Tailspinners

April 2015

AMA Charter 695
AMA Gold Leader Club

Volume 60 | Mile Hi R/C Flying Club | Issue 4

Next Club Meeting April 29th
7PM
At the Firehouse
2291 S. Joliet St. Aurora
(On Iliff Ave - East of Havana)

Next Board Meeting April 8th
6 PM
All club members are invited
At the Village Inn - Iliff and Chambers

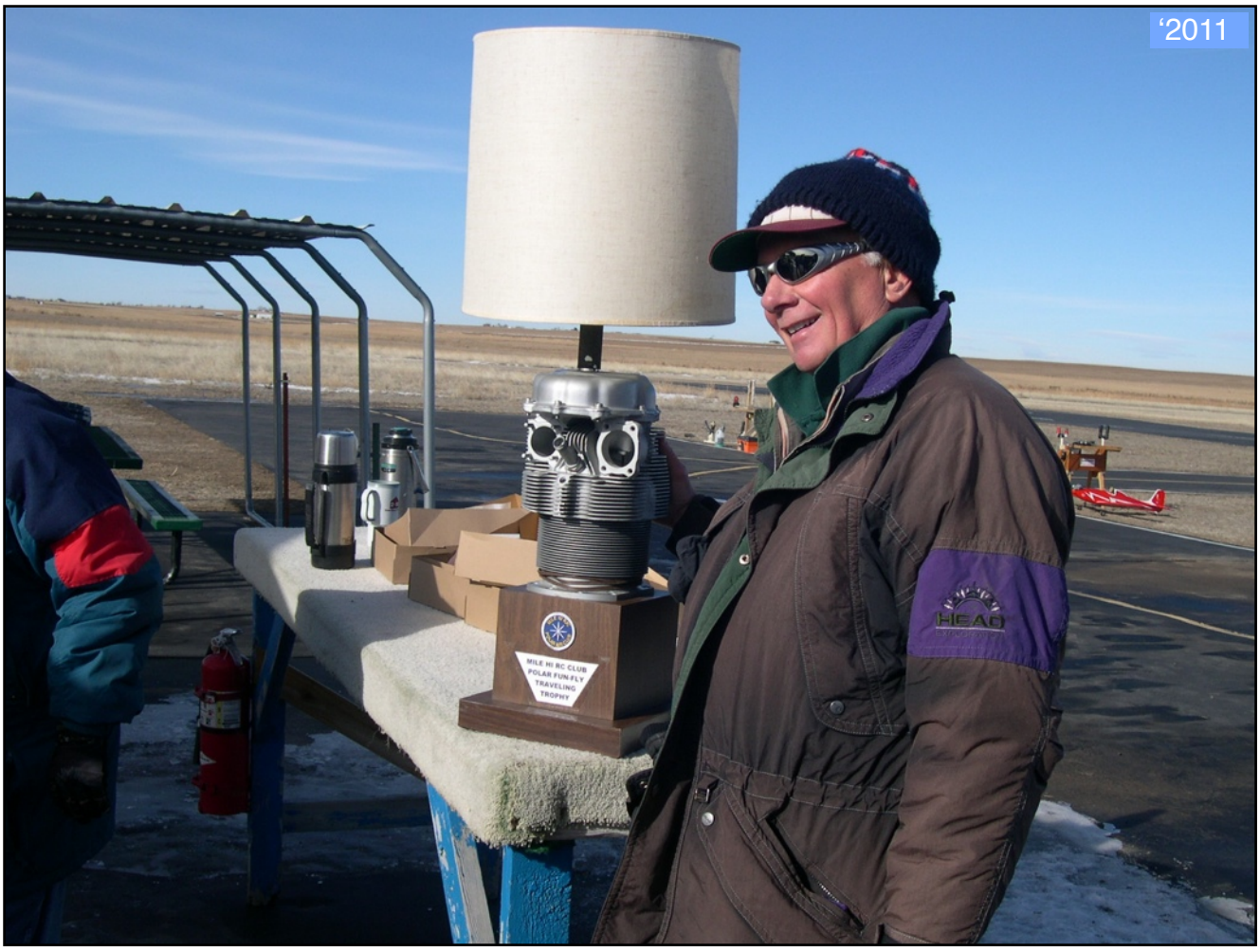
Wednesday = Free Slice of Pie

Hello Roy, We're Glad You Are Doing Better!

