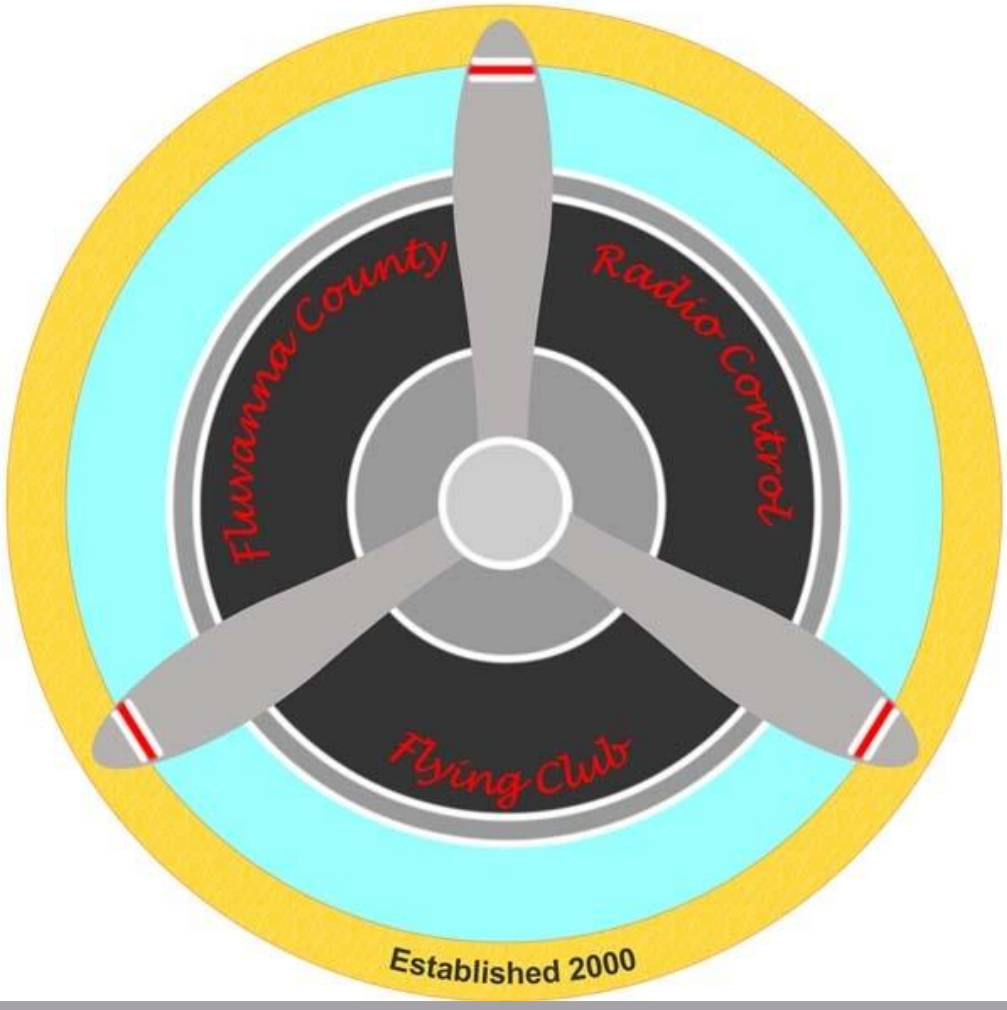
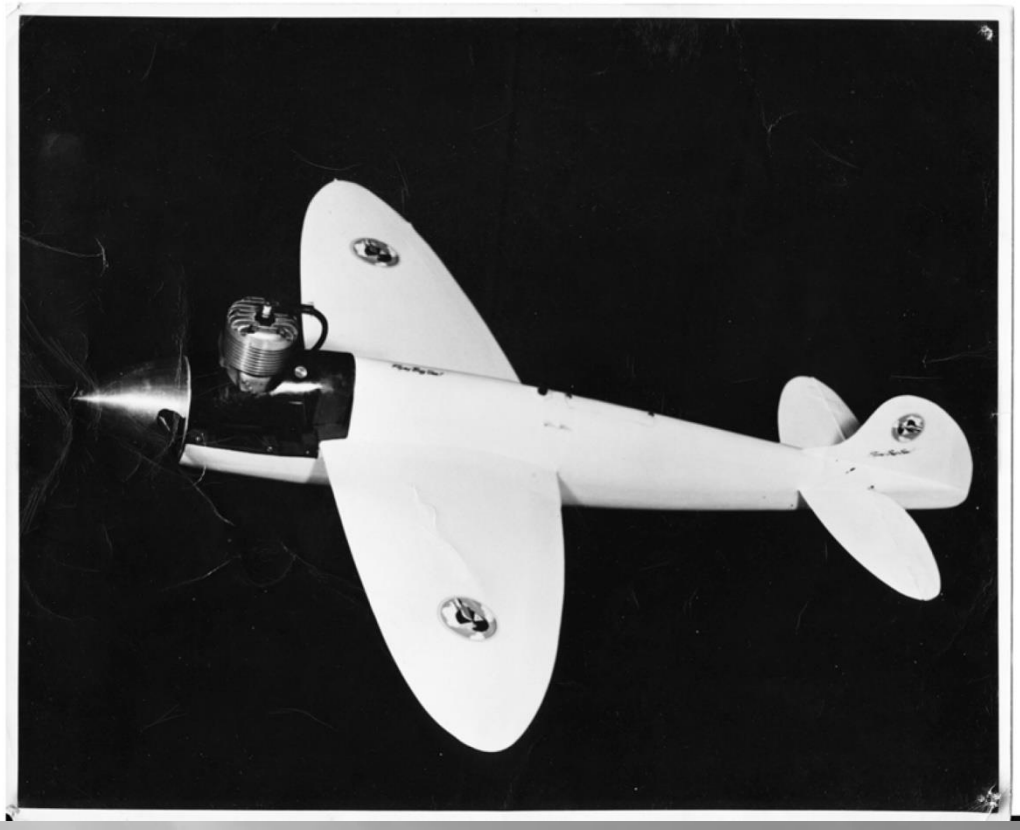
Eddie Hammers' Collection of Historic RC Aircraft



