Ampeer

October 1999

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</tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

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What’s In This Issue:


A Sig LT-25e On Floats

Terry McGill – Portland Oregon

You and your readers might like to know that the Sig LT-25e will fly off floats, carrying a MaxCim brushless and 21,000 cells and swinging a 14x8 prop...all up weight 8.25 pounds. The wing has been straightened (flat, no dihedral), took 1/3 of the ailerons and added flaps. Aileron suffers. And boy, does it pitch up when I pull 80 degrees of flap! I have done loops with flaps alone, just for fun. I have coupled rudder to the ailerons for better directional control when shooting touch-and-goes in the box on fun flies (land and water both). With the flaps down, the LT-25e at this weight will stall about 10 mph (I am guessing 10; it is Really slow!) I am going to couple flaps to the elevator, as soon as I can figure out how to make the Futaba Super 7 do what I want, to take the wild pitch-up out of arrivals!

Next project: Putting the AF 05 brushless into the Global AT-6, with 8 cells. It's been done, I know, so I know it will fly.

The 05 is coming out of the MEC Zero until I put landing gear into the wing - I pull the motor mount off the fuse about every other landing. That Zero sure is a neat model, though. If you can use digital for your -zine, I will send you a picture of it in prototypical WWII colors.

Some of My Planes

Andrew Willetts
andyw@mindspring.com

Attached are some images of my current fleet. I learned to fly with the Carl Goldberg Mirage 550. My wife purchased the kit for me this past Christmas, and I had it flying by the end of the first week in January.

I soloed two weeks later. Originally flown on the provided can 550 motor and 8x4 prop, using a Jeti 35 controller, then on an 8x4 folder. I upgraded to an Astro 605G with the Graupner folding props, ending up with the 11x8 CAM. With 7 2000RC cells, it's 54 oz. RTF on 464 sq." A recent mishap with a tree resulted in a broken spar, so it's next in line in the shop (once the Spirit is
My second project was a Hobby Lobby Flame (the old 66" which is no longer listed). With an Astro 625G and 217D controller, 12x7 CFK prop (those things are amazing!), on 14 2000RC cells it's at 94 oz. RTF, on 684 sq.". Performance is stunning, not-quite vertical, but with a 10-15' ROG (if you can hold it straight from the torque!) and 5 minute acrobatic flights, it's more than enough for my second airplane! It's been zapped at 90 mph with a lower-performance (APC sport 11x7) prop.

Following the above mishap with the Mirage, I lost my nerve for a while. I recently saw a couple of high-start Zagis - short flights but loads of fun, and apparently indestructible. I ordered the Zagi 400, just one day of building, overweight by 2 oz, but the first flights were amazing. Flies on the supplied speed 400 and 4.9x4.3 prop with an FMA mini 30 controller. Add 7 500AR cells, it's 21oz RTF on 479 sq.". You need good contrasting color schemes, otherwise you'll quickly lose orientation in the air!

I was even more impressed with the powered version than the gliders I had seen. It's a little squirrely as my CG may be a touch too far back. I had a couple of spirals into the ground, just walked over, check the battery, and hurl it back up into the sky! I get at least 6 minutes of very usable power, they are correct when they say full power is not needed for normal flight. That may not sound like much, but given the acrobatic performance, it feels like 20! A total blast, and I recommend to anybody who wants a cheap, virtually indestructible practice ship.

I started the Great Planes Spirit 100 before the Zagi, but I'm taking my time with the electric conversion. I have almost completed the fuse, incorporating an Astro 615SG with 14x9.5 prop, on 12 1000SCR. Controller is yet to be decided, but estimate 80-90 oz. RTF on 946 sq."., quite a bit higher than a non-powered version, but

Andre McFayden  andre.mcfayden@alum.mit.edu

Multiplex Twinstar: four (4) stars

Capsule review:

Injection-molded foam ARF, twin speed 400 motors, 7 cell 1700 pack. Built stock, but used silkspan covering with water-based poly-u sanding sealer (thanks Darwin Garrison). Painted with Krylon sprays with camo-markings. Still light enough to fly great. 9-10 min flights with moderate aerobatics. Have even thermalled it. Would be good aileron trainer.

