

FLYING HIGH

With Your Feet On The Ground

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World War I biplanes patrol the blue sky. World War II fighters spiral in tailspins. Helicopter blades whirl, and sailplanes streak silently toward green pastures.

Seem impossible? Not at all. These images may be viewed on Sunday afternoons when members of the *Cumberland Aircraft Model Society* assemble for fellowship and a chance to exercise their flying skills.

CAMS was formed in 1964, when a small group of enthusiasts met at Mexico Farms Airfield for the purpose of flying miniature aircraft. Over the next 40 years, the club met at various locations. Most recently, it met at Tom Barton's farm along U.S. Route 220 near Cresaptown, Maryland. CAMS is the second-oldest continuously operating model aircraft society in Maryland, and it lists 39 members ranging in age from 10 to 86. Providing a helping hand has been a key to the club's success over the years, according to its treasurer, Richard Poe. "Members help each other by teaming up." James Dolly, Secretary of CAMS, agrees. "Recently, I noticed our 16-year-old member discussing with our 86-year-old member batteries and electric motors. That kind of atmosphere has made us successful." "Buddy cords", wires that connect an experienced operator with an inexperienced pilot, also assist novices during initial flights.

CAMS members and guests enjoy casual Sunday afternoon conversations about flying conditions, ongoing projects, and flights over the Potomac River valley. Plenty of options are available to participants because each member decides what type of aircraft to fly. Some pilots prefer inexpensive, ready-to-fly models, while other hobbyists enjoy building detailed scale kits. Scale models may require a considerable investment of time and money. One club member, who is currently building a vintage World War II Hellcat, estimates that \$3,000 and two thousand hours of time will be required for the completion of the project.

According to Richard Poe, "We have a variety of interests in our club. Some members want to fly fast; others desire slow, leisurely flights. We have a few fellows that even have helicopters. So, it's really up to individuals what to build or fly."



Radio controlled scale model J-3 Cub, built, owned and flown by Alan Morgan, has a 76" wingspan.

Models may be constructed from a variety of materials including balsa wood, spruce, and space age plastics. Single cylinder engines, tiny rockets, batteries, or simple rubber bands, in the case of indoor flights, provide power

for flights. Sailplanes may have small electric motors with propeller blades that retract during flight, enabling the aircraft to silently soar. Most CAMS members fly single cylinder models, powered by alcohol-based fuel, or rechargeable batteries.

Several distinct types of aircraft are commonly used in the hobby, including free flight, control line, scale, and radio-controlled aircraft. CAMS members use radio-controlled models that are operated from the ground by means of a transmitter. Each plane carries a radio receiver, capable of decoding 4 to 9 channels of information from the transmitter. Pilots manipulate transmitter controls, thereby generating signals to small electric motors that operate mechanical functions on the plane. Different skills and innovations involved in piloting aircraft provide challenges and rewards. One CAMS member recently attached a small camera to his plane, which successfully photographed the river valley from unique perspectives. Radio-controlled piloting systems prompted the Federal Communications Commission to dedicate 50 frequencies to the hobby.

Radio commands enable pilots to simulate virtually all flying conditions from simply taxiing down the runway, to landing, to even more stressful situations like combat fighting. Ironically, according to Jim Dolly, "The most

Joe Nelson and his "Stinger" model and flight box. The flight box is typical and contains all the paraphernalia necessary to fly: fuel (nitromethane) or nitro, starter battery, starter, fuel pump, power panel, transmitter, and other small parts, if needed. The plane has a 60" wingspan with a .60 size motor.

