



# Baltimore Area Soaring Society

**NGC Helicopter Kits available!**  
**Kits provided by the Baltimore Area Soaring Society**

Science Olympiad Coaches,

When requesting kits please provide name, address and number of kits requested.  
Inquiries can be made to;

John Appling - [appling.john@yahoo.com](mailto:appling.john@yahoo.com);  
Randy Kleinert - [rkleinert@verizon.net](mailto:rkleinert@verizon.net);

## Contents

### Tools:

- ½" X 6" X 16" Building Board (a piece of ceiling tile)
- Risers (2),
- Rib Cutting/sanding board
- Single edge Razor blade (1)
- Tee Pins (2 sizes ea 1" & 1 ¼")
- Push Pins (6 ea)
- Emery Board (Fingernail board 1 ea)
- Crayon (wax 1ea)
- Clothes Pin Clamp 1 ea
- Plans
- CD containing plans, instructions, miscellaneous articles on rubber powered flight

### Materials

- 1/16" X 1/16" X 14" Balsa (16 pcs) for rotor spars and ribs.
- 1/16" X 1/16" X 4" Balsa (7 pcs) for practice cutting & gluing
- 1/8" X 5/16" X 10" Balsa (2 pcs) Motor stick
- 1/8" X 1/8" X 9/16" Balsa (2 pcs) Top Rotor Hubs
- 1/8" X 1/8" X 11/16" Balsa (2 pcs) Bottom Rotor Hubs
- 1/8" X 1/8" X 1 1/4" Balsa (4 pcs) Bracing posts
- 1/8" X 3/4" diameter Balsa discs (2 pcs)
- 1/8" X 1/8" X 6" Balsa (1 pcs) Spare material
- 1/16" X 1/4" X 1" Pre-drilled Plywood (2pcs) thrust bearing mount
- 1/32" diameter Rear Rubber Hook (2 pcs)
- Wire Rotor shaft with plastic thrust bearing (2 pcs)
- Clay ballast
- Rubber (1 pc) 1/8" X 9.5 feet

Items needed to build helicopter

Waxed Paper (1 piece 12" X 16")

Glue stick

Masking Tape

Thread (2 pieces approximately 2 ft long)

Glue (acetone based, white glue, wood glue or thick CA)

Ruler or scale

Scissors

Patience & Practice

Items needed to fly the Helicopter well

Access to a balance that can accurately measure 3.50 grams.

Rubber Winder.

Rubber Lube (Armor All®)

A carry box to transport the helicopter.

Patience & Practice

**Overview**

The materials in each kit will build two helicopters. (Since proficiency come with practice please build one completely before starting a second one to prevent making the same mistakes.)