



**AMA Charter 695
AMA Gold Leader Club**

VOLUME 60

MILE HI R/C FLYING CLUB

ISSUE 1

Pages - 2, 3 and 4 are Fokker D.VII related articles and videos plus a video of a B-29 - FIFI

Page - 5 Pat Cobain's Chipmunk

Page 6 - The Denver Post visited our flying field in 1994

Page 7 & 8 - Two Member Pictures

Pages 9, 10 & 11 are sail plane related articles and videos

Pages 12 & 13 is IMAC information from Mike Hurley, Aresti information, Basic & Sportsman videos & full scale formation flying

Page 14 - A "How To - Safety Tip"

Page 15 - A Flight Trimming Chart

Pages 16, 17 & 18 is "Using The Rudder" articles

Page 19 - Expo and Jefco Auction Information

Page 20 - Flying Tip / observation, an older field maintenance photo and information on what is coming in next months Tailspinners

**Next Club Meeting
January 14
7PM**

**At the Firehouse
2291 S. Joliet St. Aurora
(On Iliff Ave - East of Havana)**

**Join us at the Village Inn at Iliff
and Chambers after the meeting**

Free slice of pie night



Alex Pluckrose, who was a friend to so many of us in the club, is pictured here at his home in Conifer. January 1st marked (I think) 20 years since his death

Hello all, holy moly the holidays and the first club event of 2015, our Polar Fly, has come and gone! Even my grand kids tell me how fast time is going by. With the cold and the snow on us right now, I am enjoying some time in the workshop. I am already thinking about spring and really looking forward to the upcoming flying season. I have 10 planes ready to fly, plus a Piper Arrow under construction on the workbench, an AT-6 Texan and an Ultra Sport 60 both NIB on the shelf. I am enjoying doing our club newsletter each month and more importantly, I really hope that you enjoy receiving it. Thanks to a lot of hard work, our club web site is really coming together nicely and soon we will be able to interact with it. Thank you web team! Lastly, keep in mind that the "Modeling Expo" will be held at the Wings Over The Rockies Museum next month, February 21st. See page 18 for more information on that event.

Walt
MHRCC Newsletter Editor
waltstroessner@msn.com



MIKAEL CARLSON

AS YOUR TIME ALLOWS, CHECK OUT THE VIDEO BELOW AND ENJOY WATCHING AND LISTENING TO SOME OF THE SMOOTHEST SOUNDS AND SOME OF THE SMOOTHEST FLYING THAT YOU WILL EVER HEAR AND SEE. IT INCLUDES LOOPS, ROLLS, STALL TURNS, SHOW PASSES AND TOPPED OFF WITH A PERFECT LANDING.

PERFORMED BY MIKAEL CARLSON IN HIS "REPRODUCED" FOKKER D. VII

(**Be sure to turn up the sound and go full screen**)

This video is From Peter Lundberg - 15min

[HTTP://WWW.YOUTUBE.COM/WATCH?V=GZZ82XIWP7W](http://www.youtube.com/watch?v=GZZ82XIWP7W)

RC VERSION 1/3 SCALE

Check out a beautiful 1/3 Scale Fokker D. VII

<http://www.youtube.com/watch?v=ymdW44xIYxs>

See Steve Forrest - a maiden flight - Balsa USA Fokker D. VII

RC VERSION 1/4 SCALE

[HTTP://WWW.YOUTUBE.COM/WATCH?V=BTFvw6JzZNk](http://www.youtube.com/watch?v=BTFvw6JzZNk)

Turn up the sound to hear the Great sounding Fujii 34 4-stroke gas

WWI ERA PLANES SUCH AS THE FOKKER D. VII

The brainchild of Reinhold Platz, the designer of the famed Fokker Dr.I, the Fokker D.VII traced its roots back an experimental set of aircraft known as the V-series. Electing to use a thick cantilever wing to increase lift, Platz created an aircraft that was more stable than many of its predecessors. Initially dubbed the V.11, the D.VII first took flight in January 1918, powered by a 180-hp Mercedes D.IIIa engine. With the loss of German air superiority in late 1917, the Luftstreitkräfte called for new fighter designs to be tested the following spring.

UNDER-CAMBERED WING

With most airfoils, a vertical cross section of the wing, have a curved surface. There is always a curved top surface. Sometimes the bottom surface has the same curve as does the top surface, but as a mirror image (a symmetrical airfoil). Sometimes the bottom is just a straight line (a flat bottom airfoil). Sometimes, especially on gliders and most WW I aircraft, the bottom curve matches the top curve with just some space in between. This is an under-cambered airfoil. It produces the most lift but also the most drag.

Under-Cambered



Length: 22 ft. 9 in.

- **Wingspan:** 29 ft. 3 in.
- **Height:** 9 ft. 2 in.
- **Wing Area:** 217.4 sq. ft.
- **Empty Weight:** 1,540 lbs.
- **Loaded Weight:** 1,874 lbs.
- **Crew:** 1

Performance:

Power Plant: 1 × Mercedes D.IIIa, 180hp

- **Max Speed:** 116 mph
- **Rate of climb:** 787 feet per minute
- **Ceiling:** 19,600 ft.

Armament:

ADDITIONAL FULL SCALE FOKKER INFORMATION CAN BE FOUND HERE

<http://militaryhistory.about.com/od/worldwariaircraft/p/fokkerdvii.htm>

FULL SCALE This web site is a one minute video of a **Mercedes D.IIIa engine** warming up.

TURN UP THE SOUND AND PUT ON YOUR GOGGLES!

<http://www.youtube.com/watch?v=-CrQG7NFSMg>

After seeing his flying video, I thought how nice it would be to sit down and talk with Mikael. I was thrilled when he responded to an email that I sent to him. He corrected me by telling me that the Fokker D. VII in his video is not a restored airplane as I had thought but a 100% reproduction build by him and his crew. Amazing! If your time allows, check out some of Mikael's other airplanes on his web site below. Walt

<http://www.aerodrome.se/>

Mikael was born in 1959 and since his childhood he has been interested in aviation. At an early age he was a very skillful model airplane builder which eventually resulted in gold and silver medals at two consecutive World Championships for **R/C scale models**. A dozen of the static display models at the Swedish Air Force Museum are built by Mikael Carlson confirming his craftsmanship. Mikael currently works as a Captain of a Boeing 737.