DEMECO SPEEDSTER (1947)

This plane is a "Demeco Speedster" and was built around 1947. Power was a "Hornet" 60 on ignition. Top speed was 105 mph and was entered in several local contests. The biggest problem in those day was to get good batteries. We purchased batteries by the case and normally got only about half that were good enough to use for ignition.



PDQ
WENSEN 36 ENGINE

This plane was a "PDQ" and had a "Wensen" 36. The Wensen was my first engine and was purchased in Washington, D.C., in 1944 and cost $18.50, with the hobby shop dealer throwing in a prop. He did not know how to hook up the ignition and it took three months for him to find someone to show me how to connect the coil, condenser, points and battery. One can tell from these pictures that at that time, I had not yet mastered control line flying.

FIREBALL
Powered by a Delong 30

This plane was a "Fireball" and was powered with a "Delong" 30. Nice flying controline and was unique in that the fuselage was made from two solid blocks of balsa, with the inside gouged out and the outside shaped. The wing was sheeted with no main spar. This particular plane ended its days by trying to take own a basketball backboard.

WHIRLWIND
Contester 60 engine

This plane was a "Whirlwind" powered with a "Contester" 60. I often used this in speed competition, especially where the take off area was too rough for a plane to use a dolly. The engine was built from machined steel and had a very short stroke. Once the engine fired, it was instantly up to top speed. It and the "Bantam" accounted for more bloodied fingers than all the rest of my engines. It was also a very loud engine because of its very long, thin, steel exhaust.

PLAYBOY (1945)
"…last seen heading for the ocean"

This plane was (if I remember correctly) a "Playboy." It, too, has a "Contestor" for power. This plane was built in 1945 and the last I saw of it was at a contest in Maryland; it was heading for the ocean.