From All of Your Fellow Club Members

Above - L-R Keith Bennett and Randy Mill

Below - Robert Plant



I've built two and this was my 1st Super Skybolt. Pictured is Bob and I around 1992. Below - Monokote over Monokote. Masking and painting the wheel pants seemed to be more of a job than the covering. OS 1.20 with a pump, (just had to have one) for power was over kill but this plane truly fit the old saying that it "Flies Like It Is On Rails". Surprisingly, the landings were not a chore. You might already know this, but Great Planes came out with an ARF version of the Skybolt and that is a good thing! Walt

March 20, 2015

Joe Marquez enjoying a fantastic 1st day of spring out at the field

Ric is instructing one of my grandsons, Stefan. This was Stefan's 1st time flying RC. A perfect day at 71 degrees/ 0-5 mph from the west. Stefan is testing the waters to see if RC flying is something that he would enjoy. Walt

‘2015

L- Say hello to Curt Pase. Curt is visiting the flying field and is considering joining the club. I had the pleasure of talking with Curt just last week and I hope he stays with us.
R- Marvin making adjustments to beautiful flying Extra 300

Ric instructing Dave Witt. Dave made two landings on his own this last day of March. Congratulation David!

‘2015

Gary gave me a heads up saying that his Bonanza flew very well with the re-installed Saito 150

I saw this nicely covered airplane on line. Isn't this a great looking "Sunday" flyer

SIGPLANES

From the Previous page - The great covering job on the Senior Kadet Sport began when the building of the plane was first started. Right from the get go you have to try and make all of your joints match as closely as possible if you want to have a good looking covering job. Be neat and careful when gluing joints and remember to wipe away any excess glue.

Transparent coverings tend to magnify poor fitting joints and surface irregularities. Since most of the covering on this beautiful Senior Kadet is transparent, everybody and their dog can see the good, the bad and the ugly when you use this see-through stuff! Use sanding blocks of different grades to keep the surfaces true and smooth while building.

The covering used on this plane is transparent Monokote Orange and Blue and finished off with opaque White scallops and trim. This plane was first covered with Orange. At the major white areas, there is about 1/2 inch overlap of the white over the orange.

Here is a good tip - The scallops; they were first drawn onto thin card board and then cut out. The card board templates were then put over the white Monokote and then they were cut out with a "sharp" exacto knife.

The edges of the fuselage were just strips of monokote applied over the orange base. Wherever there was a large overlap of two or more layers of Monokote, it is a good idea to perforate the wood surface with a pin to prevent air bubbles from being trapped between the layers. SuperMonokote was used exclusively on the model. The information provided here is from the unknown builder of this great looking plane.

http://www.monokote.com/transparent.html

Hello all,

This Tailspinners contains what I'd say are two "special" articles and a number of photos related to the articles.

They are from Jim Limbaugh and Ray Phillips. I had the pleasure of meeting Jim Limbaugh at this years Modeling Expo. Jim brought two beautiful airplanes for display at this event and I really enjoyed checking them out as well as talking with Jim. I asked him if sometime in the future he would send me some construction photos and a little information about his beautiful planes. I realize that not all of the club members have an interest and or the time for building RC airplanes but never the less I think you will enjoy Jim's article and the attached photos of his P-38.

The second article is from Ray Phillips. You are about to be treated to a thorough and well written review of his new P-51 Mustang from FMS. While talking with Ray a few weeks ago, he told me that he was anxiously awaiting for the plane to arrive. I asked him if he wouldn't mind sending me a few pictures and a some information about the new airplane so that I could put it in our club newsletter. You won't find a better review of an airplane build anywhere. As I read his article starting on page 13, I found the following; I felt like I was sitting at his building table looking over his shoulder during the construction process. Ray is looking forward to doing some formation flying with a few members. Jim Hebert has a similar P-51 and he too is looking forward to formation flying as well.

Thank you Jim and Ray! Walt

MY P-38 by James Limbaugh

Ever since I can remember, I have always worked with my hands and been interested in anything mechanical. This also includes my love for airplanes. When I was about 10 years old my Great uncle, Thomas Carney, introduced me to the world of balsa models. My first airplane was a Sig Customaire, stick and tissue, and my second was a Sterling pt-17, which I still have. I built many models, including a 40 size Sig Piper Cub, till I was about 16 years old .Then it was motorcycles, girls, and High School.

Forward to 1990, I bought my first RC plane, a Sig Kadet Mark II and Conquest radio, and tried my hand at learning to fly, didn't go so well, but kept the remnants as a trophy. Some time later, I found a Royal P-38 kit at a garage sale for $15.00 that had been started, so I bought it. It sat in my barn for about 8 years till I built my house in 2003, then it started," Airplane Mania". I dug the 38 out of the barn and searched for instructions on how put it together. A gentleman named "Twinman" sent me some basic instructions on how to put it together. A little confusing, I searched for local help, where I met Frank Scharnell of Air Scharnell, I joined Mile High RC club, and Frank taught me to fly RC with my Re-built Sig Kadet.

