

JAYHAWK MODEL MASTERS NEWSLETTER

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A.M.A. CHARTER #2013

ISSUE DATE: January 12, 1991

NEXT MEETING: February 16, 1991; ALL-SEASONS MOTEL; 8:30 a.m.

THERE WILL BE NO CLUB MEETING IN JANUARY DUE TO THE SHOP 'N SWAP IN KANSAS CITY ON JANUARY 19, 1991.

OUR NEXT CLUB MEETING WILL BE FEBRUARY 16, 1991

MEETING MINUTES DECEMBER 15, 1990

Richard called the meeting to order. He reported \$1139.50 in the treasury.

It was discussed and voted on that club cards can not be used in the pin slots in the field, anymore. You MUST have an AMA card.

A motion was made and passed to donate \$50.00 to the Clinton Lake Clean-Up. Richard also informed us that he sent a Poinsetta plant and Pop-Corn Tin to the Corps.

Chuck Hardman told of a place in Lincoln, Nebraska, that has used radios, engines, and planes for sale. If interested, contact Chuck for the number.

Congratulations to the Raffle Winners! Richard Ballard won the Futaba Radio; C.W. Holt, Jim Crawford, and Vince Bortone won subscriptions to R/C Report; Joe Bryant, Geoff Brady, Dave Rosen, C.W. Holt, Kyle Walker, Darrel Cordle, Dave Plamann, Emory Price, and Keith Coleman won Tower Catalogues.

Richard Ballard brought his 'Hot Canary.' Gary Rauckman brought his F-18 Hornet. Chuck Hardman brought a 4-120 that he purchased from the place in Lincoln.

Vince Callahan brought his Trainer-40 with a camera attached to it for aerial shots.

MISSING IN ACTION

The following club members are missing in action from the 1991 club rolls. If you see any of them, please give them a gentle kick in the butt and remind them to pay their '91 dues.

Thanks,

De Prez

Ivan Hird
Robert Hird
Pat Moriarty
Ron Griffin
Bill McCollum
C.W. Holt
Choon Park
Bud Burns
Marquam Wells Jr.
Stephen Dennis
Alan W. Jack
Roger Hamilton
Ed Ramey
Greg Berroth
Vince Callahan

Steve Shumate
Michael Weinsaft
Lester D. Smith
David B. Rosen
Danny Callahan
Dennis Shepard
Adrian Burns
Russ Whiteman
Don Miller
Onis Bearden
Darrel F. Colton
Bryan Sorenson
Larry Broddle
Darren Cook

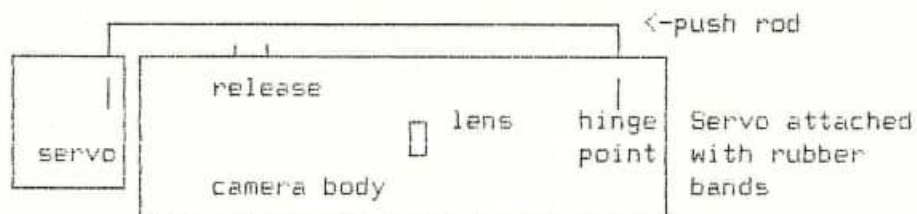
A BIRD'S EYE VIEW
by Brett Bennett
Oct '90

Several weeks ago I tried my hand at some aerial photography using my model airplane. The idea is far from new, and was something that several club members and I had talked about, but none of us had any experience with. So with no real idea of how to proceed I said, "What the hell, I'll try it."

Not having a camera that I was willing to risk in airborne flight, I knew I would use one of the 'disposable' cameras on the market. These cameras, made by Kodak and Fuji (and maybe others), are lightweight (2.5-3.5 oz) fixed shutter speed, fixed focal length cameras. They come preloaded with 12 to 24 frames of film, and when spent are returned, camera and all, for processing. All you get back is your prints, thus the name disposable cameras. I tried two different versions of Kodak's cameras, the STRETCH-35 and the FLING-35.

For the photo-buffs out there, here are the specs on these two cameras. The STRETCH has 12 frames of VR-GOLD 200 film, a shutter speed of 1/125 second and a focal length of 25mm with an aperture of f12. The FLING has 24 frames of VR-GOLD 400 film, a shutter speed of 1/250 second and a focal length of 35mm with an aperture of f11. Both cameras are fixed focus with a 3' to infinity range using a plastic lens. The STRETCH takes 'panoramic' type pictures. These prints are about 10" wide and 4" tall. Because of this it requires special printing equipment and costs extra to process and print (about \$1.00 per print). The FLING takes normal 35mm negatives and therefore the prints are normal 4"x5" and much less expensive.

To release the shutter of these cameras there is a small push button on the top that is raised about 1/16" from the plastic case. In order to take pictures from my plane, I would need a servo to somehow depress this button. I did this by first attaching the servo to the camera body with rubber bands. Then using some aileron connecting rod, I fashioned an assembly to push the release button. See figure below:



The servo pulls down on the 'push-rod' which is hinged into the body of the camera. This pushes down on the shutter release button taking the picture.