A modern reproduction of a Fokker D. VII

Arguably the best German fighter of WW I was the Fokker D.VII. A powerful engine [180Hp], a high ceiling [19,600 feet - remember, open cockpit and no oxygen!] and a couple of machine guns. This was the only German aircraft type that the allies required Germany to hand over as part of the armistice agreement of 1918.

B-29 "FIFI" – 1ST FLIGHT WITH NEW ENGINES

<http://vimeo.com/17388627>

JUST "PLANE" FUN

PAT COBAIN'S CHIPMUNK PROJECT



Pat and I were shooting the breeze and I asked him if he wouldn't mind sending me a few pictures of his latest project. Looks like fun Pat. Thanks

Walt
waltstroessner@msn.com



Hi Walt,

I've decided that my next RC project will be the Chipmunk. I bought the ARF model way back when I lived in Bremerton Washington, in the mid to late 1980's. I ran into building problems back then and put the model on hold. Since then I've learned a lot more about building and I also have a lot more tools then back then. I'm thinking that

I'll be able to get by the problem areas this time without too much trouble. I took all the pieces of the model and had to clean them up. There were some spots on the covering that I was worried about not coming off, but with a little bit of Windex and some light scrubbing it all cleaned up well.

The picture of the plane is with the pieces just temporary put together. Nothing is glued. There isn't an

engine or any radio gear installed yet. I just threw it together to get a better sense of how it's going to look and the size. I painted the pilot figure many years ago.

I plan on using a Saito 45 four cycle engine in it. I also bought the engine way back then.

Pat

A LITTLE INFORMATION ABOUT THE FULL SCALE "CHIPMUNK"

<http://www.sbap.be/aircraft/dhc1/dhc1.htm>

BIG RED IN THE WILD BLUE YONDER

MAY 1994



The Denver Post / Duane E. Howell

Justin Meyer, 14, of Aurora and his father, Joel, fire red Thunderbird aircraft with an electrical starter as other fliers of radio-controlled model airplanes look on at a field in unincorporated Arap-

ahoe County — only 14 miles from Denver International Airport. One of Justin's first airplanes nose-dived to destruction shortly after takeoff, but he came back to fly again. **STORY, 2B**

Radio-controlled planes hum 'n' buzz near DIA

By Patrick O'Driscoll

Denver Post Staff Writer

As a 737 jetliner banked into its final approach to Denver International Airport, a red Thunderbird stunt plane screamed across the same patch of sky.

The acrobatic aircraft looped and rolled ever higher, oblivious to the airliner. From the ground, a mid-air collision looked horrifyingly possible. More shock: A bystander said the guy at the controls was 14 years old.

But then the jetliner zoomed off, apparently well above the little T-Bird. And young stunt pilot Justin Meyer of Aurora actually had both feet firmly on the ground.

That's because he was flying a radio-controlled model airplane — don't call it a toy — one-twelfth the scale of a full-size aircraft.

Gently wiggling two joysticks on a hand-held transmitter, Meyer took the T-Bird through more buzzing, whining, 360-degree rolls and low-level passes. Then he landed it on a 500-foot, blacktopped runway in a pasture off East Quincy Avenue, 14 miles south of DIA in unincorporated Arapahoe County.

Well before Denver's new airport opened this spring, the state of Colorado almost shut down Mile Hi R/C Flying Field, home since 1981 to the radio-control club of the same name.

The state, which leases the 40-acre site to the club, feared the models would interfere with airliners using the DIA flight pattern overhead. So a Federal Aviation Administration crew surveyed the site two years ago.

The club's 95 members held their collective breath. They had sought out this remote spot — 9 miles east of Cherry Creek State Park — specifically to avoid such conflicts.

Eventually, the FAA gave them a thumbs up. Remote-control models could continue to fly beneath commercial air traffic.

On a recent afternoon, they shared the skies above Mile Hi R/C's tidy, fenced complex — bright blue benches, storage shed, field toilets and shelter. The club even has an airport wind sock, a big orange model that once flew at Stapleton Airport.

Weather permitting, clubs like Mile Hi R/C — one of more than 10 in the area, with an estimated 2,000 members — fly nearly every day of the year. Mile Hi even awards a "Polar Air Club" patch to members who fly on New Year's. Local airstrips get busy on weekends, with model warplanes, biplanes, even airliners buzzing about like giant mosquitoes.

At Mile Hi's airfield, strict rules allow up to five planes in the air at once, but only on separate frequencies so flights don't go haywire with criss-crossed "radio hits." Crashes are a costly proposition in a hobby where planes often cost \$500 or more, not including \$500 to \$1,000 for engine-transmitter packages.

A beginner can start for less — perhaps \$200 for a balsa kit, engine and transmitter. With training from club instructors and a light finger on the controls, a determined novice can "solo" in a few weeks.

The flight principles are the same — just like the real airplanes, said Mile Hi R/C club member Bob Bergin, a United Airlines ramp worker. "What do you mean, 'real'?" club president Dave Loshbaugh interrupted. "These are real."

The scale models have rudders, flaps and are identical to full-sized aircraft. Their wingspan may be only 4 or 5 feet, they may weigh just a few pounds and their engines may be pip squeaks at 1 1/2 horsepower or less. "But a propeller will take your finger off all the same," said Bergin.

Club instructor Alex Pluckrose, a 40-year veteran of the hobby, sported a nasty-looking line of fresh "prop rash" scars on his index finger one recent afternoon. "The oldest member of the club, and you'd think he'd have learned by now," kidded Bergin.

Pluckrose, 68, soon had a red, twin-engine Comet fighter — his 47th aircraft — doing strafing runs. His other 46 didn't all crash, but accidents are inevitable. "We have a saying in the club: 'You build 'em to fly 'em and you build 'em to crash 'em,'" said Bergin.

"You can never get real comfortable with it, 'cause as soon as you get cocky, you get in trouble," added club flier Walt Stroessner.



The Denver Post / Duane E. Howell

PERFECT LANDING: Walt Stroessner lands his radio-controlled plane as enthusiasts Dave Loshbaugh, Bob Bergin and Jim Newcomb, from left, watch.

Indeed, young Meyer learned the hard way with a kit plane he had just built. It taxied, took off — and nose-dived straight into the pavement. He shrugged it off and flew again.

Master craftsmen build handsome and detailed aircraft only an expert would dare fly. Last June, Pluckrose got to "pilot" fellow modeler Mark Burr's realistic B-29 — 12-foot wingspan, four engines, 49 pounds — on its maiden flight at then-unopened DIA.