DEMECO STAGGERWING BIPE using an Ohlsson 60

This is a "Demeco Staggerwing Bipe" and used an "Ohlsson" 60. This was the engine and plane that we first experienced an engine running without ignition. Our club mixed DHP #3 fuel for use in this airplane. This plane was a favorite of many and at one time we had 19 in the club.

THE MOLE
powered by a Bantam 19

This plane was labeled "The Mole." It was powered by a "Bantam" 19, and was a very fast plane. It has no landing gear, but used a dolly for assisted takeoff. This airplane was built from plans and was never "kited."

DRONETTE
Special production to be used with the Drone Diesel 30 engine

Shown is a "Dronette" which was produced especially for the "Drone" diesel 30 engine. This plane started out with a "Drone" engine, but I found it very hard to start at times and was later converted to an "Ohlsson" 60. It was a very popular plane at the time. The fuselage was made into a diamond shape and many modelers added an extra set of landing gear, so the plane could be landed either way. With the "Drone," this came in handy in stunt flying because the engine frequently cut off in flight.

STUNTWAGON
by Demeco with Hornet 60
(“84 mph, straight-and-level”)

This is the stunt plane I used in later days of stunt flying competition. It was the "Stuntwagon," by "Demeco." This particular plane had a "Hornet" 60 for power and turned 84 mph in straight and level flying. The plane was capable of looping almost within its own length.

DEMECO SPEEDWAGONS

The planes pictured here represent one of my most enthusiastic and at the same time the most gut wrenching time of my control line flying. Both planes are "Demeco Speedwagons." The smaller had a "Bantam" 19 which turned 98 mph. The larger used a "Torpedo" 29, and was clocked at 105 mph at a speed contest in Charlottesville, VA, in early 1949.

Many exciting things happened that day. One club showed up with an all metal plane with a "Dynajet" engine mounted on top. After flying, a member of that club who had never flown a jet made enough of a nuisance of himself that he was allowed to fly the plane. Upon takeoff he immediately did a wingover and drove the plane into the ground, bending both the plane and motor.

In early morning, with Matt Simmerman, (Matt and I flew as a team and took turns flying), the "Bantam Torpedo" was clocked at 105 mph. The record at the time stood at 98 mph. We held this for five hours, after which two "McCoy" factory representatives showed up with their just released (two weeks earlier) "Red Head McCoy" 29 racing engine. They were to fly demonstration. They were clocked by three judges during the same flight at 98, 102 and 105 mph and were awarded the top speed of 105, thereby setting a new record.

We protested on the grounds that (1) the flight was to be a demonstration flight; (2) the engine was not yet available to the general public; and (3) the speed ranged from 98 to 105, and according to rules should not be more than a .2 mph spread between all judges. We lost the ruling with no reason given.

In mid-afternoon, someone flying in Class B Speed had failed to peg the two halves of the fuselage together and the bottom half separated. In an instant, the bottom half, with the engine and elevator in tow, covered about a hundred feet and struck a young woman in the mouth. It was fortunate there was an ambulance standing by, just a short distance away.

TAURUS (1967)

Bill Blackburn, a member of our "Skyline RC Flying Club," is shown hand-launching my "Taurus" in 1967 at our flying site beside R340, just north of Grottoes. Our takeoff area was very small, and while on "reeds," a tricycle gear plane was almost impossible to keep lined up when flying from grass. The "Taurus," by Ed Kasmirsky, was one of my favorite planes.

KWIK FLY (1967)

The first picture shows me starting my "Kwik Fly" (designed by Phil Kraft) on April 16, 1967, at the flying site north of Grottoes, Virginia. The second picture shows the Kwik Fly in flight.

DEMECO BIPE at Andrews AFB (1948)

Here's the "Demeco" Bipe at Andrews Air Force Base in 1948. It's using a Phil Kraft, 12-channel reed system.

DAS UNGLY STICK
...a Phil Kraft design

This is a picture of Bill Blackburn (Waynesboro) working on his "Das Ugly Stick," designed by Phil Kraft. Though changed slightly, the plane is still very popular today in both and electric, and is known simply as "The Stick."

SKYLARK
...two, small OS engines

The unfinished plane is a "Skylark." It was later finished and flown using two small OS engines.