The camera assembly was wrapped in plastic with cutouts made for the lens and the film advance. I attached this to the bottom of my Arrow's wing with rubber bands, taking care to make sure there was no interference with the plane's ailerons.

I connected the servo to my receiver's FLAP channel, thus I could take the picture anytime I wanted by 'lowering my flaps.' These simple cameras, of course, have manual film advance by means of a thumb wheel on their back side. This limited me to one picture per flight. After taking my shot I would have to land and re-arm the camera.

The camera, being mounted on the bottom of my Arrow's wing, looked straight down from the plane. The camera/servo combination was NOT aerodynamically 'clean,' and the Arrow knew it! The plane flew as if I had applied full up-trim and reduced my FP-.40 engine to a K&B-.60 (grin). The payload acted like flaps increasing lift and drag. This made the plane very difficult to control during photo taking, since the plane wanted to 'nose-up' all the time, even with full down trim and minimum power.

The first roll I shot was with the STRETCH-35 camera. When shooting these I would first climb to altitude and shut the engine down, then gliding to where I thought would be a good location, I tripped the camera. I would then 'dead stick' the plane back to the runway. I killed the engine before taking the pictures to help insure a steady picture by eliminating engine vibration. Alas, while the pictures were sharp, none took a shot of what I had intended, namely our airstrip. It turned out that it was very difficult to judge where the camera was looking. The second try was with the FLING-35. This camera offers 24 attempts to get it right, and from my experience with the STRETCH, I knew I had to fly it much more overhead than I did the first

time. I decided to 'dead stick' the first few photos but 'powered' through the bulk of the pictures.

My conclusions are that 'dead stick' pictures are noticeably sharper than those with the engine running. A piece of foam between the camera and the wing seemed to help reduce vibration-induced blur, too. When taking the pictures, bring the plane to what looks like it's overhead, then fly it a little bit further, before taking the picture. It was the pictures that I was sure I had gone too far, that came closest to the mark. The problem with this is that the pitch of the plane is more difficult to ascertain and you are more likely to be taking a picture at an angle rather than straight down. The higher the plane, the less motion blur you get, but you also lose detail. The FLING-35's higher shutter speed seem to help reduce blur, but its 400 speed film had less detail. A lightweight auto-wind camera would make the job a lot easier! Having a 'camera man' actually take the picture while I just flew the plane was helpful. A high winged airplane in which the camera could be mounted inboard, thereby not changing the aerodynamics of the plane would be ideal. Say..... Anybody out there got one they'd like to turn into a reconnaissance plane?

IS 1/4 SCALE TOO SMALL?

How big is big? 1/4 scale, 1/3 scale? Or even bigger? By any measure we use today, a B-17 Bomber of W.W.II must seem pretty large! So how would you like to learn to fly with an R/C B-17 as your Trainer? (Talk about beginners!)

After W.W.II ended there were about 2,500 B-17's still able to fly home from across the big pond. (Out of over 11,000 built!) They were flown home only to be put in storage or melted down for scrap in case we needed to fight another war some time soon.

Shortly after that, A-Bomb tests got underway and it didn't take long to figure

out that a 4-engine prop driven bomber was not going to be the ultimate answer for hauling them to a target, wherever that might be.

By now the A-Bombs used on Japan were just a "Flash in the pan" compared to our "New" bombs. Why? A B-29 with a strong tailwind couldn't out-run its own blast, and even if it did, the crew would soon lose interest in flying while they watched their hair fall out, and pondered the intense radiation sickness following a raid!

The BEST minds of the day thought perhaps the ultimate answer would be a remotely piloted bomber that could be flown to within a few miles of the target by Radio Control and then allowed to crash in a blaze of glory, all by itself.

In the meantime, the pilot and crew would be flying away as fast as their little Pratt & Whitneys could carry them in the opposite direction. (Sounds like a good idea to me!)

Anyway, several B-17's ended up as QB-17's in 1946. (What "Q" meant is anybody's guess, but it's starting to sound like a James Bond novel to me!) At any rate, the QB-17 Bomber, under Radio Control, was flown from Hilo, Hawaii to Muroc Army Air Base, (a distance of 2,500 miles) as part of the Bikini Atol tests. The QB-17 was followed closely by a DB-17 that stayed within visual range all the way.

The "D" in DB-17 stood for "Director" and "D" was an R/C Pilot! (Now it's starting to sound like a James Bond movie!) Whether or not "D" made a good landing at Muroc AAB is not mentioned in any of the research I have done so far. He didn't make the A.M.A. Record books however, so I must assume it wasn't anything to write home about! (It could be that it wasn't a sanctioned event however!)

What is important is that a B-17 Bomber must have been the ultimate R/C airplane of all time if you like Big Birds! It must also have been the first Cruise Missile, except the historians of the day

didn't know what to call it!