Radio-control fliers actually christened the unfinished airport two Septembers ago. Arvada Associated Modelers opened 1993's Denver

International Air Show with two stunt planes, trailing colored smoke just like real aerobats.

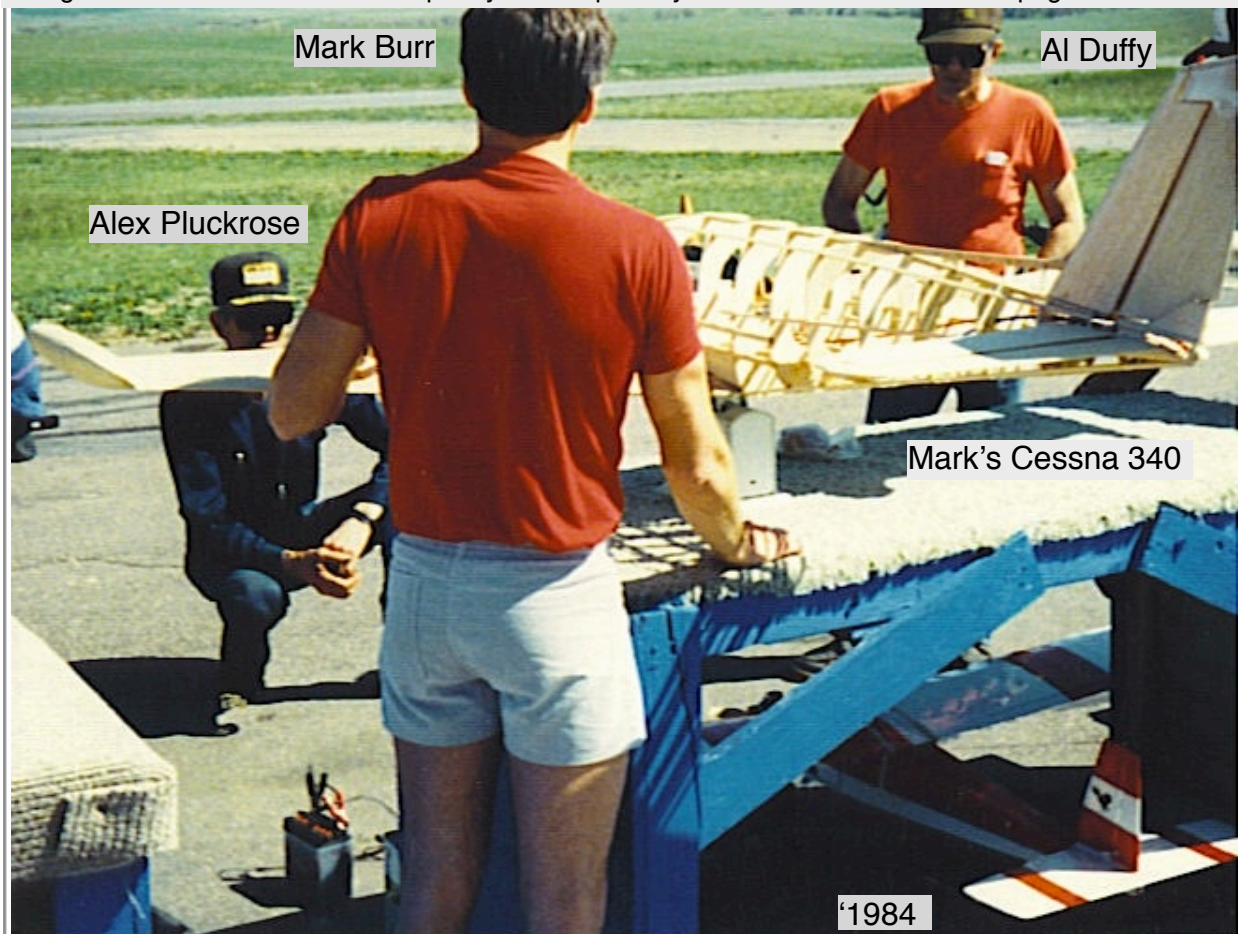
The hobby welcomes tinkerers, modelers and would-be pilots of all ages, promoting itself with shopping-mall shows and fund-raising fly-ins for charity. While a few women join in, the sport draws mostly a male, basement-workshop crowd. But what a crowd — about 3 million or more U.S. enthusiasts.

"You know you're addicted to R/C," said Loshbaugh, "when you take the wing off your largest plane and take it when you go to buy a new car — to see if it'll fit inside."



Above Foreground - Mark Burr took measurements of a full scale Cessna 340, he then drew up the plans for an RC version of the plane and then scratch built it, pictured above.

Background - Church Blackwell's superbly built Super Skybolt - Picture of Church on page 8



