to the following True or False questions.

No.		T	F
1	The Frequency Board, is only used when more than 3 flyers are present.		
2	Taxiing towards the pits is permitted for aircraft exceeding 7 Kg.		
3	Flying is not permitted over the pits except on final landing approach.		
4	Pilots shall announce their intent to land or take off.		
5	The only time aircraft are allowed to by flown over the pits is during fun flies.		
6	In other than calm conditions, the takeoff must always be into the wind		
7	Taxing into the pits is not permitted.		
8	Always check the level of your transmitter battery before each flight.		
9	MAAC insurance is absolutely necessary when flying at our field		
10	Sometimes it is OK to turn on your radio without checking the frequency board first.		
11	The correct procedure is to power the plane first, the turn on the transmitter.		
12	The correct procedure is to de-power the plane, then turn off the transmitter.		
13	Uninvited guests and dogs are permitted in the pits area.		

"A" Wings – Basic Control

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Examiner: \_\_\_\_\_

Maneuver	1st	2 <sup>nd</sup>
1. Take Off		
2. Straight Flight Out		
3. Flat Figure Eight		
4. Rectangular Approach		
5. Land Under Power		
Subtotal:		
Less General Downgrades		
Total		

Pass / Fail

Examiner's Signature: \_\_\_\_\_

V1.0