RLB

BLOND HAIR A BOMBSHELL IN WWII

(By the Associated Press,
COLORADO SPRINGS, Colo.)

When Americans everywhere were giving up luxuries for the effort to win World War II, Mary Babnick Brown gave up something much more personal than a favorite food -- her below-knee-length hair.

Brown, 83, was honored Saturday for contributing to the war effort. In a ceremony at the U.S. Air Force Academy, she received a special achievement award from the Colorado Aviation Historical Society.

What she didn't know back in 1942 was that her hair was used as cross hairs in a secret bombsight used on bombers.

Brown said she didn't really want to give up her blond hair, but caring for it was becoming a lot of work. The government wanted hair at least 22 inches long. She sent 34 inches -- hair that had only been trimmed, never really cut, for her first 36 years.

In 1942, she saw an advertisement in a Pueblo newspaper that the government was looking for women to contribute their hair to the war effort, she sent an inquiry and quickly received a telegram asking her to send a sample.

A few days later, she received another telegram pleading for her hair. It was exactly what they needed, said officials with the Institute of Technology in Washington, D.C.

"I saw so many people crying their eyes out, not wanting their sons to go," she said. "I was sad. I wanted to do something for the war effort."

Bill Feder, founder of the International B-24 Memorial Museum in Pueblo, learned recently that a Pueblo woman had donated

her hair. He began looking for her.

He told Brown her hair was used experimentally as cross hairs in a bomb-aiming device known as the Norden bombsight.

The bombsight, invented in the mid-1930s by a Swiss immigrant named Karl Norden, was essentially a mechanical computer used in high altitude bombing. The device took into account such things as altitude, the plane's speed and wind velocity.

When the target reached the center of the cross hairs, the crew could drop the bomb with dependable accuracy.

Used on the B-24 Liberator, the B-29 Super Fortress and the B-17 Flying Fortress, the Norden bomb-sight was so secret it was equipped with explosives, Feder said, and crews were ordered to destroy it if their bomber ran the risk of falling into enemy hands.

At altitudes as high as 20,000 feet, the bombsight cross hairs were subjected to freezing temperatures and rapid changes in humidity. Black widow spider webs, which contracted and expanded on scale under those conditions, were originally used but were fragile and hard to come by.

Feder said Brown's fine blond hair, which had never been bleached or touched with a hot iron, was unique and shared many of the qualities valued in the black widow spider's web.

KANSAS CITY RADIO CONTROL

SHOP 'N SWAMP

SATURDAY, JANUARY 19, 1991
8:00 A.M. - 5:00 P.M.

BLUE SPRINGS CIVIC CENTER

1/4 Mile south of I-70 between Woods Chapel Road and Hwy. 7. Blue Springs, MO.

Adults: \$2.00

Children: Under 12 free

Concession stand open from 8:00 A.M. til close. Coffee, doughnuts, hot dogs, soft drinks, etc.

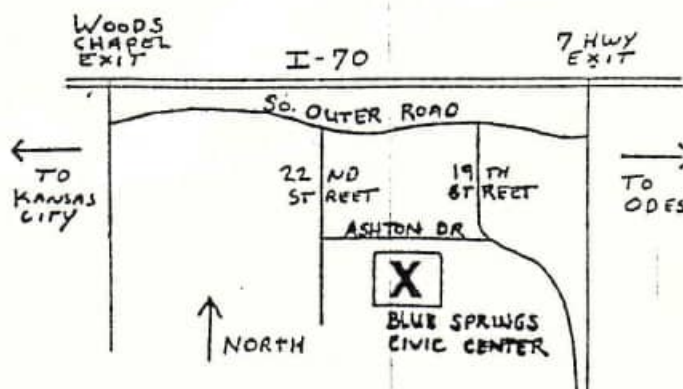
Terms:

1. Table space \$10.00 (maximum \$20.00 full table, per seller).
2. Overflow floor & wall space available on first-come first-served basis.
3. KCRC not responsible for damage or theft.
4. Sellers responsible for Mo. sales tax and will be provided necessary forms.
5. Everyone is required to have a good time.

For more information call: BOB DESKINS
(816) 461-5616

EVERYONE WELCOME

Chuck Hardman said that he will be handling Byro-Jet Fuel. It will be available at Jayhawk Bowling Supply by the gallon or case. Chuck says that you will save more money buying it by the case.





A-6 INTRUDER



GRUMMAN A-6E INTRUDER

Wingspan:	53 ft.
Length:	54 ft. 9 in.
Height:	16 ft. 2 in.
Engines:	two Pratt & Whitney J52-P-8B turbojets
Engine thrust (lbs.):	9,300
Maximum T-O weight (lbs.):	60,400
Operating altitude (ft.):	42,400
Cruising speed (mph):	474
Top speed (mph):	806
Maximum range (miles):	2,740