Mark Burr's First RC Airplane Build - He scratch built this Cessna 340



L-R Church Blackwell and Hans Pennick



My Method of Getting Rid Of Some Weight

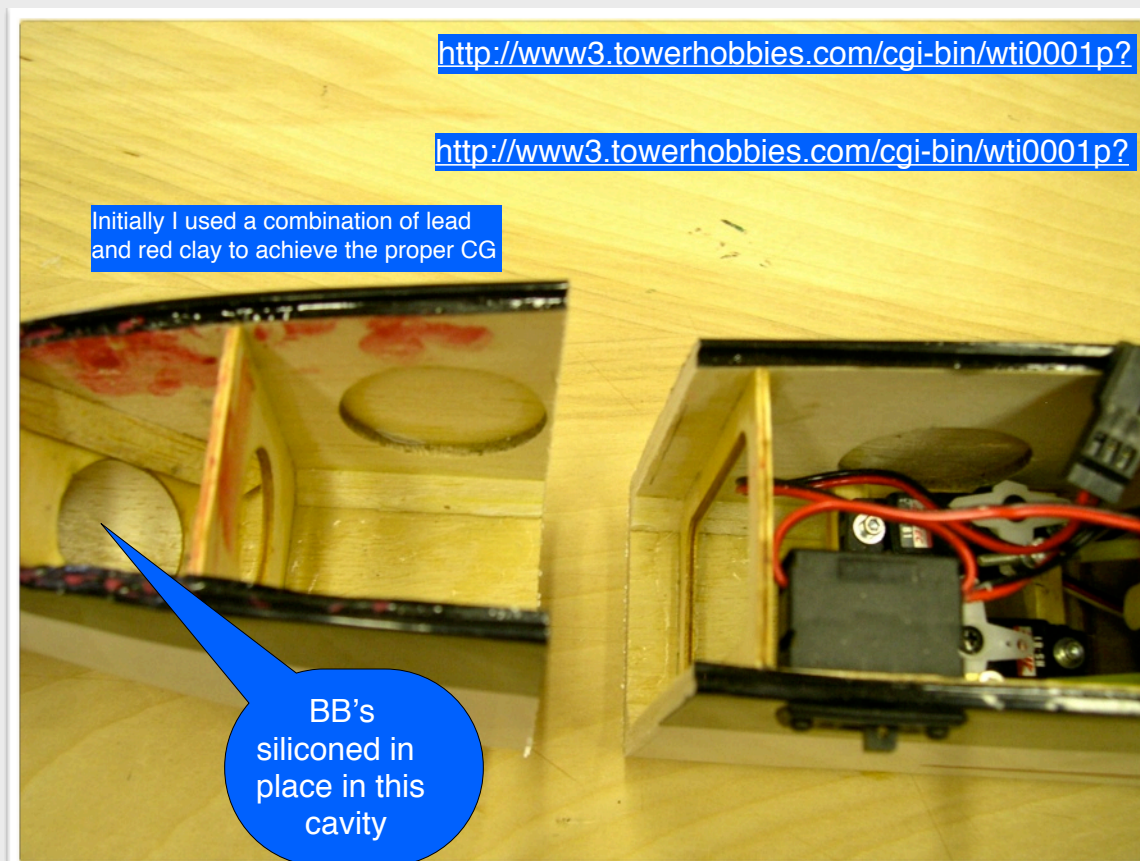
My Tower Hobbies Vista 78.5" glider arrived with a small package of bb's included in it's box. Not a good start I thought ... adding weight to a glider? The bb's were to be used as ballast in order to obtain the correct CG. After placing the servos, battery and the bb's into the plane, the CG was way off creating a tail heavy airplane. I had already placed the battery and the two servos as far forward as possible, so I placed some silicone adhesive into the pile of BBs to keep them from moving around as well as to add a little more nose weight to the plane. It was still too tail heavy. At this point and just for grins I added a bunch of lead and some red clay that I had laying around into the compartment behind the BB's. Ok, now the plane was balanced correctly. The end result as you might have guessed was that with this load of additional weight, the plane would drift back to the ground way too soon. With nothing to loose, I made the following changes to the plane.

