



July 1994

The News Letter of the *Manned Space Center Radio Control Club*

President's Corner

Ed Copeland

I want to thank Jerry Hajek from all of us for his very entertaining, informative and interesting presentation on his air combat training flight experience. Next to doing it I think his presentation gave the touch, feel and effect, in terms that provide the imagination with a feast. It had never occurred to me that a great deal of combat training time must be invested in learning to fly the aircraft without having to look at the instrument panel. Those T-34 guys can probably sense the onset of stall or red-line speed without a glance at the airspeed indicator. One question I wanted to ask and forgot was how much lead does one use when firing a laser? Just kidding, however, I understand that today's gunsights have auto ranging and are coupled to the aircraft instrument sensors for airspeed, pitch/yaw/roll rate, and closing rate in order to provide corrections that could only be done by visual estimation until the end of WWII and beyond. I think that the WWII gunsights had some correctional capability. I saw one in a surplus store once that had a motorized cross hair, but I have no idea what made it move. They did not have radar coupled to the aircraft sensors, to my limited knowledge. Within my reading, the only airborne radar units used in WWII were in sub chasers, etc. Some fighters did have radar sensors and jammers (later P-51D had this mounted in the vertical fin). Well, that's already more than I really know about all of this. Thanks again Jerry.

Next month we will do the Avro Vulcan. The first part of the presentation will be a brief history of the design and
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Words From The VP

Ray Randolph

Going's On - The June Fun Fly took place on the 11th and Mother Nature cooperated with a really pretty day. All six contestants and all six spectators had a good time and again we had some fine prizes thanks to the club and our friends at Texas Model Trends. Congratulations to Don Fisher on winning the Touch-n-Goes and Lee Erminger for first in "Roops" or "Loops/Rolls/Touch-n-Go".

**Next Meeting
This Thursday
July 14th
7:30 PM
Clear Lake Park Building**

I was doing OK in the Touch-n-Go event 'til I let the wind push me out of a "final" turn and bounced my "Stickit" on its nose which caused the tail feathers to separate. It's back together and good as new so we'll be ready next time!!

For Kirby and Lee, your Model-of-the-Month trophies are ordered and should be available at the next meeting. Sorry for the delay.

Mini-product Review - I've told some folks that I think "Orocover" from "Hobby Lobby International" is the best all-around covering film and that "Ultracoat" is probably in second place. There has been some feedback from
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Minutes from the June 1994 Meeting

Resha Hill - Secretary



Ed Copeland called the meeting to order at 7:35 pm. The minutes of the previous meeting were accepted as published in the newsletter.

Old Business:

-Fuel: Next purchase of fuel will include: 4-Stroke, Super Tiger, 10% Castor, FAI, and Regular. Ed Copeland and Don Fisher will get together to make sure they have a complete list of types of fuel that need to be bought for the club.

New Business:

-Don Fisher presented the June 11 Fun Fly events as the 3-Minute Touch-N-Go and Loops/Rolls and Touch-N-Go. Awards for winners still need to be determined. Drinks and ice will be made available.

-Texas Model Trends would like to be placed on the Newsletter mailing list. Dave Hoffman will take the action.

-Dave Hoffman distributed a sign up sheet for club members interested in purchasing popcars.

-Bill Langdoc mentioned to club members that a construction project is going on behind building 14 and the parking area has been blocked off. Members will have to park on the left side of the building and walk across the grass with your flight box and plane to get to the paved strip. He will try to get more information regarding the construction.

-Dave Hoffman will coordinate the fun fly event for July. This will be a Sail Plane Fun Fly.

-Ray Randolph will purchase Model of Month trophies for the club.

Model of the Month:

Lee Erminger displayed his Dern Wing. Mainly built of foam this plane was covered with wall paper backing paper, then with Monokote. (Black and white with Batman emblems on the wings). This plane is mostly wing and has no tail section. Lee says this plane flies like a conventional airplane and will do some unusual things as well. The plane is 5 years old, weighs 7.5 to 8 lbs with a 65 Sportster engine.

Entertainment:

Jerry Hajek kept us entertained sharing a video and talking with us about his flying experience with Texas Air Aces, (a Christmas present from his wife Bernie).

Refreshments: - Taz Crowson volunteered for to bring refreshments for the June meeting.

Calendar of Events

July 9-10 - Big Bird, Prop Nuts, Crosby, Tx

Sept 9-10-11 - 12th Annual Greater Southwest Fan Fly, Bomber Field, Monaville, Tx

Sept 16-17-18 - 6th Annual B-17 Gathering Big Bird Fly In, Bomber Field, Monaville, Tx

Oct 8-9 - October Charity Event, Prop Nuts, Crosby

The R/C Flyer

EDITOR

Jerry Hajek

ASSEMBLY AND POSTING

Daniel Hamala

Articles and want ads can be submitted to Jerry Hajek, 486-4722 or on 5.25" or 3.5" floppies in ASCII, Word Perfect, PFS, Word Star, Modem Xfer, or hard copy formats sent to: 1035 Bellgreen, Houston 77062. "Support Your R/C Flyer"

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development of this (then - 1950's) revolutionary aircraft. The second part will be a brief presentation of the RC design project. This was the British equivalent of the Convaire B-58 Hustler. Both the Vulcan and Hustler were delta wing bombers for intercontinental delivery of nuclear ordinance. The Vulcan went into service first and was a great success in terms of its flying qualities and in terms of meeting the design specification. It only saw combat once, during the Falklands war.