FLYING WING
with a VECO 45 engine

This is another of the flying wings I've tried over the years. This one was on "reeds" and used a "Veco" 45 engine. It was not a kit, but was built from plans. It had Elevator, Aileron and Engine control, but was very tricky on "reeds."

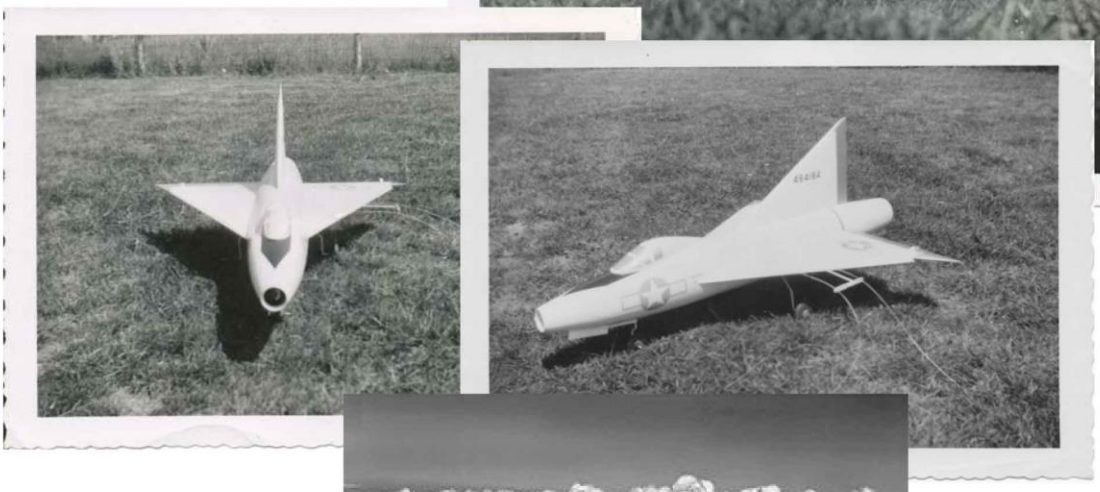
XF-92 PULSE JET

...full-scale experimental at bottom

These pictures show the model of the first delta-wing airframe studied by the Air Force, designated the XF-92 (full-scale shown at bottom). It was built from a set of plans expanded from a model airplane book. The wings were sheeted and the fuselage was built up using strips of balsa.

This control line model utilized a Dynajet pulse motor for propulsion. The motor (no reciprocating parts) was 22.5" long and 2.5" in diameter, producing 2.5 HP or 4.5 lbs. of static thrust and weighed 1.5 lbs. It was mounted in a metal bracket with ½" of space around it. The inside of the fuselage was covered in a sheet of asbestos and painted with a coating of "water glass" to restrict the motor heat from attacking the frame. Even with this, the internal structure became scorched enough that the plane was discarded after just a very few flights.

The Plane was flown on 90' lines and even then, because of the weight and speed, one had to literally have heels dug into the ground just to hold it. It was no fun to fly.