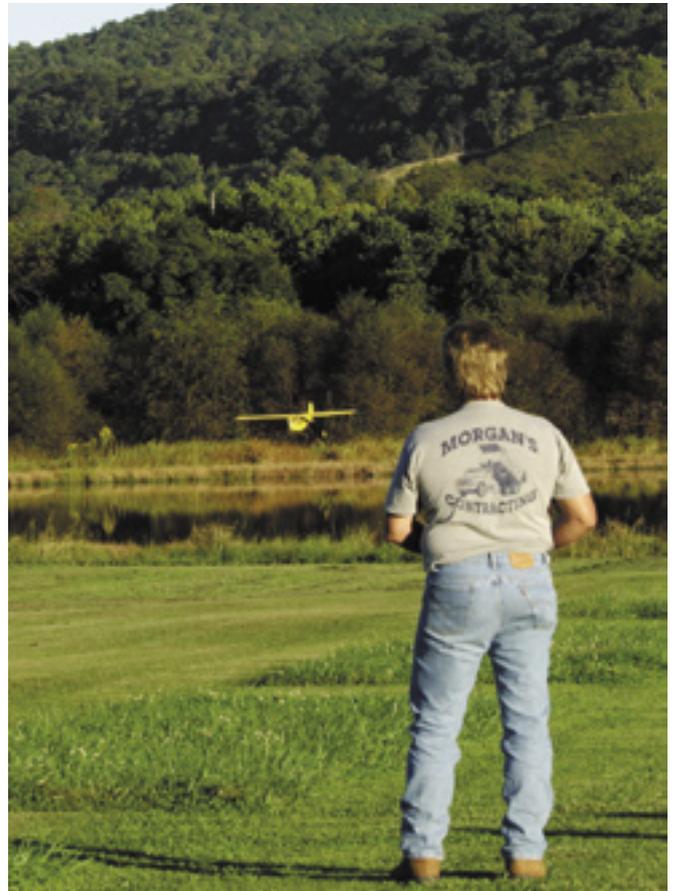


difficult routine task for pilots is landing because it is so tricky. Depth perception can be a problem. Taking off is a lot easier.”

Flying miniature aircraft is considered to be both a hobby and sport. Local enthusiasts rarely engage in competition, but international competition is common. During competitions, records have been established for speed, duration, distance, and altitude to name a few. For example, Maynard Hill, a world record holder with local connections, successfully completed a transAtlantic flight in 33 hours, 39 minutes. On special occasions, CAMS will have a “free for all,” a dogfight featuring inexpensive planes with streamers attached to tails. The object is to cut streamers from opponents’ planes. A winner is declared when a single pilot’s steamer remains untouched by opposing propellers. However, such events are not common, as pilots prefer cooperation to competition.

CAMS is currently searching for a new home for their aircraft activities. To keep updated on site location, consult the CAMS website. CAMS welcomes prospective members to attend a business meeting or a flying event. Visitors are also welcome to watch the aerial acrobatics on Sunday afternoon. For more information, check online at <http://webpages.atlanticbb.net/~clhenry1/C.A.M.S.html>

ENGINE POWERED MODELPLANES



Alan Morgan, transmitter in hand, landing the J-3 Cub. The planes are generally easier to take off than they are to land.



These three photos show Les Henry's 5.5 foot wingspan sport plane, of his own design, which averages 70-80 mph.

MODEL HELICOPTERS

Leon Neff with “Fury Extreme” Helicopter, is much larger than the “Piccolo” (below) and has a kit price tag of around \$900, without electronics. With electronics and other necessities it would not be difficult to sink upwards of \$2000 in a model like this one — definitely not for beginners.



Below left: Leon with the little “Piccolo” helicopter. Powered by battery (no fuel) and weighs 10 oz, it is also radio controlled. This helicopter model sells for around \$180, without electronics and is small in comparison to the “Fury Extreme” bottom right. This “bird” weighs in around 11 lbs, has a 60” rotor span, is capable of traveling at 60-70 mph, and can do aerobatics. The helicopter runs on nitromethane and when full has about 12 minutes of flight time.



GLIDER MODELS (SAIL PLANES)

Jim Dolly with “Thermik Dream”— a glider with a 124” wingspan and weighs about 90 ounces, with a small electric motor. The model is also radio controlled. On the gliders, the prop, motor, and a good shove are one method to get the model aloft. Once in the air, the motor is shut off allowing the model to glide and soar on the currents; direction is still controlled by the operator. The model comes assembled except for the wings and horizontal stabilizer, which come off for transporting.



Dustin Iser built this “Electra” model from a kit, with a 78” wingspan and electric radio controlled motor. If you look closely you can see the prop folded back during shut down. Since these models have no wheels the prop needs to fold back for landing to avoid damage and flipping the plane over. This also provides less drag during flight.



Jim demonstrates the hand launching technique necessary with a lot of gliders. This model is called a “Spectra” and has a 78” wingspan.