The P-38 was in bad shape by the time I got around to it. The previous owner had started to put the booms together; they had warped beyond any easy fix, so I started all over. The bulkheads were scanned into the computer and printed out on T-Shirt transfer and ironed on to the new ply. I was able to salvage the boom sides and together with the new bulkheads the process began. The wing was started next, cutting all "New" ribs and spars. The original bellcrank linkage was replaced with Sullivan control rods and then sheeted. With the Booms and Wing in their rough state, I had to figure out how to "Jig" the booms up, so I used some 6061 flat bar I had on hand to use as spreaders to keep the dimensions correct. After measuring many, many times I was able to drill the wing for the wing bolts. Once this was competed, I was able to build the horizontal stab. I incorporated aluminum tubes in the stab so the booms could be separated into two pieces. I then embedded the Sullivan rods for the elevator and a hand made bellcrank. This was later redesigned using a Hitec servo arm and ball bearing with the push rod exiting the underside for the elevator.

continued next page

The rudders were next, also embedding the controls in the Stab surface. To further aide in this endeavor, I built a cradle that would support the whole assembly while I sheeted the booms and did general assembly. The elevator was installed and lightened considerably, but had an issue with servo centering consistently. Part of the problem was my 1st bellcrank had too much slop. In comes the second design using Hitec servo arm and ball bearing, Better. Centering was better but not perfect. Since the Full scale 38 had a Mass Balancer, I decided to try that. I found some fishing weights that were close and made a functioning Mass Balancer that cured my centering issue.

The booms were sheeted using 1/8" soft balsa, wetted and let dry, on secured over each area. I used thicker wood so I would have enough to blend every thing together. Next the radiator covers and the superchargers. Carving these out took days and didn't give me the results I wanted, so they were replaced with vacuum formed ones I found On-line. Once satisfied with that, it was time to figure where to put my switches. Trying to keep as aesthetic as possible I decided to put them where the machine guns are. The Nose was formed using several blocks and then hollowed out. I then drilled the nose piece for the guns and cannon. A shelve was made to support three switches, one main and two glow, and a block to secure to nose in place. The screw retaining nose is accessed through the cannon with an Allen wrench. The machine guns were made using several different size plastic tubes and connected to the switches using a modified T-pin. The charge jack was placed where the shell ejection slots would be on the Full Scale. Earnst charge jacks were sandwiched between layers of wood and glued inside the lower nose section. Two switches drive the glow plug power to each engine using two 3000mah batteries in parallel. Main power drives 2700mah to the receiver for the 12 servos. Once this was done, a cockpit kit was installed and a modified battery power indicator was places in the radio section of the cockpit to monitor receiver battery levels.

The airplane was then sanded down completely and sealed with Dope, re-sanded with 220 grit paper and then covered with Aluminum Super Monokote. Flat black was used on the anti-glare areas and flat black fuel proof dope airbrushed around the super chargers. The post D-Day invasion stripes are Monokote on the wings and airbrushed on the booms with stars and bars decals in the appropriate locations. The "Cherry Bomb" wet slide transfer was put on the Nose. Gear doors were installed to finish off the scale, since my 38 has fixed gear.