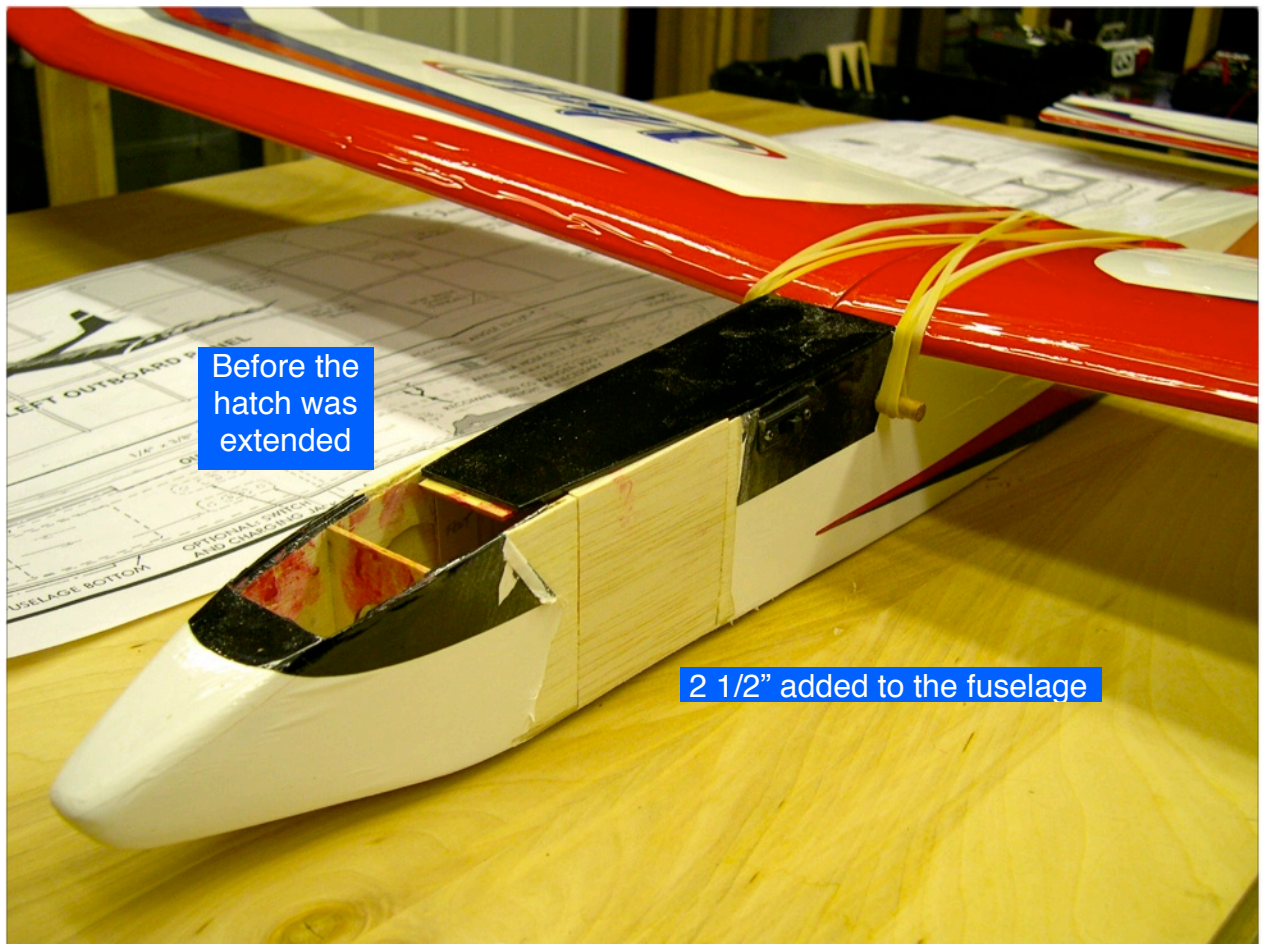
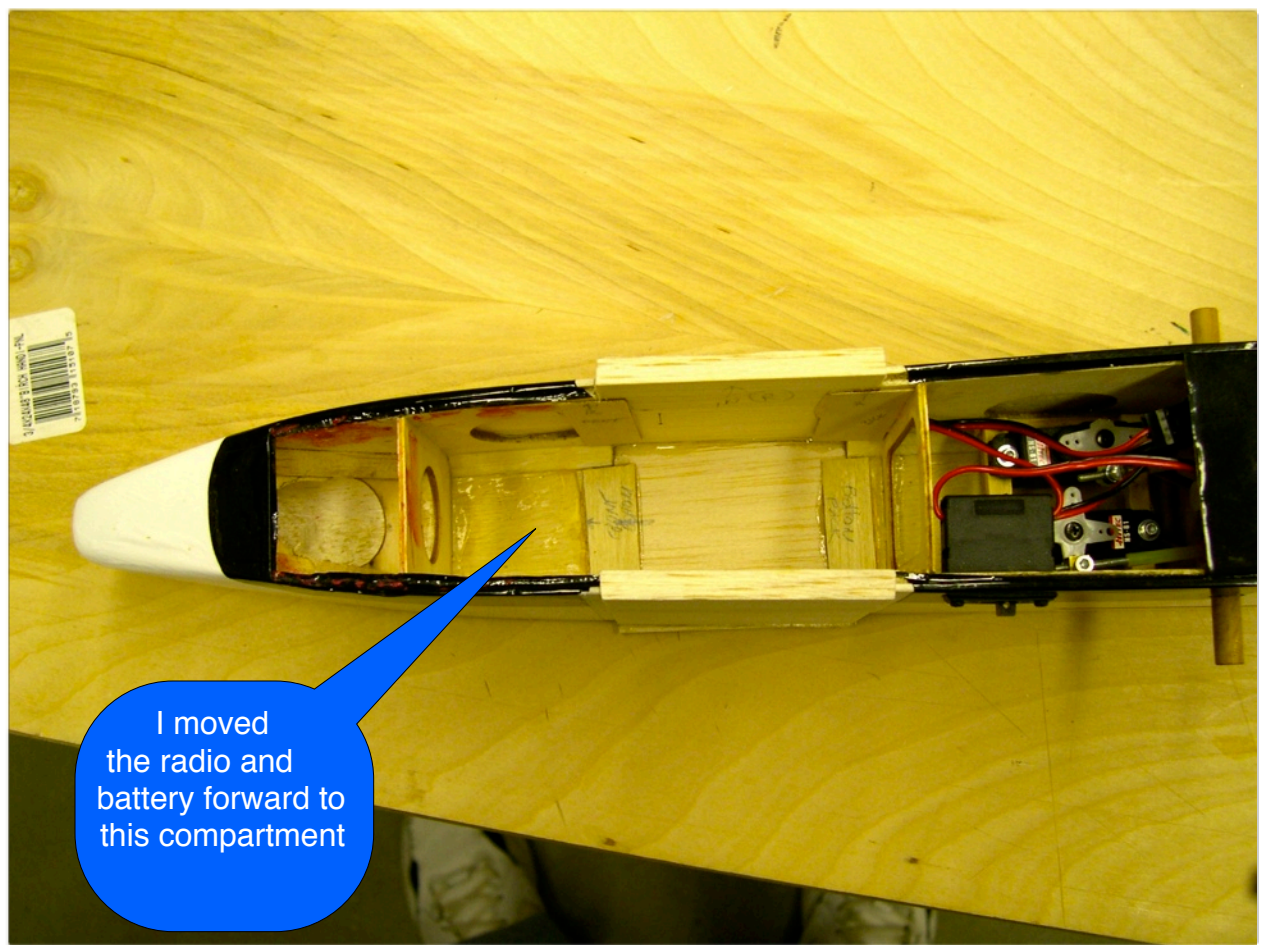
I figured that if I could stretch the nose of the plane forward, maybe I could achieve the proper CG without all or any of the weight that was currently in place. My fuselage stretcher, also known as my "Band Saw" was my tool of choice. I simply cut off the nose of the plane, (and thoroughly enjoyed the few seconds that it took to accomplish that.) Then, after thousands of hours of complicated mathematical calculations, I came up with the final number that I would use in extending the nose. (Actually I just guessed that 2 1/2" added to the fuselage should do it.)

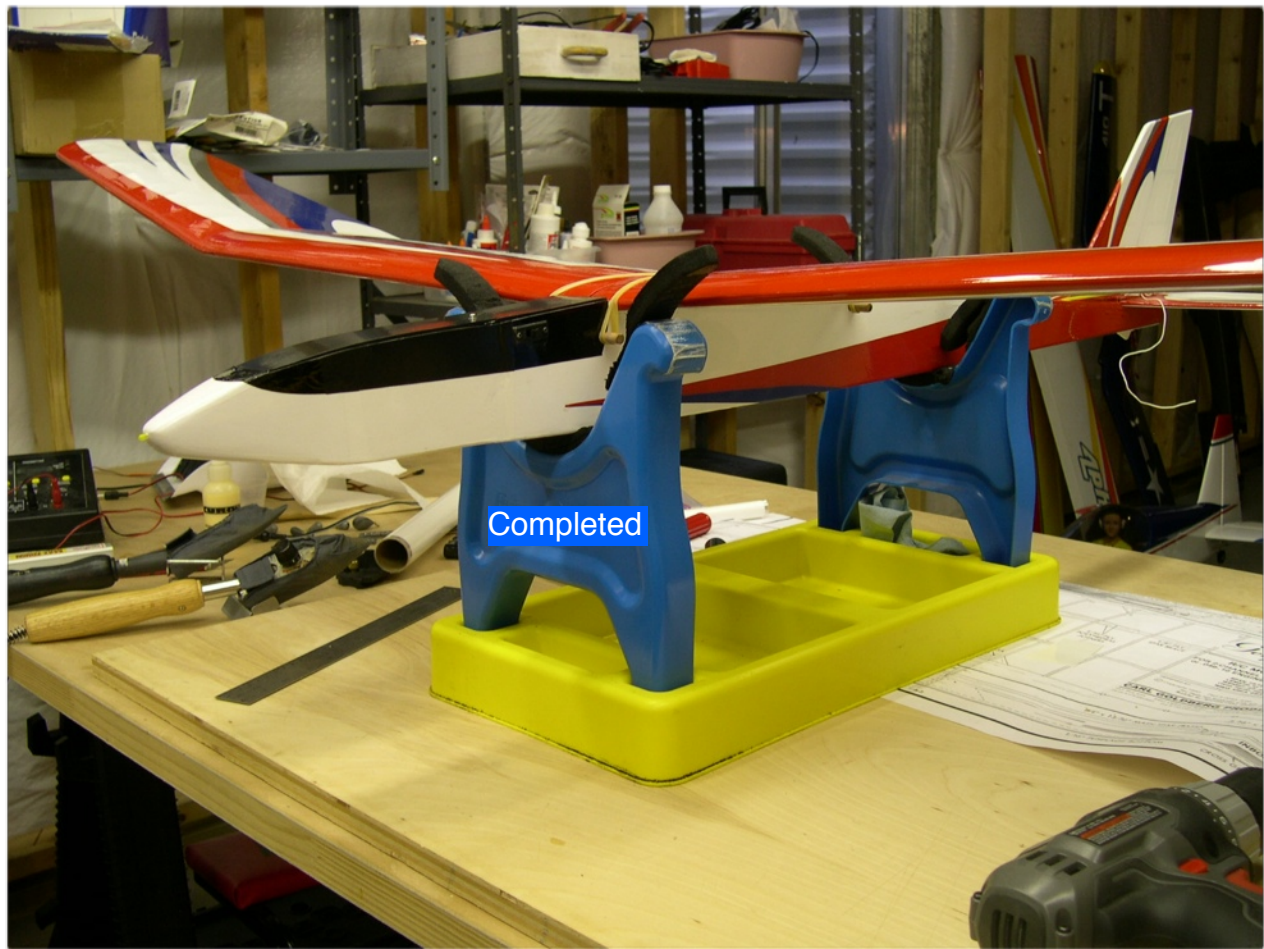
Using light ply and balsa, I added the length to the fuselage. A little sanding along with some Monokote patching and the plane was ready to balance once again. It worked out great needing just the BB's to achieve the proper CG. Now the glider fly's the way it should. I was able to use the same launch hook position on the bottom of the glider.

