

# Indoor Night at NEAT 2005

Hosted by the

**Boston Micronauts**



-size does matter

[www.BostonMicronauts.org](http://www.BostonMicronauts.org)

**Raffle Prizes Donated By** (listed alphabetically):



*Wright Brothers RC*



Mighty Midget Brushless Motors

**RC Micro World**

*Micro Flier Radio*

**Fly RC**

- BSD MicroRC ([BSDmicroRC.com](http://BSDmicroRC.com))
- Dynamics Unlimited/DWE ([slowfly.com](http://slowfly.com))
- JMP Solutions ([jmp-solutions.com](http://jmp-solutions.com))
- Micro Flier Radio ([MicroFlierRadio.com](http://MicroFlierRadio.com))
- RC Micro World ([RcmicroWorld.com](http://RcmicroWorld.com)) the only publication focused exclusively on micro RC planes
- DC Enterprises (sold through BSD & DU)
- FlyRC Magazine ([FlyrRC.com](http://FlyrRC.com))
- Plantraco ([plantraco.com](http://plantraco.com))
- Wright Brothers RC ([WrightBrothersRC.com](http://WrightBrothersRC.com))

If you are interested in micro RC planes, the “micro” vendors listed above are a good place to start. The on-line RCMicroWorld newsletter has a wealth of information. A glossary of common Micro RC terms is at the end of this program. All proceeds of the raffle go to the Downsville High School technology class to buy equipment and supplies.

# Half-Time-Show Planes



**Matt Keennon's** SE5a biplanes (at left) are two extremes of the micro spectrum. The larger SE5a has a wing span of 15 inches, weighs 35, and uses a geared M20 motor. It also has machine guns that light up and make very realistic sounds. The smaller SE5A is Matt's newest scale model and weighs just 2.4g with a span of 4-inches. It uses his own KBA muscle wire actuators and a geared 4mm pager motor and 20mAh LiPoly battery and Matt's own receiver design. Matt works at Aerovironment in California ([aerovironment.com](http://aerovironment.com)) and heads up

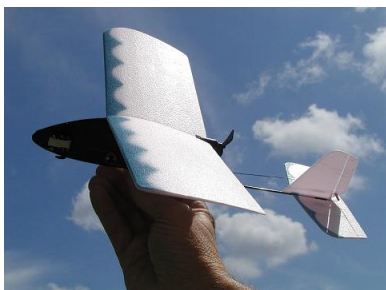
their MAV (MicroAir Vehicle) program. He is also a contributor to RC Micro World magazine.

**Joe Malinchak's** F6F Hellcat (at right) uses the Plantraco 900mhz receiver, a pager motor and a 30mAh cell. His Corsair uses a Co2 motor and weighs just 4.65g. Both models are built from 2mm wall foam. At approximately 7-inches span both models are the same size as a plastic 1/72 scale plastic models. Joe also flies these planes outdoors where they look very nice in flight. Joe is a pilot with US Air



**John Watkins' Experimentor II** (at left) has a wing span of 25 inches and uses a mix of balsa and carbon fiber rods in the airframe to achieve a weight of just 36 grams. Propulsion is via a 9:1 geared M20 and an adjustable pitch prop with blades cut from a disposable plastic cup. The battery is a 145mAh LiPoly.

**Gary Jones' Toon Jet** (right) is his own design flying wing, now available as a kit from BSD. It is vaguely reminiscent of the F-86 Sabre Jet from the Korean war, hence the name Toon Jet. It uses the Mighty Midget double whopper micro brushless motor, a JMP receiver, YGE4-BL controller, Blue Arrow servos, and is built from laser cut Depron foam. It is equally happy flying indoors or outdoors and is surprisingly stable.

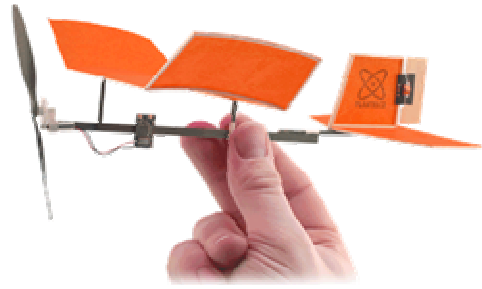


**Ralph Bradley's Homeboy** (right) design is a new BSDmicroRC kit. It uses a direct drive pusher with an orange 7mm SuperSlicks toy car pager motor with a Toytronics prop. Wings are 14.5" span blue foam Gary Jones wings, actuators are BSD MiniAct, receiver is Plantraco. Total weight is 17g. Ralph was unable to attend NEAT, so the plane is flown by Bob Selman.