Extended review:

Believe what you have heard, this is a great-flying plane and an unbelievable bargain. The following minor improvements will make the experience even better:

The wing mounting system in the instructions is not adequate. The front wing hold-down screw is not long enough to truly "bite" into the threads on the mounting hole. I know this because the first flight was going great till I tried a gentle loop. Pulling out at the bottom, the wing separated from the body (the latter became a lawn dart, required extensive epoxy repairs on the nose). Use the included "T-nut", push it into and epoxy it securely to the mounting plate. No problems since then.

After doing some violent (for me) aerobatics, minor hairline cracks have developed along the wing chord, just outboard of the wooden wing spars. Yes, I did use reinforced strapping tape, 2-in wide, on the wing bottom. I think I will add carbon fiber tape with epoxy, just to be safe.

Beside these minor points, I love this plane!

Jodel Parkflyer: two (2) stars

Great-looking Speed 280 geared (6:1) ARF. Sport scale, fiberglass body and built-up wing. High quality, easily assembled. Flew OK, but seemed under-powered and too wind-sensitive, not for beginners. I will probably try upgrading to a Speed 400 geared.
The temperature reached into the middle 90’s and the humidity wasn’t too many percentage points below that. The meet was scheduled to start at 8:30 AM, but as you might have guessed, fliers started showing up at 7:15 AM. Sure glad I started my day at 4:30 AM and got a head start on those early birds.

We had thirty-eight registered pilots from Iowa, Illinois, Michigan, Minnesota and Wisconsin and over 140 aircraft ranging from an Antic to several Zagi’s. Am not sure how many spectators attended, but I saw a lot of people walking around ogling the airplanes and asking a lot of questions.

We had five flight stations that were full most of the day and anyone that didn’t get in enough flying time just wasn’t trying.

I only had one negative comment during the entire meet, and that was in regard to no food or drink being available on site, and we will remedy that situation for next year.

All other comments were very complimentary and the most asked question was “Are you going to do this again next year?”

Yes I am planning on doing this again next year, hopefully at the same site and I have a meeting scheduled with the host club to start working things out and picking the dates, you read that right, as I am planning on expanding this to a two day affair next year if things work out.

Industry support for raffle prizes was outstanding with contributions made by the following:
Astroflight, Aveox, Cermark, Harris Design, Hobbytown – Cedar Rapids, Modelair-Tech, Model Electronics Corp, S & E Modeler, Sig Mfg. Co., SR Batteries and Windsor Propeller. All in all we raffled off 44 items. Your support was truly appreciated.

A BIG thank you to all of the folks that volunteered their help who are too many to name but you know who you are and an even bigger THANK YOU to the Davenport R/C Society for the use of their fantastic flying site and their support.

If anyone would like to be included on my announcement list for next year, all communication would be appreciated by e-mail if possible.

Jon McVay
Contest Director

Gordy Cells
From: Gordy Stahl GordySoar@aol.com

I have plenty of Gordy Cells right now, just for your information :-)

Gordy Stahl
9303 LeBeau Ct
Louisville Ky 40299
502-491-5001

About 5 weeks ago I was flying my Ferias Speed 400 ARF in the front yard.

Normally I fly in the back yard but the it was evening and the sun was at an unbearable angle. Anyway I had flown out about 4 packs doing lazy 8’s over the houses and fields--recharging my internal batteries while the Ferias drained its NiCads.

As it got towards dusk I made my last final over the power lines, started to descend and the rustle of leaves and branches reached my ears as the Ferias came to rest 40 or 50 feet above the ground in an unreachable bough of the next door neighbor's tree. Damn (that's not "exactly" what I said.)

The plane was too high to reach with a pole from the ground. Too high to climb for as the branches at that height wouldn't provide support for even a small climber. Oh well, I thought, the Illinois winds will surely blow it from its perch and I can at least recover the receiver, etc.

There was never more than a barely perceptible breeze for a week.

About a week after the unhappy landing a storm was brewing in the West.