Walt

waltstroessner@msn.com







Using the High Start to launch your glider



An enjoyable way to enjoy RC flying



<http://www.mini-iac.com/>
supporting the sport of
scale aerobatic competition

Login Register
Thursday, November 06, 2014



Dates

Contest

May 2-3, 2015	IMAC – MAS Brighton, CO (Lamar Steen)
June 6-7, 2015	IMAC – LAMA Longmont, CO
August 2-3, 2015	IMAC – Mile Hi Strasburg, CO
Sept. 12-13 2015	IMAC – Pueblo, CO

Hi Guys,

Most of you probably know me; some of you might not. My Name is **Mike Hurley** and I'm excited to be your new Colorado IMAC ARD (Asst. Regional Director).

I flew in all of the IMAC contests last year and had a blast. The contests were fantastic, we all had a lot of fun, and I found that IMAC is full of some of the finest people you'll ever want to know.

I had such a good time that I decided to try to help out. I'm happy to announce that we will be adding a new Contest to the schedule for 2015; Sept 12 and 13 in Pueblo! Thanks Mark Siemens!

Look guys, Pueblo is not a long haul. This is another contest in our own area and I expect you guys to go... no belly achin'!

Pueblo has a fantastic facility with a great paved runway and Mark and Bill know how to put on a good contest. I know I'll be there.

My one and only disappointment with the IMAC series last year was our low pilot turnout. That's why I've put together this email list and added all of you to it.

Everybody on this list has flown in an IMAC contest at one time or another. I'm hoping to bring some of you back. I'll be sending out info and updates throughout the season and I'm here for any one of you for questions, help, or just to chat.

You can contact me any time, and I'll be happy to help you if I can with anything from practice, to plane setup, radio stuff, the sequences – whatever I can do to help you get out and fly with us.

My phone is 303-519-7560 and email is mhurley222@comcast.net

The 2015 sequences are out (except for unlimited). Print'em out and start getting ready for next season now! Get your plane and your thumbs tuned up 'cuz May ain't that far away.

Basic: http://www.mini-iac.com/Portals/0/Downloads/Sequences/2015/2015_Basic.pdf

Sportsman: http://www.mini-iac.com/Portals/0/Downloads/Sequences/2015/2015_Sportsman.pdf

Intermediate: http://www.mini-iac.com/Portals/0/Downloads/Sequences/2015/2015_Intermediate.pdf

Advanced: http://www.mini-iac.com/Portals/0/Downloads/Sequences/2015/2015_Advanced.pdf

(Note: there's an advanced alternate sequence for tighter fields but I don't think we'll have to use it)



IMAC INFORMATION CONTINUED

ARESTI MADE SIMPLE BY BARRY WEGMAN

http://www.fightercombat.com/wp-content/uploads/aresti_made_simple_20051.pdf

TWO INTRODUCTION VIDEOS TO “BASIC” & “SPORTSMAN”

<http://www.mini-iac.com/Training/tabid/121/Default.aspx>

FANTASTIC VIDEO SHOWING AIRBUS FORMATION FLYING

[Awesome! 5 Jumbo Jets Flying in Formation](#)

A "How To" - "SAFETY TIP"

I thought the rubber band set up, pictured on my transmitter below, would be a good idea to use for my electric powered planes. The idea is to prevent an accidental throttle response. In the past, my safety method has been to hold the transmitter in my left hand while keeping my thumb on the base of the throttle stick to prevent the stick from moving forward. That works fine but I also like this rubber band idea too and I thought that I would pass the idea on to you in case you might want to try this as well. When you are ready to use the throttle, you just flick the band from the stick and then re-attach it when your flight is completed.

To set this up just link a few rubber bands together and then attach them onto the handle at the rear of the transmitter. Once attached, stretch the bands so that they reach around and under the front of the transmitter. By stretching the bands on the back and bottom of the transmitter, you will find that most of the pressure that is applied to the throttle stick is minimal, but effective.

As shown here, I use the larger #67 rubber bands instead of the standard #64 bands because the #67 is what I have on hand.