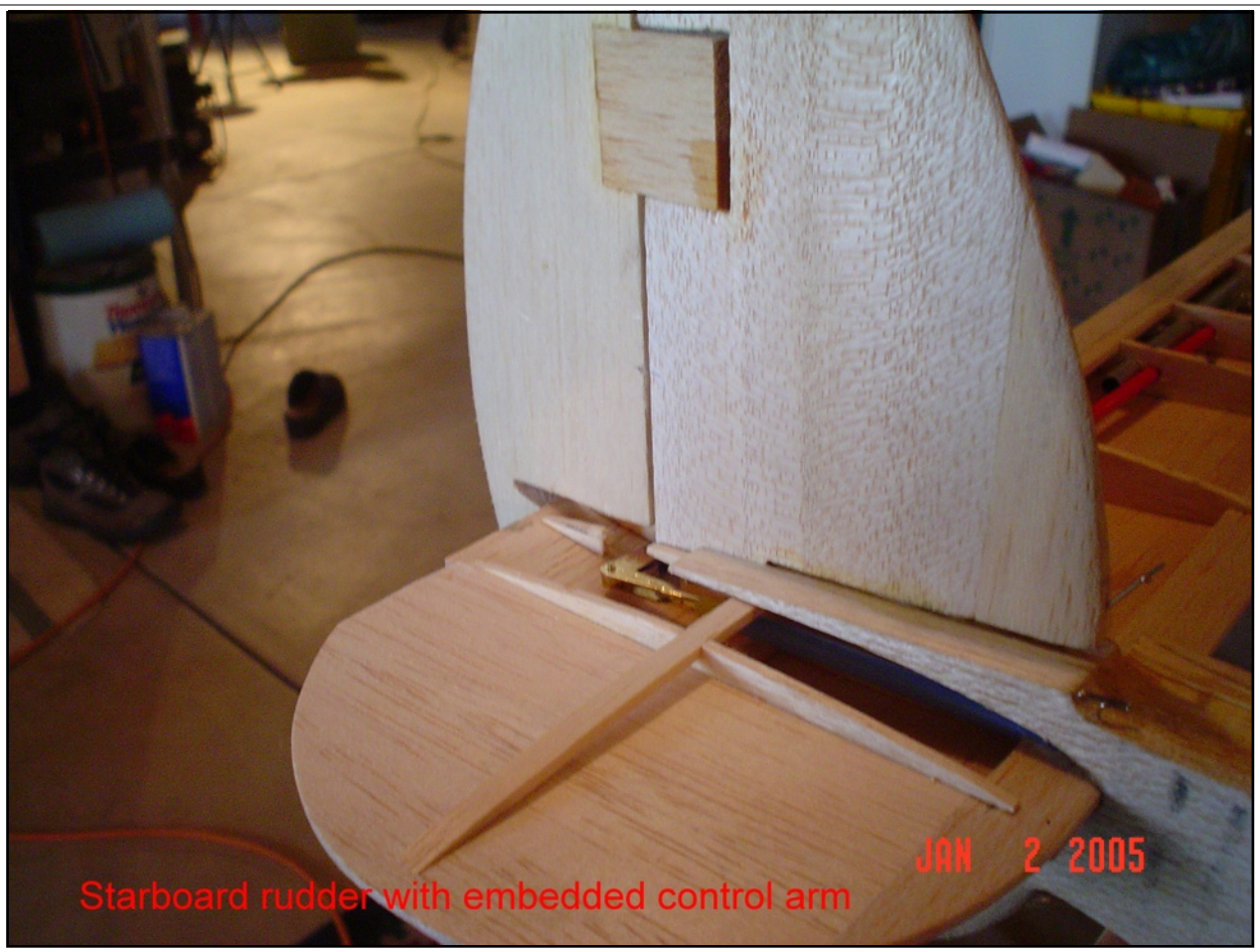
The engines I chose are Magnum .52's for there reliability and power, Sullivan fuel tanks and Hitec, Futaba servos and Hitec receiver. The ailerons employ (2) HS225MG; rudders, (2) HS85MG; throttle, (2) HS56HB;flaps, (4) HS85MG;elevator (1) S 3151 Digital and the Nose gear (1) S 5101 slow speed. Both engines were methodically broke-in and care was employed to get the sync within 100rpm of each other. The thrust from both engines is about 12lbs 6 oz with 12/6 props at 10,500 rpm and 10% nitro. Finished weight of my P-38 is 14lb 4oz. that's about 70 oz per square foot of wing area.

This was a long build, about 2 ½ years, start to finish. I had built about a half dozen other planes while this process was taking place, and learning to fly other wing designs of all configurations, so hopefully I will be able to handle it. To date I have built about 18 planes, some scratch, some kit. All have flown well, and this one has yet to fly. I Hope I can rely on the Club's support to get me past this hurdle. It has been my Pleasure to tell you about a part of Me- James.