High winds came that evening, blowing the corn in the fields nearly flat in some places, ruining the crops. The Ferias stayed planted right where it first became entangled.

Two more weeks went by and several other windy evenings. Mother Nature did not see fit to deliver the little Ferias back to Earth but rather drove the little red plane deeper into the tree's outstretched arms.

Another week went by and there was a glimmer of hope. The sun finally rotted a couple of the rubber bands that held the wing in place and the plane fell 15 feet or so deeper into the tree but alas, still out of climbing range. Things actually seemed worse now. I could see no way the Ferias would ever be blown free of its captor's grasp. I was resigned to wait until Fall to see if the plane would come down with Autumn's leaves.

Yesterday, Tyler and Chase, the neighbor boys appeared at our front door. They wondered if the red...
airplane stuck in the tree was one of mine. I said yes and was going to leave it at that when I noticed the plane was now clearly visible in the lowest limbs of the tree.

Wow! At least I can get at it with a ladder and retrieve servos, receiver, etc. Speed 400 motors are cheap and the plane had flown many, many sorties over the corn fields so I wouldn't feel bad about its demise.

Tonight after gathering ladders, etc. we scaled the tree and retrieved the plane. I must have used up a lot of good luck this time. Not only was there no damage, there was not so much as a single tear in the covering. A drop of oil on the motor/gearbox, a range check, and a little tender loving care with a heat gun have the little Ferias back in flying form.

I haven't actually put up a flight with it yet but I will haul it with me to the Iowa E-Fly this Saturday.

I did have to replace the rubber bands that hold down the wing and the verdict is still out on the battery pack. Even the pack was lucky. I own 4 "flat" 7-cell packs. 3 are 500AR cells and 1 is made of 600AE cells. The 600AE pack was in the plane on that last flight, even if the pack is ruined it's the least expensive one I have.

I hope everyone is having a good summer and that my tale put a little smile on your face.

"Bitsodis and Bitsodat"
From: Donald Skiff  donskiff@ameritech.net

Ken,

I finished the Speed 400 plane you saw at the August meeting, and Keith Shaw helped me get it airborne. (The name was his suggestion.) It uses a 35-inch wing salvaged from an unidentified 1/2A plane that bit the dust, a tail from the In-Between I electrified (and buried) last year, and a brand-new cowl for a Goldberg Mirage. I designed the fuselage to fit those other components. The motor is an AstroFlight 035 Ferrite (very old, but little used), with a Jeti 10 ESC. I began with five 800AR cells and a 6-4 prop, but upon the advice of Keith I switched to six 600AE cells and a 6-3 prop, with much-improved performance. It now flies well—not a slow-flyer, but a good schoolyard plane anyway. All-up weight is just 20 ounces.
The airplane flies beautifully. It has good straight takeoffs and plenty of power when using the 10x7 or 11x6 Master Airscrew props.

Flight time is 8-12 minutes depending on throttle management. It does nice loops, good stall turns and Cuban eights. It flies inverted with some down trim and will do outside loops. It doesn’t spin very well.

**Specs:** 10-RC2000 cells, 10x7 or 11x6 Master Airscrew wood prop, static amps at take off 27, 8400 RPM with 10x7. 83.5 oz. ready to fly. Standard servos and 500mAh Rx pack. 66.3 watts/lb. at takeoff. Wing loading – 16.7 oz./sq.ft. Wing area – 5 sq.ft. Covering – Monokote. Wheels – 3” Lite wheels.

Orme’s law* would suggest 14 cells, but this doesn’t apply to the Aveox on direct drive. The brushless motor can sure spoil a guy. I wish I could afford more of them!

Orme’s law: Number of cells = wing area in square inches divided by 50 – lowest cell count, through wing area divided by 35 – higher cell count. ie. 720 / 50 = 14.4 cells and 720 / 35 = 21.4 cells or 14 to 22 cells.

That is why these are generalizations. Matt’s law works quite well most of the time, and it is fast. KM

This would be the model for an average sport flier entering electrics, but would be less costly using your advice (KM’s) on an Astro 15 geared. I think you could go as high as 6 lbs. (with extra cells and gearing) and still have a “spiffy” flyer.