Walt

MHRCC Newsletter Editor

waltstroessner@msn.com



BELOW IS A HANDY FLIGHT TRIMMING CHART THAT WE ALL HAVE SEEN AT ONE TIME OR ANOTHER. WITH THE '2015 FLYING SEASON JUST AHEAD, WHY NOT BUDDY UP WITH SOMEONE AND USE THIS CHART AS A REFERENCE TO RE-TRIM YOUR PLANES

FLIGHT TRIMMING CHART

TRIM FEATURE	MANEUVERS	OBSERVATIONS	CORRECTIONS
CONTROL CENTERING	Fly general circles and random maneuvers.	Try for hands off straight and level flight.	Readjust linkages so that TX trims are centered.
CONTROL THROWS	Random maneuvers.	A. Too sensitive, jerky controls. B. Not sufficient control.	If A, change linkages to reduce throws. If B, increase throws.
ENGINE THRUST ANGLE (1.)	From straight flight, chop throttle quickly.	A. Aircraft continues level path for short distance. B. Plane pitches nose up. C. Plane pitches nose down.	If A, trim is okay. If B, decrease down thrust. If C, increase down thrust.
CENTER OF GRAVITY LONGITUDINAL BALANCE	From level flight roll to 45-degree bank and neutralize controls.	A. Continues in bank for moderate distance. B. Nose pitches up. C. Nose drops.	If A, trim is good. If B, add nose weight. If C, remove nose weight.
SPLIT ELEVATORS (Also Yaw and C.G)	Into wind, pull open loops, using only elevator. Repeat tests doing outside loops to inverted entry.	A. Wings are level throughout. B. Plane tends toward outside when right side up, and to inside when inverted. C. Plane goes in on regular loops, and out on inverted. D. Plane goes out on both types of loops. E. Plane goes in on both types of loops.	If A, trim is fine. If B, add weight to right wing, or add right rudder. If C, add weight to left wing, or add left rudder. If D, raise right half of elevator (or lower left). If E, raise left half of elevator (or lower right).
YAW (2)	Into wind, do open loops, using only elevator. Repeat tests doing outside loops from inverted entry.	A. Wings are level throughout. B. Yaws to right in both inside and outside loops. C. Yaws to left in both inside and outside loops. D. Yaws right on insides, and left on outside loops. E. Yaws left on insides, and right on outside loops.	If A, trim is correct. If B, add left rudder trim. If C, add right rudder trim. If D, add left aileron trim. If E, add right aileron trim.
LATERAL BALANCE	Into wind, do tight inside loops, or make straight up climbs into Hammerheads. Do same from inverted entry.	A. Wings are level and plane falls to either side randomly in Hammerhead. B. Falls off to left in both inside and outside loops. Worsens as loops lighten. C. Falls off to right in both loops. Worsens as loops tighten. D. Falls off in opposite directions on inside and outside loops.	If A, trim is correct. If B, add weight to right wing tip. If C, add weight to left wing tip. If D, change aileron trim.
AILERON (3) RIGGING	With wings level, pull to vertical climb and neutralize controls.	A. Climb continues along same path. B. Nose tends to go to inside loop. C. Nose tends to go to outside loop.	If A, trim is correct. If B, raise both ailerons very slightly. If C, lower both ailerons very slightly.
WING INCIDENCE	Knife-edge flight.	A. Model tends to veer in nose up direction. B. Model veers in nose down direction.	If A, reduce wing incidence. If B, increase wing incidence.

1. Engine thrust angle and C.G. interact. Check both.
2. Yaw and lateral balance produce similar symptoms. Note that fin may be crooked. Right and left references are from the plane's vantage point.
3. Ailerons cannot always be trimmed without sealing the hinge gap.

USING THE RUDDER

Do you wish you were more proficient with *Rudder Use*? I recall attempting to teach myself but I came close to putting the plane into the ground on final approach numerous times. As a result of those fun moments, I changed gears and hurried back to my comfort zone which is using the ailerons and elevator to crab the plane on final. Once the wheels were on the ground, I was Ok with rudder use. We all realize that using the rudder isn't something that is absolutely necessary when flying most RC planes, but once learned it will sure put more enjoyment into your flying. There are a number of ways to become comfortable with it's use and the article below is just one of those methods. There are two additional "Rudder Use" web sites following the article. If your time allows, read over the articles and if you have an RC flight simulator, try putting what you have read to use. Walt

Visualize yourself standing on the flight-line with your plane in the air. The plane is constantly changing it's orientation to you. Trying to keep the plane on course (steering) by using rudder can get confusing depending whether the plane is flying towards you, away from you or towards you inverted or away from you inverted.

Which rudder direction do you use for making course corrections, since it is entirely dependent on the orientation of the plane to your view of it. With most people, learning to use the rudder is that they think in terms of "*left*" and "*right*", which requires a multiple step process. First you determine if your plane is going left or right. Remember, if your plane is inverted going towards your right it is actually going towards your plane's left no wait??

Here are a few simple rules for using the rudder both for course correction and for aerobatic maneuvers that allow you to automatically use the correct rudder input without ever thinking about "left or right".

There are four possible "horizontal" orientations, (talk about vertical orientation later) of the plane to you as you stand on the flight-line.

- 1- the plane is upright and flying away from you.
- 2- the plane is upright and flying toward you.
- 3- the plane is inverted and flying toward you.
- 4- the plane is inverted and flying away from you.

Please remember that in all of the following, visualize yourself always pivoted towards your airplane. If the plane is at the left end of the runway, your body is half pivoted to your left, and so is the transmitter. If the plane is at the right end of the runway, you are half pivoted to the right. If the plane is across the runway, you are facing forward.

Orientation 1: Upright and flying away is the easiest situation because this is like driving your car or taxiing. You are simply steering the nose of the plane in the direction that you want to go.

Orientation 2: Upright and flying towards you. This one is more important because it happens every time you land whether from the left or right. You can use the rudder to maintain a proper track on the runway so that you do not drift either into the pits or into the weeds.

The simple way to think about this is that you should point the rudder stick, as you are facing the plane, in the direction that you do not want the plane to go. If the plane is drifting towards the pits, pressure the rudder stick toward the pits. Whether your approach is from the left or right end of the runway, and drifting towards the pits, you would pressure the rudder stick towards the pits.

You are never thinking or calculating left or right, you are thinking "away from the pits". If the plane is drifting towards the weeds, you will pressure the rudder stick toward the weeds. You are steering the tail of the plane.

Here is a hint for setting up your landings; perform the following at a mistake or two high. Instead of making the turn from downwind, base and final with just aileron, use rudder to make the turns while using a lot less aileron. This will keep the turn much flatter which means less last minute corrections from the aileron as your speed is slowing down and you are getting closer to the ground. Once lined up, keep the wings flat but steer only with the rudder. Practice by using rudder control for just one leg to start.

continued next page

USING THE RUDDER CONTINUED

Orientation 3: Visualize your airplane inverted and flying towards you. With the nose of the plane coming towards you, and that you are facing the plane. Pressure the rudder stick in the direction that you want the nose of the plane to go. Don't think "left and right" ... just push the nose around with the stick.