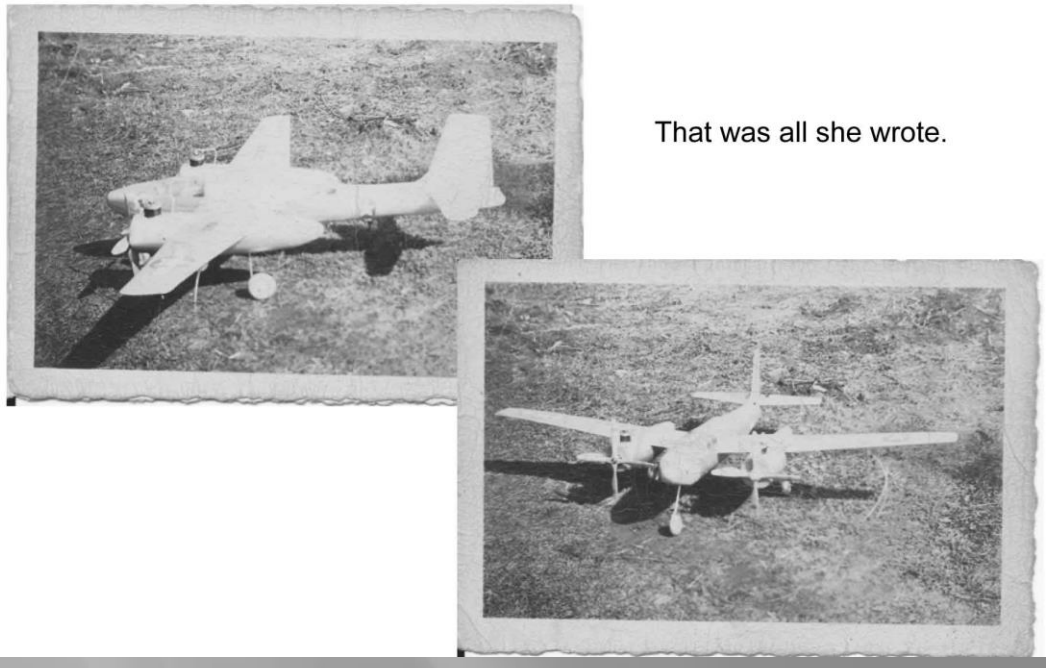
A-26
Kit-built w/2 Atwood JH-60 engines

The pictured A-26 was built from a kit. For power, two "Atwood JH-60" engines on ignition were used. It was all balsa, with sheeted wings and a fuselage built of ½" strips over plywood bulkheads. It was a nice flying plane, but had to be flown on 90' lines.

The outboard engine was always started first, so as to ensure the inboard engine would always have more fuel left so that it would cut off last, in order to keep the plane tight on the control lines. This worked great until one day, the inboard engine died first. With no cut-off control, the remainder of the flight consisted of always running away from the plane to keep control. Therefore a new system had to be developed...

Since each engine had its own fuel tank, coil, condenser and points, I added a DPDT switch into the circuit so that with the switch in one position, each engine could be started separately. Once running, the switch was thrown and this allowed the "points" of one engine to fire the spark plug on the other engine. This worked better than expected, as only one set of points had to be advanced to increase the RPM of both. Both engines were synchronized and when one engine died, so did the other.

This worked well until a very bad "mishap": The rear Ventura mounted vertically and was prone to breakage in a wreck. The other was that the engine often backfired thru the Ventura. After a number of flights, the nacelles had filled with fuel vapors and when the inboard engine was started, the nacelle exploded, blowing the wing off the fuselage and catching both pieces on fire.



That was all she wrote.

ORBIT
Pre-fab, 12” wingspan (1946)

(…descriptive text, next 2 frames…)

ORBIT
Pre-fab, 12” wingspan (1946)

#1 -The plane in this picture was, I believe, called an "Orbit" and had a 12" wingspan. It was the first "pre fabricated kit that I know of and was produced around 1946. We had four in our club, of which two were mine.
The kit came in a large box and the fuselage was in two halves, IE: top and bottom. It was manufactured from some sort of pressed or molded material that looked like some kind of fiber mixed in liquid and heat pressed into shape.
Assembly was by placing small 2" blocks on the plans at the outline of the plane and then laying the lower half of the molded form on these blocks. The plywood motor mount and the wing spar (wing tip to wing tip) was added, along with the bellcrank, control rod to the elevator, elevator and fuel tank. This form had a lip that surrounded the outside of the plane and was used to glue the top half on.
Once the glue had dried, the entire plane was removed and the lip was cut off and sanded. A thin piece of cloth was then glued around the seam. This was sanded and sanding sealer applied and sanded until any signs of the seam or cloth disappeared

The plane, as mentioned before had a 12" wingspan and this particular one had a McCoy 60 Red Head on ignition for power. The prop was customized from an "Excello" 9 X 9 wood prop. To customize, we squared the tip, which ended at 1/4". We then drew a straight line from the smallest part of the prop just outside of the hub to the tip; both leading and trailing edge. The portions outside of the lines were removed. This left a flat leading and trailing edge, which was removed by scraping the inside leading portion and the outside trailing portion until a very thin prop emerged. This resulted in a 9 X 14 speed prop that was so thin that a starter had to be used. Fuel used was "Liquid Dynamite" and sold for $1.95/pt. Finish was a burnt orange fuel proof dope. The plane turned 106 mph on 70 ft lines, but was never entered in a competitive contest.