The RC project was commissioned by Pat Barnshausen. Pat has agreed to come to our meeting and help with the history. Pat has spent a lot of time collecting data and has photographed a full scale bird in the bomber air museum at Barksdale Air Base in Bossier City Louisiana. The end result of the project will be a twin ducted fan 111 inch RC model. The drawings together with the construction details will be presented. The plans were drawn using AeroDraw and are about ready for approval, having undergone two interim reviews. I think you will enjoy the presentation, so be sure to attend.

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We still need more airplanes of the month to look at. Perhaps one of our most prolific builders brought in a very interesting tailless design and won the trophy for model of the month. Lee Eminger told us a very interesting story indeed, about his RC model including some info on its German designer (Dern?). I am always amazed at these smarty-pants tailless aircraft that do not seem to know that they are not supposed to be stable and fly like more conservative (conformist) aircraft, only to do it anyhow. And what is more arrogant, this thing has forward swept wings! Is there no respect? Well I enjoyed seeing it and hearing the story. Thanks to Lee for sharing it with us and I hope I get to see it fly some time. Thanks, Lee, show us more. And to everyone else, bring in those planes!

Charles three years + effort on the 83 Spitfire is rapidly reaching fruition with it's colors and final clear coat on, and is about ready for its maiden voyage. The camo job came out great. This clear coat stuff is a marvelous elixir. There were some problems with the camo over-paint and it was not a given that the overall paint job would be successful without considerable touch-up. The clear coat is Perfect Paint Dead Flat Clear and has totally eliminated differences in surface texture of the colors. The plan is to take it to the Sharks annual big bird fly-in the weekend of June 25/26 in Bossier City Louisiana. We have been to this one in several previous years. That will also give us a change to see the Vulcan. The Sharks have moved up this year from their (nice) field off Airline to the old Shreveport Municipal Airport in the bend of Red River. The event is sanctioned and they probably feel that they need the extra space.

Did anyone out there happen to see the article in AOPA Pilot about flight testing the Free Piston Engine? This engine was invented in the late 40's or early 50's. It was type certified by the FAA in the late 70's or early 80's and has never been put into general service. The patents and type certification were purchased by someone and the 190hp version is being flight tested on several high performance aircraft. The engine is very light, has a smaller cross section than the equivalent turbo prop engine and has better torque at low RPM (than either piston or turbine). The fuel consumption rate is slightly lower than the equivalent piston engine but in other respects it offers significant advantages. We are running out of engines for light aircraft and the technology is being lost. This engine has half the parts-count, requires less of high technology in materials and machining and is expected to require less maintenance. The pistons move axially and have combustion chambers at both ends. It has no crank shaft in

the usual sense.

I remember when this thing was first discussed in Science and Mechanics or somewhere and it was touted as the eventual replacement for the piston engine. As we know now the list of replacements for the piston engine is as long as Detroit's longest assembly line. Most recently there was the MCC, or Migrating Combustion Chamber engine. What happened to that one? Well, as was the case of the MCC engine there was a miniature version of the Free Piston Engine flown on a model aircraft in the 60's(?). It was also to invade the model aircraft field and would be ideal for its small size and light weight. Also, its low RPM torque curve would be helpful. If anyone out there remembers anything about either one of these engines I would be interested in further information.

A somber update to the interesting presentation that we received from Fred Maupin on the Tora Tora Tora aircraft. That fire at the Montgomery County Airport in Conroe wiped out most of the Tora wing of the Confederate Air Force. One of the AT-6/Zeros that was lost was the one that Fred had planned to photograph for the book. As it happened he was there two days before the fire to investigate an accident and had some left over film after taking accident photos. He used it up shooting all the planes in that group. Charles and I had a meeting with Fred about two weeks after the fire and we got a set of the last photos of those planes. One of the planes was a rebuilt AT-6 that had never been in the air. The subject of our meeting was the replica Hurricanes that he had mentioned during his presentation. We are hoping to have an opportunity to produce some highly detailed drawings from info these people have collected, perhaps in 1:1 scale!

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members that have tried these products and so far all the comments have been positive. Might be worth a try on your next plane instead of some of the "classics".

In-work - My progress on the Ace 4-120 Bipe has been to open the box and lay out the rolled plans to "uncurl". This is a "big bird" and is going to tax my available building area. What I really need to do is add a home hobby shop to my garage. Sounds like another project for the list.

Entertainment - It looks like the July meeting presentation will be Ed Copeland and Pat Barnshausen sharing their knowledge and experiences on the Vulcan Bomber project that they are currently working on. Also, we'll get a look at Charles Copelands' completed scale Spitfire. This should be a beauty!

For Sale

Great Planes Super Sportster 90/120 Kit New still in the box \$95

Royal-Air 40L ARF \$80

Bel-Air 40 Bipe \$65

R. Centmar 488-5489(H) 476-2323

The R/C Flyer

412 W. Padadena Blvd.
Deer Park, Texas 77536
(713) 479-1945



RESHA J. HILL
2305 RAMADA
HOUSTON, TX 77062

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Fuel for Sale

Jim Brock 334-1715
John Campo 488-7748
Charles Copeland 532-1570
Tas Crowson 474-9531
Don Fisher 474-4942(H) 483-2157(W)
Wayne Green 484-3151
Don White 488-1024

Instructors

John Campo 488-7748
Charles Copeland 326-2360
Paul Ellis 480-3839(H) 488-9878(W)
Don Fisher 474-4942(H) 483-2157(W)
Mike Goza (Heli and Airplane)
554-4016(H) 483-4696(W)
Wayne Green (Heli) 484-3151
Jerry Hajek 486-4722(H) 246-4312(W)
David Hoffman 476-5206(H) 479-1945(W)
David Tadlock (Glider) 481-5227