Orientation 4: Inverted and flying away from you. As you view the tail of the plane, just push the tail in the direction that you want the tail to go. You are actually pushing the tail to the "outside" of the turn.

Here are a few hints for aerobatic maneuvers that require rudder correction. These include point rolls, knife edge etc. Remember, the idea here is not to think about whether to use "left or right".

If you are flying upright and roll the plane to knife edge, (or the first point of a 4 point roll), the rudder stick input is always in the opposite direction as the roll direction. In a four point roll, the last rudder stick input (point 3) is always in the same direction as the aileron stick. You don't have to think "left or right". Roll the plane either left or right and input rudder in the opposite stick direction.

The sequence for a 4 point roll would be:

Roll (left or right)

Rudder input (opposite rudder stick)

Roll again

(rudder released, down elevator as needed)

Roll again

Rudder input (same side rudder stick)

Roll again

(rudder released, up elevator as needed)

The sequence for a slow roll is the same but the timing of the inputs is slightly different as the aileron is not released once the roll begins and the rudder and elevator inputs are slowly mixed into the roll.

If you are starting any of the above maneuvers from inverted flight, you just have to remember that the first rudder stick movement is in the same direction as your aileron stick movement, as in point rolls etc. the last rudder input would be an opposite stick movement. A stick plane is useful in visualizing this.

The point being, you do not have to think "left or right" but simply remember a few rules opposite rudder stick starting from upright; same side rudder stick from inverted.

If you are not comfortable using the rudder, you should practice some easy ovals and straight flight out in front of the runway using the rudder to steer the plane until you get comfortable and it becomes internalized. Once comfortable doing this, practice inverted until you get comfortable with that as well.

A good way to practice aerobatic maneuvers, say for an IMAC event <http://www.mini-iac.com/> is to have a buddy stand with you using a calling card to keep you updated as to which maneuver you will need to perform next.

A suggestion ... why not use this same method when learning rudder use. Print the calling card sheet below, contact a buddy and give this a try.

Caller **Card 1**

Upright and flying away from you

Steer the nose of the plane in the direction that you want to go

Caller **Card 2**

Upright and flying towards you

Point the rudder stick towards the side that you do not want to go

Caller **Card 3**

Inverted and flying away

Push the tail in the direction that you want the tail to go

Caller **Card 4**

Inverted and flying towards you

Push the rudder stick in the direction that you want the nose to go

Caller **Card 5**

Aerobatic Reference card for a 4 - *Point Roll*

Upright - roll the plane to knife edge (1st point of a 4 point roll)

Rudder stick input is always in the opposite direction in this 1st roll

The last rudder stick input (point #3) is always in the same direction as the aileron stick

Below - I put two web sites that give additional suggestions in mastering "Rudder Use"

AMA FLIGHT SCHOOL

Why Learn To Use The "Rudder"

<http://amaflightschool.org/getstarted/how-do-i-use-rudder>

Slip and Slide Using - "Flat Turns"

<http://www.modelairplanenews.com/Media/MediaManager/flat%20turns.pdf>

Practice Practice Practice



2015 MODELING EXPO

FEBRUARY 21ST 10 AM - 4 PM



Contact Bob Bergin - bobbergin2@comcast.net

Let Bob know if you plan to bring an aircraft to display at the Expo
No setting up or taking down of chairs and display tables for us this year

AT THE WINGS OVER THE ROCKIES AIR AND SPACE MUSEUM

JEFCO AEROMOD'LERS RC CLUB

2015 Annual Auction



Welcome to the JEFCO AEROMOD'LERS RC CLUB

Auction PreRegistration System.

2015 Auction Dates

NEW THIS YEAR: This is the weekend AFTER the Super Bowl & the Auction is SATURDAY ONLY! Jeffco Fairgrounds, Golden Colorado

Item Checkin: Friday February 6th - Auction: Saturday ONLY February 7th

You may Pre-Register whether you are buying, selling or want to do both.

Pre-Registered SELLERS

- May post items here on the website and will have the ability to make changes and maintain their items for sale including pictures (if available) until **Thursday February 5th 2015. Noon.** After the noon cut-off you may add/delete or make changes to items onsite at the event.
- The system will generate all the paperwork for Pre-Registered sellers. **A paperwork package will be prepared and waiting for you prior to the start of the event.**
- You will not have to wait to register** and you will be able to simply pick up your package and go straight to the item prep/check in area.

Pre-Registered BUYERS will be able to view all the items posted by Pre-Registered sellers.

- ONLY Pre-Registered buyers will be able to view PICTURES posted by the seller, BUY IT NOW prices and seller MINIMUM prices for items where available.**
- Pre-Registered buyers will be able to **bypass the registration line** and just pick up their already prepared bidder paddle at the event.

GUESTS (Non Pre-Registered) can view the items listed by the sellers; however, **Pictures and prices will not be displayed unless you are Pre-Registered!**

If you are going to attend the auction *it is best to Pre-Register on-line now!*

No Sales will take place on this site! All Sales will be at the event only.

[Need to Register](#) [Already Registered Login Now](#) [Non-Registered Guests View Catalog](#) [F.A.Q.](#)

ver 2.0.2 2014.01.01

A good landing is when you can walk away from the plane.

A great landing is when you can reuse the plane.

On the wall of the student pilots rest room
Columbus AFB MS, 1974

From Bob Bergin

Ric and Marvin ... lets call this picture a "divine moment" in field maintenance



COMING IN THE FEBRUARY NEWSLETTER

Information and videos about the assembly and flying of the "Park Zone" Radian Pro motor glider, information and videos about "High Start" launching of r/c glider planes, an article and a few videos about a full scale "J2" Cub with a "very unique" propeller, a "Lateral Balancing" article, and lastly an update on my Piper Arrow build. Have a great month!

If you have an article and or pictures that you would like to see in the Tailspinners, just send them my way and I'll place them in our February Tailspinners.

Happy '2015 to you and yours!
Walt - MHRCC Newsletter Editor
waltstroessner@msn.com

Great job done by our club member web team on the Mile HI RC web site! Because of the numerous hours that these members have put into this project, we now see the beginnings of a top notch web site! The work continues and additional upgrades are in the works as we speak.

A thank you and a "Tip" of the hat to the web team!

milehirc.com