The two planes owned by other club members; One had a McCoy 60 Red Head on ignition, the same as this one and the other had a Hornet 60. The Hornet proved to have too short a shaft for proper cowling and was soon disguarded.

#2 -My second "Orbit", shown here was the same a #1, except for the following. The color was the same, and had 7 coats of dope, each wet sanded between coats. For power, a completely new system was utilized using a "Hassad" 65 and ignition only for starting.

To explain, I have to go back some months earlier. Our club was fortunate to have a president named John Holcombe who was Manager of Merck & Co; Two club members were Forrest Dryden, the Mgr., of the chemical lab and John Pasey, chief chemist. Since we were buying our racing fuel by the case, the three decided to have the fuel analyzed and in so doing came up with DHP#1, a blend of tri-nitromethane, methanol, benzene and castor oil. It worked so good that DHP#2 was mixed. This was better, so DHP#3 was mixed. This fuel had quite a number of advantages, so #4, #5 and #6 was tried. DHP#5, we found dissolved the piston baffle, so we went back to DHP#3. This became our standard flying fuel.

While flying a Demeco Stagger wing bipe equipped with an Ohlsson 60 one day, we found that without cowling, on a low powered sport engine such as the Ohlsson, and with a certain type ignition plug, the engine would continue running without loss of RPM even when the ignition was

ORBIT
Pre-fab, 12" wingspan (1946)

removed; when using DHP#3.

My second Orbit was set up, whereby we started the engine on ignition, using a plug in ignition system and then removing it once the engine warmed up.
At Hybla Valley in 1947, I was clocked at 129mph with the plane stalling at about a 35 degree stall and engine running very rich. No amount of "whipping" would lean the engine.

Hybla Valley, south of Wash. DC was a new event for control line speed and free flight. That year, they expected around 200 entries in speed and 700 in free flight: Instead, they had 900 entrants in speed and 2000 in free flight. Because of this massive turnout, we had only one chance for a tryout.

At mid day, a single engine Taylorcraft buzzed the field and then landed. The pilot was removed from the plane and taken away, almost before the wheels stopped turning. In early afternoon the crowd had destroyed all barriers and it was hard to distinguish a contestant from a visitor. This led to a visitor being hit in the back of the head by a free flight that looped over the crowd and then dropped. The airfield was then shut down and we left.

During our spare time, we visited many vendors setups. Two of the main things remembered, was that "Arden" first showed their new product about to be produced. That was the Arden Glo plug. These were soon available complete, and you could purchase replacement Glo elements and repair your own. We knew we were ahead of our time with the set-up used earlier in the day. The second item of interest was that this was the first showing of the CO2 engine, which was flown in a small rubberband model. The designer was looking for a manufacturer and a representative from "Herkermer" (who made the OK engine line) was discussing some particulars with him. Herkermer soon came out with the engine.

The Hybla Valley airport was destroyed by fire sometime after 1949.

KAOS, NEWPORT & STORMER

Starting the "Super Kaos." It is powered by a "Supertigre" 60 "Blue Head." The plane and the engine were kept after the closing of my hobby shop in 1976. The picture was taken at the Pleasant Grove flying site.

The "Newport 28"; picture taken at the FCRFC field, Fluvanna County Landfill.

The "Stormer" was being built in my shop. Though a very popular plane, it never went into production. Also on the table is a Falcon 56, and hanging overhead out of sight was a 6' Cessna 180.

(The full page article, separate panel, is a copy taken from the October, 1968, RC Modeler Magazine. World Engines, the forerunner to Tower Hobbies, selected one of their larger customers each month for presentation of a radio system. At one time, I did a very large amount of business with World Engines.)