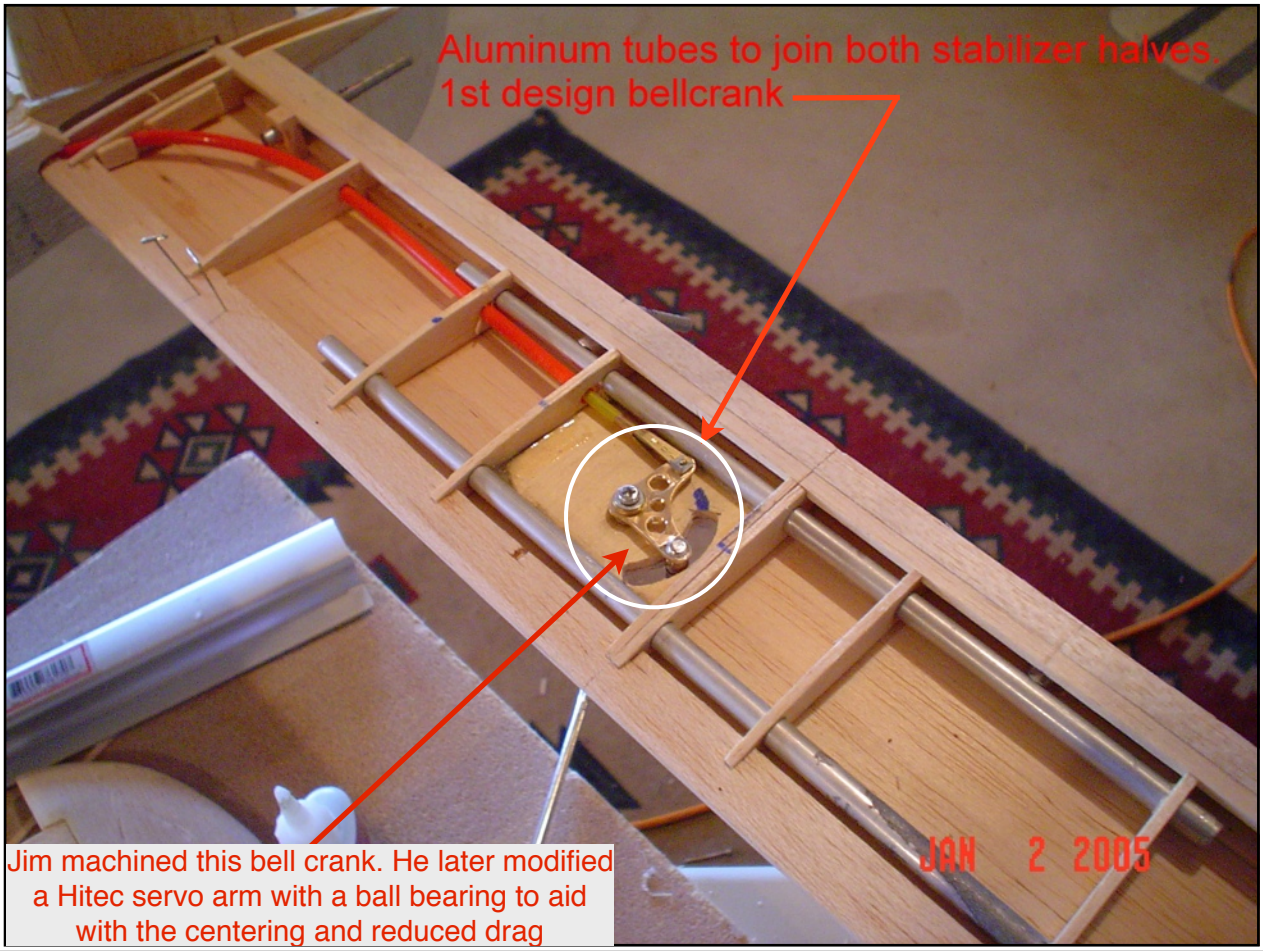

Jim


JAN 2 2005
Starting to look like a plane!


26
Well thats 2 1/2 years,Finally Done!
FEB 19 2007
14.4 lbs,12.6 lbs of thrust,12 servos,(2).52 Magnums,70oz psf WL



Starboard rudder with embedded control arm



Jim machined this bell crank. He later modified a Hitec servo arm with a ball bearing to aid with the centering and reduced drag


Bare booms clamped with bars.Alignment double checked many times.12oz tank and throttle servo
JAN 2 2005


View of the elevator push rod
JAN 2 2005


Three switches installed.Two outboard control Glow power,
Center controls main reciever power


Cannon layout.Allen bolt can be seen at the
bottom center hole


Three solid chunks of balsa used to make
the nose piece,plus lots of carving

Ray's P-51

Hey Walt,

Here are some random thoughts on the P-51 build.

- FMS is a Veteran-owned business. The model showed up shortly after being ordered, and in excellent condition. It was packaged very well. Even the "extras" I ordered for it, were included in the box.

- While the model is sold as an ARF/PNP, everything is easily removed, so it's more of a kit, which can be easily modified, upgraded, etc.

- Good instructions.

- Concern: flight controls are attached via molded foam (typical of foam models). I will replace at first sign of "trouble" with Robart 1/16" hinges, and 2-56 rod.

- Swapped out original motor with FMS 4250-580kV motor.

- Battery tray slides out of fuselage, and can be removed, to install/remove battery. Excellent design.

- Scoop has actual opening for airflow, and vents in forward cowling, along with exit-holes in the lower aft fuselage, help to keep the ESC cool.

- Metal-geared servos mounted in actual servo trays. Not hot glued!

- FMS uses "T-connectors," which are a knockoff of Deans. Works with Deans.

- 70-amp ESC is well built.

- Put heat shrink around the bullet connectors between the ESC and motor, to prevent a loose connection. Make sure motor shaft turns counterclockwise first.