**Bud Keys** of Plantraco will fly their Butterfly (right), which is the first mass-produced commercially available Living Room Flyer (LRF), meaning it can be flown in a reasonably sized room in a house. It weighs 4 grams and has a wing loading of



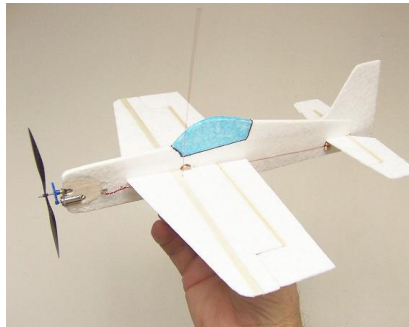
just one ounce per square foot. It uses Plantraco's special 0.38g two-channel receiver developed specifically for this plane, a "hinge-Act" magnetic actuator on the rudder, and a 30mAh LiPoly cell with their patent pending BaHoMA magnetic attachment system. This revolutionary plane is available from Plantraco and their dealers. It even comes in its own small padded aluminum suitcase for safe transport.



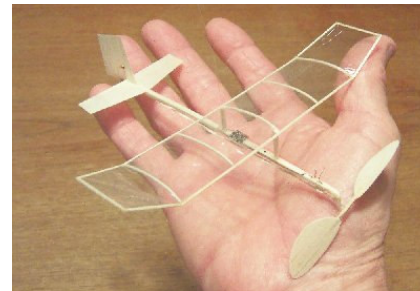
**Chris Murphy's** Kite Thing (at right) is adapted from a Peck Polymers "Stringless Wonder Kit" and is a stable all wing flyer. It uses a geared 6mm motor, an RFFS receiver, BSD remote actuators, and a 145 mAh LiPoly cell. Weight is 20g. Chris is a Boston Micronauts member.



**Nick Leichty's** fully aerobatic plane (right) may



have the record for the lightest fully aerobatic 4-channel plane built. It uses Nick's own designed 0.38g 4-channel receiver, his own actuators, and a geared 6mm pager motor. Wing span is 9-inches and weight is 8 grams. Nick will be offering this plane for sale in November. Nick will also be flying his 0.49 gram (yes, that's half a gram for the entire plane) rubber-powered



single channel plane. It uses his single channel receiver to control the rudder with propulsion being provided by rubber band.



**Ken Spencer's** Cootie (at left) uses a Rogallo wing similar to the early hang gliders. It's built from Ralph Bradley's plans, available from BSDmicroRC. It uses a direct drive M20-LV motor with a Toytronics pusher prop, JMP combo receiver with a single BSD MiniAct for rudder control, and a 140mAh LiPoly battery. The wing is constructed with carbon fiber rod and plastic shopping bag. Weight is 18.3g

**Ben Pipenberg's** Bristol M1C "Red

Devil"(at right) has a 8-inch span and weighs just 7g. It uses the RFFS-100 receiver, a geared Didel 4.5 ohm 6mm pager, hand carved prop, Kokam 60mAh LiPoly cell, is constructed from 2mm wallfoam, and is decorated with a sharpie pen. Ben is just 18, and clearly has a good scale modeling career ahead of him.

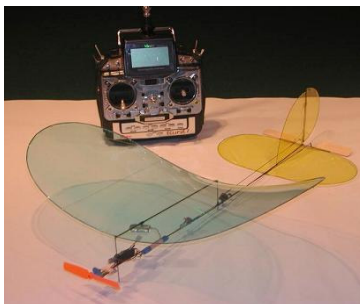
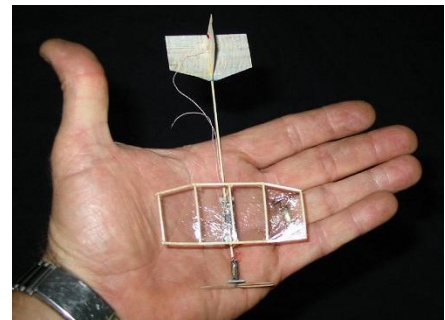




**Gordon Johnson's** Monocoupe 110 (at left) has a 14 inch span, is powered by a Mighty Midget 1-cell Wye brushless motor, uses a Falcon receiver and servos and a Dynamics Unlimited controller. It is constructed from 3mm Depron, covered with printed tissue and weighs 28 grams. His 13-inch span P38 Lighting (lower left) uses two 4mm pager motor watch-gear drives made by Ralph Bradley. Control is BSD MicroAct's and Plantraco RX. It is constructed from 2mm Depron covered with printed tissue. Weight is ~12 grams. If he is unable to fly the P38 he will fly his 10-inch span Monocoupe (right) which uses the same equipment as the P38, but has just one motor. It weighs 9.1g.



