

# Radio Controlled (RC) Airplane

New Hancock County 4-H Project

2011



ELECTRIC "BLU BABY"

# Radio Controlled Airplane

## New 4-H Project

### WELCOME

Radio controlled aircraft flying is delightful for all ages, both genders, families and individuals alike. Sponsored by the Indianapolis RC Modelers (IRCM) Club from Morristown, this project is new to Hancock County 4-H in 2011.

Particular attention has been devoted to making this first year project as inexpensive as possible, while providing a valuable experience. The required cost for this project is \$85.00 (including liability insurance) for the aircraft and all necessary components to compete as a 4-H project. The only additional cost will be what you decide to use to decorate and finish the exterior of the aircraft. A non-refundable \$35 deposit is required and it will be credited to your \$85 kit cost. Your non-refundable deposit check is payable to Indy RC Modelers, and should be mailed c/o Indy RC Modelers at P.O. Box 705, Greenfield, IN 46140 by March 1, 2011.

Everyone will build the same airplane, and you will be required to purchase and pick up your airplane kit package at Hobby RC (see RESOURCES section below) and bring it to the first workshop.

To complete this project, your aircraft must have a successful “maiden flight” at the IRCM field. You will not be required to purchase electronic receivers, batteries, or transmitters to compete in this project--Indy RC will provide for your “maiden flight.” After the flight, your aircraft will be judged based on the criteria referred to below.

There will be four workshops to assist in the construction of your aircraft—see WORKSHOPS below. Parents and guardians are highly encouraged to accompany you to all workshops.

This project eliminates the last minute completion turmoil that accompanies most 4-H projects. Your RC project will be completed at least 2 weeks before the Hancock County 4-H Fair begins!

4-H members are welcome to explore membership in IRCM, but membership is not required for this project and judging will be conducted with complete disregard of any interest in IRCM.

### PROJECT GOALS & EXPECTATIONS

The goals of this project are: to have fun, and to learn about building and flying RC aircraft.

Our expectations of you as a 4-H member participating in this project are for you to be: careful, attentive, considerate, cooperative, responsible, trustworthy, and eager to learn and accept instruction.

## WORKSHOPS

### Workshop I

Ted Brindle/Steve Howard

Wednesday-April 13 from 7-9 pm, or Saturday-April 16 from 9-11 am

At Hancock County 4-H Fair /Hancock County Extension Offices

**4-H members bring complete “4-H Project Kit” purchased at Hobby RC.**

Presentation: Aerodynamics/Lift, Aircraft Control (rudder, elevator, ailerons, throttle)

Installation of servos & push rods

Simulator Experience

### Workshop II

Mike Karnes/Sherman Harvey/Corey Lucas

Wednesday-May 4 from 7-9 pm, or Saturday-May 7 from 9-11 am

At Eastern Hancock High School Shop, enter north side doors & right at first hallway

Assembly/gluing of aircraft foam frame & wing panels

Flight demonstration during glue drying break

### Workshop III

Kelly Bogigian/Jack Sallade

Wednesday-May 18 from 7-9 pm, or Saturday-May 21 from 9-11 am

At Eastern Hancock High School Shop, enter north side doors & right at first hallway

Installation of motor, electronic speed controller, & landing gear

Installation of Velcro for battery. Batteries will be provided for use at maiden flight.

Balance testing for horizontal and lateral center of gravity

### **Airframe decorating and finish by 4-H member at home, between Workshops III & IV**

Foam surfaces (blue, pink, etc.) should be colored (Magic Markers) or painted with latex or hobby store floral paint; decals and other accents may also be used. Airframe finish and presentation are considerations used in judging the finished project—see JUDGING CRITERIA below

**DO NOT USE Oil-BASED SPRAY CAN PAINT – it will melt the foam.**

### Workshop IV

Roy Wilson/Paul Peterson/Gene Brooks

Saturday-June 11 from 1-5 pm Alternate date (rain, wind) Saturday-June 18 1-5 pm

AT IRCM Morristown airfield—see directions to field under RESOURCES section.

4-H members bring their aircraft to IRCM flying field for “maiden flight” --- conducted by IRCM members. Project judging will also be conducted by IRCM members, the results will not be revealed until the 4-H Fair.

## PROJECT JUDGING CRITERIA & ACHIEVEMENT DESIGNATIONS

Project judging will be conducted and sanctioned by the Indy RC Modelers Club. All decisions will be final. Judging will be conducted using the following point system.

	<b>CATEGORY MAXIMUM</b>	BLUE RIBBON	RED RIBBON	WHITE RIBBON
Cutting, sanding, gluing, & assembly quality (10 points each)	<b>40</b>	37	35	32
Neatness of interior & exterior assembly (10 points each)	<b>20</b>	18	16	14
Exterior decorating finish quality/creativity	<b>10</b>	8	6	5
Balance accuracy (Horizontal & Lateral Center of Gravity)	<b>10</b>	8	6	5
Success of maiden flight	<b>20</b>	20	18	15
<b>TOTAL POINTS</b>	<b>100</b>	91-100	81-90	71-80

Grand Champion—highest point total for all project submissions

Reserve Grand Champion—second highest point total for all project submissions

The Grand Champion project will not compete at the Indiana State Fair because radio controlled modeling is not a state-wide 4-H project.

**4-H members will take their aircraft home after the judging, and enter their project for exhibition at the 4-H Fair Exhibition Hall as required by the fair. Judging results will be posted at the fair.**

## RESOURCES

Hobby RC      Phone (317) 359-6242                      1102 S. Franklin Road, Indianapolis  
 Hours    M-F 11:00 am to 6:00pm    Sat 10:00am to 5:00 pm    Closed Wednesdays & Sundays  
 West side of Franklin Road in Indianapolis, 1/4 mile north of US#52 (Brookville Road)

Indy RC Modelers Club      [www.IndyRCModelers.com](http://www.IndyRCModelers.com)  
 The IRCM Club airfield is located on Blue River Road southwest of Morristown. Take US# 52 west of Morristown to the first road ( "T" road) before crossing Blue River, then south ½ mile through 4 curves to field on east side of road.

Tower Hobbies      Phone 1-800-637-4989 or 1-800-637-6050    [www.towerhobbies.com](http://www.towerhobbies.com)

---

Questions about Indy RC Modelers or this 4-H project may be directed to  
 Roy Wilson at 317-409-5857 or [roy@c21wilson.com](mailto:roy@c21wilson.com)