- To bind the transmitter to the receiver, make sure to run your transmitter's motor-trim to the lowest position first. Initialize the ESC by turning radio on, then move throttle to full (wide open throttle). Plug in battery and listen for "double "beeps." Within four seconds, move throttle to the idle position, and listen for "double beeps." You will then hear a cell-count in "beeps." Finally, you will hear "ready beeps." So, you have to bind first, then initialize.

- Four-bladed props, individually mounted, with use of lock nuts. Very safe design.

- Control horns are good quality. Not flimsy.

- "Mystery glue" is supplied to glue machine guns, antenna, and exhaust stacks. Works good.

- Wing has one fiberglass rod, and one aluminum rod, for strength.

- Self taping screws are used to attach various flight control surfaces to the empennage. I found it helped to "self tap" the plastic inserts/posts first, then actually attach the flight control surface.

- 3M "Safe Walk" cut to fit along wing/fuselage area to add simulated walk path on both wings.

- Plastic “safety clips” used on all servo wire connectors. I use “purple” for all electrics. On “gassers,” I use “orange” for all connectors tied-in to the receiver, and “ blue” safety clips for all connectors tied into the ignition/throttle. Helps when troubleshooting/tracing wires.

- Battery came with two velcro straps mounted laterally, and I added one more longitudinally.

- Two cautions: there is a self tapping screw that attaches the horizontal stabilizer to the empennage. It can only be mounted when the tailwheel is extended. This could be easy to miss! Also, my Spectrum DX8 doesn’t have a throttle-hold/cut for electrics. Make sure propellers are removed prior to completing any type of “programing” of your transmitter, to prevent an accidental throttle-gimbal-bump. Many newer transmitters now have throttle-hold/cut capability, specifically for electrics.

- Wing is easily detachable from fuselage for transportation, etc., due to “single wire connector." Only two servo wires need to be fed through the hole in the fuselage, to connect to the “single wire connector.”

- Landing gear has actual struts, and gear door’s have wires to help door flex during movement.

- Overall, I am very pleased with the P-51 foamy.

There you go Walt.

Thanks,

Ray

FMS 1450mm (57") P-51D Mustang V8 Marie Receiver Ready (PNP)

This latest version of the FMS P51D Mustang has the most scale detail and most refined features of nearly any EPO foam RC plane on the market. Since this is the 8th version of the FMS P-51D, the attention to detail and quality is simply amazing. The control surfaces use 17g hybrid metal gear servos and the servo-less e-retracts feature metal trunnions for extra durability. The landing gear struts on the FMS P51D are all metal and shock absorbing. The large tires and shock absorbing struts allow for easy flight from a grass field and also help to take the force out of an occasional hard landing. The flaps on the FMS P51 feature an extra slow moving servo for scale detail. The inner and outer landing gear doors open and close using a sequencer to allow for the most detailed landing gear ever seen on an FMS P-51 Mustang. In addition to all the features, the FMS P-51 is simply an amazing flyer. The latest version features an upgraded motor for more power to pull scale acrobatic maneuvers. This is simply one of the best foam planes around.