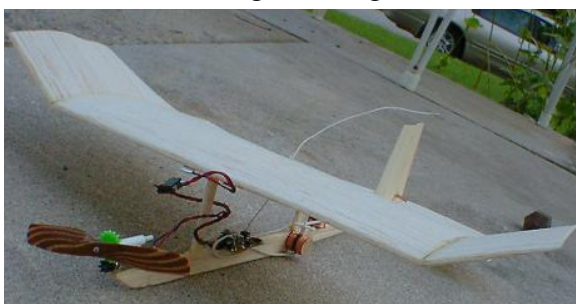
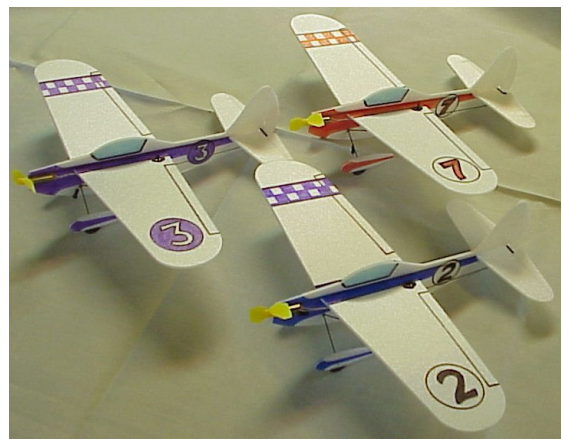
**Henry Pasquet's** plane is a 1/3 size model of the Plantraco Butterfly. It has a wing span of 2.75 inches and weighs about 1.3g. It uses a 4mm pager motor and rudder and throttle control. Henry specializes in the smallest and lightest indoor planes. At one time or another he has held the world's record for the lightest three channel RC plane. He has also held at various times the record for indoor RC duration.



**Allan Wright's** "Kolibri"-type carbon fiber Living Room Flyer(at left) uses readily available micro equipment. It uses a JMP receiver and BSD actuators, Falcon PU04 gearbox, and weighs 28g. It makes up for its weight with wing area and can comfortably be flown in Allan's living room. Allan is a Boston Micronauts member.

### Pylon Racing

**Demo:** The three pylon racers (right) by Bob Selman, Ken Spencer and Gary Jones are made from BSDmicroRC laser cut Depron kits, decorated with colored markers. The planes all use orange 7mm Super Slicks toy car motors with direct drive props, Plantraco 900mhz receivers and BSD MicroAct's for control. Wing span is 9-inches and weight is 12 grams.

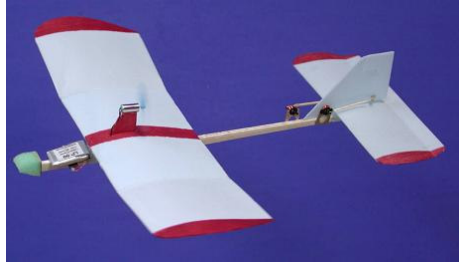


**Sergio Zigras' "Nick 5.5"** (at left) is named that because it weighs 5.5g and uses Nick Leichty equipment. It has a 7.5 inch wing span, uses a 4mm motor, and a 45mAh LiPoly and Nick Leichty (MicroFlyerRadio) receiver and actuators.

**Stew Meyers'** flying wing (right) is constructed from wire cut blue foam, has a 20-inch span, and weighs about 19 grams. It uses a Plantraco 6mm pager motor and gearbox and actuators with BSD designed actuators.

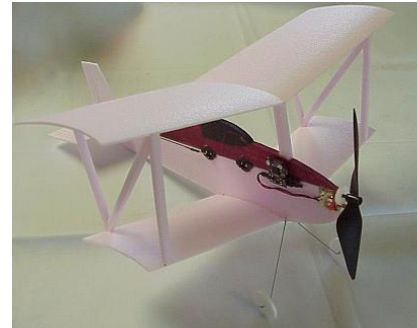


**Roger Carignan's** Pinky Mite (left), flown by Bob Selman, is a much smaller version of his Pinky. All the Pinky planes including the new Mite are available as kits from BSDmicroRC.



The Pinky Mite has a 9-inch span, weighs 8.5g, and is constructed from wire cut blue foam. It uses a direct drive 6mm pager motor and the Plantraco receiver with a

90mah LiPoly cell. Due to the low weight it has a very low wing loading of 1.2 ounce per square foot.

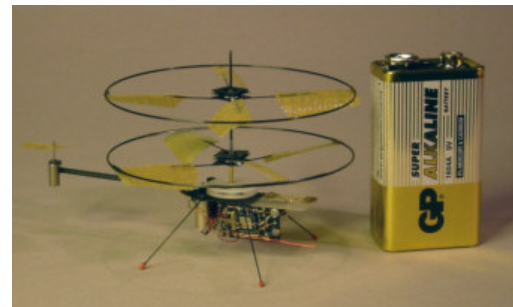


**Jerry Comb's** OkieBipe (right) is a new kit available from BSDmicroRC and is flown by Ken Spencer. It is constructed from wire cut pink foam, has a wing span of 9-inches, and uses the Plantraco receiver, actuators, and 6mm geared motor and prop. Weight is approximately 14 grams.

**Petter Muren's** Bladerunner toy (below left) is based on his Proxflyer. This year Petter has created a helicopter with the the world's smallest rotor diameter, the Picoflyer (at right).



The Picoflyer has a 60mm diameter rotor and weighs just 3.3g using a custom Plantraco RX. More information can be found on [proxflyer.com](http://proxflyer.com). Petter



will demonstrate his Proxflyers early in the evening, before the half-time show as he has to catch a plane to Germany to a Micro Air Vehicle (MAV) competition .