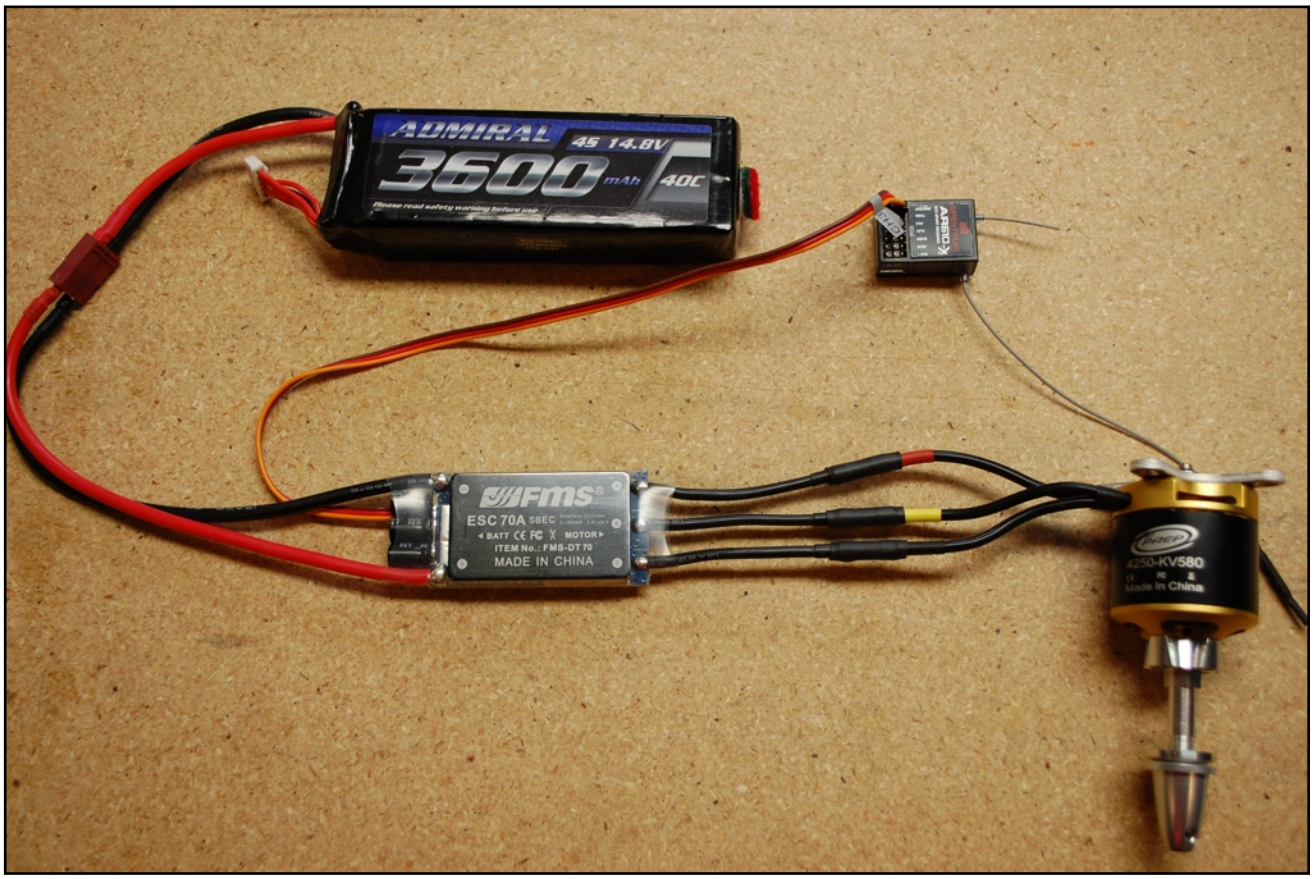
Newly updated features:

- Upgraded, shock absorbing struts with new 4mm diameter lower section
- New Removable battery tray (same as P-51B)
- New upgraded FMS sequencer which closes the gear doors after gear is down
- Newly upgraded tail feathers with hard points for glue-less assembly
- New 17g hybrid metal gear servos
- New open air intake (same as P-51B)
- New gold PAEP motor
- New 70A ESC
- New single wire connector for easy wing removal (same as P-51B)
- New FMS retracts with 6 second open/close for more scale operation

Features:

- Upgraded, shock absorbing struts
- Scale details like sliding canopy, functional air scoop, drop tanks (removable) and sequenced landing gear doors
- Realistic 14" Four Blade Propeller
- Scale pilot figure
- Reinforced control surfaces (ailerons, elevator, and rudder)
- High visibility LED navigation lights
- Full functioning drop-hinge flaps for quick takeoffs and smooth landings
- Durable EPO Foam


Q
413298
5Q
C
"Marie"
CRAFTSMAN


ADMIRAL
4S 14.8V
3600 mAh
40C
FMS
ESC 70A SBEC
ITEM No.: FMS-DT70
MADE IN CHINA
4250-KV580
Made in China


Q
413298
5Q
Pilot


FMS
P-51D-V8 1450MM
FMS EXCELLENCE IN THE SKIES
New
· ESC 70A with SA SBEC
· Fly metal gear servo
· Built-on foil structure
· Sliding battery tray
· Scale landing gear, door sequencing
· More robust landing gear structure
Like Us On
Visit Us At
DUCHESS
ARLENE
PNP


HAND HOLD


PM3*60
3*45PM
2.6×20PA
2.6*25PA
Aileron
2.6×10PA
3.0*18PM
Rudder
Elevator
Replacement


"Marie"


PAEP
4250-KV540
Made In China
PAEP
4250-KV580
Made In China


"Gone Flying" - Ray

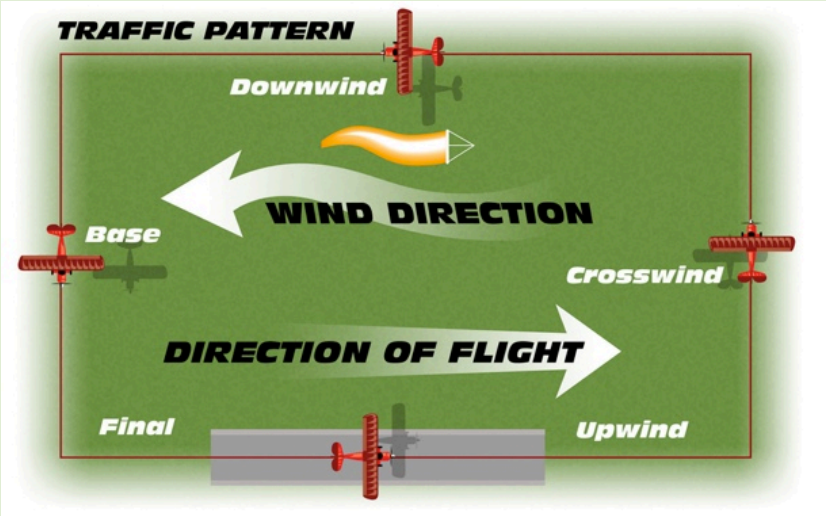
I had damaged this DLE 20 a few years ago and then let it sit in a box thinking that if it sat in the box long enough, it would miraculously fix itself. Jim diagnosed and then replaced the bad bearings that it had and now the motor runs better than it ever did. Thank you Jim. Walt

Jim

http://www.flyrc.com/flying-the-crosswind-landing-2/

http://www.flyrc.com/the-art-of-landing/

THE ART OF LANDING



https://youtu.be/ho-vk4brZFo

Some nice HD video sent by Greg Bergin. Greg just installed a GoPro on his Quad

This RC plane is one of the coolest remote control planes out there -- it gives the controller a first person view through a live-feed video on the ground. The realistic and fully animated cockpit is to scale. An old 80's GI Joe is used for the hands, jacket, pants and 5&9 gram servos for the **pilot's head camera** were used.

http://www.chonday.com/Videos/rcpapfpov3

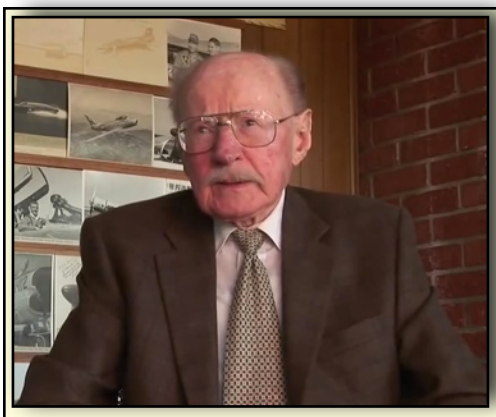
An Excellent Video of Indoor Scale Like Flying Of An Airbus A310

A "Helium" filled fuselage reduces weight making the plane able to fly at scale speeds

The plane weighs = 10 ounces
It has a 78.7 inches wing span

http://youtu.be/xDtqUg8R6Jw

From Bob Bergin



If you are faced with a forced landing, fly the thing as far into the crash as possible

Bob Hover - renowned aerobatic test pilot

https://www.youtube.com/watch?v=g7R7jZmliGc

https://www.youtube.com/watch?v=B09nWQHdRiU

A Change In Receiving The Tailspinners

Starting with this newsletter, there is a new distribution method in getting the club newsletter to you. Instead of placing each monthly newsletter as an "attachment" to an email from me, I will send an email to you but it will be just to let you know that the newsletter is now posted on the club web site and available for you to view.

The email from me will have the www.Milehirc.com link for you to click on for easy access to the club web site.

Once you click on the web site link, you will see the newsletter on the cover page. There is no need to download the newsletter but the option of doing so will be there if you chose to.

Walt

Coming in next months Tailspinners

There will be a few additional pictures of Jim's P-38 and Ray's P-51, also an article about "Sport Parachuting" .... interested, send me some info/pictures of your jumping experiences. Also, photos and information about the "Gremlin" airplanes, a look at one re-covering job of an RC airplane, new for me ... installing my repaired DLE 20 into my Stearman and as always, pictures from the field. If you have a topic, pictures or an article that you would like to add to the next newsletter, just send it and or your idea my way and I'll take it from there.

OUCH/REMINDER - Watch out for the top fence wire at the east end of the main runway. Luckily, an easy repair ahead for me. In an attempt to hit the numbers, I forgot about said wire and using some exact precession flying, (EPF) yes, EPF, I "precisely" removed my main and tail wheel gear by barely contacting the wire at approach speed. The prop and cowl didn't sustain any damage and both the main and tail wheel gear are fine. It was my 3rd flight of the day with my Revolver and it has a brand new Saito 100 in it. The airplane/motor combination is a "10". Having done very little flying in the past three years, now I can't wait to get the Revolver back in the air again. I'll put a couple of pictures of it, the Good, the Bad and the Ugly in next months newsletter. Have a great month guys! Walt

Walt - MHRCC Newsletter Editor
waltstroessner@msn.com