Now I have a desire to build a Fleet bipe (Electric 56-inch) by Concept Models. I wrote Keith Shaw about it and he responded with a very nice letter. He did not design the airplane, but he went over the plans with the designer and suggested a few changes.

He stated that it is a nice design and a good flier using 12-inch and 13-inch props at 2:1 ratio on props. ie. 12x6 or 13x7, etc.

Orme’s law states that this is an 18 cell plane (using gearing). (That’s minimum: 890 sq.in. / 50 = 17.8 cells up to 890 / 35 = 25.4 cells) For a calculation figure, I used an 8 lb. weight giving a wing loading of 20.7 oz./sq.ft., even though the literature states 6.5 to 7 lbs., but I think that is probably for the glow version. (Using my new formulas I would recommend 19 cells at 27.8 amps for a brushless. I predict a flying weight of 124 oz. or 7.76 lbs. KM)

Using your (KM) formulas found in the March issue of the Ampeer, I tried to see what would work with the Aveox system or other brushless motors. I don’t have the MaxCim specs.

(MaxCim specs for Tom’s new Max32N-13Y are on the next page. KM)

The only formula of yours (KM) that I can’t figure out is the one arriving at prop RPM. Can you simplify this for me with a full example?

This is what I came up with for the Fleet bipe at 8 lbs. And 890 sq.in.

Aveox 1412/4Y, geared w/Astro 1.63 install ed on motor and 18 cells turning a 13x7 or 14x6 prop at about 31 amps to start. That’s about 90 oz. of thrust at about 8,500 RPM at the prop shaft.

The Aveox 1412/4Y is 725 Kv, 1.865 Kt, 0.065 Rm and 0.7 Io and rated 22 – 50 amps. I would like to cut the amps down somewhat but not go below 70 oz. of thrust.

Can you check these figures over and see how far off I am? Or, can you make a better suggestion for an Aveox system? I don’t want to go over 18 cells, as I only have a 110D charger.

Also, do you have a good formula for figuring thrust as per prop size and RPM of same?

*****

Response from Ken:

As always, I’m updating my “predicting” process to try and make it easier and easier. I’ll use your Fleet as an example of how I’m doing it now.

890 sq.in. x .6^a = 534 watts of input power required.

534 watts input / 27.8^b = 19.2 cells

534 watts / 4.3 (a constant I use) = 124.2 oz or 7.76 lbs. (target weight)

(sqrt of (124.2 / Pi) * 2 = 12.57 inch prop (13 inch rounded)

124.2 oz. / 6.18 sq.ft = 20 oz./sq.ft.

(sqrt of 20 oz./sq.ft.) * 3.7 (constant Keith uses) = 16.5 mph stall speed

16.5 mph * 3^c = 49.5 mph

49.5 mph / 7 pitch (just higher than the 2:1 prop pitch ratio) = 7.07 thousand RPM minimum required

Using ElectriCalc, with the modifications I use, 1.31 volts and 26 ESCohms and 6.0 Cell ohms for RC2000 cells, and a 13x7 prop, I found the following:

Aveox 1412/4Y w/1.63:1 – 18 cells: 30.2 amps and 7,810 RPM – looks like a good candidate.

MaxN32-13Y w/3.16:1 – 18 cells: 31.2 amps and 7,900 RPM – if a ratio of 3.25:1 were available it would be 29.7 amps and 7,810 RPM – another good candidate.

Astro Flight 40 w/1.63:1 – 18 cells: 25.3 amps and 7,170 RPM – still meets all the criteria above.

The above comparisons were made with 18 cells, as that is the maximum that John said that he could charge.

Notice that I said I’d use 19 with a brushless. Of course, the gear ratios would have to be changed. Since I have a MaxCim, it would look like this using the same
MaxCim – MOTOR TECHNICAL DATA  “Y” wind 12 – 28 cells; “D” wind 6-18 cells

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<tr>
<th>Motor Parameters</th>
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<th>Model MaxN32-13Y</th>
<th>Model MaxN32-13D</th>
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CONTROLLER TECHNICAL DATA

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<td>(Amps)</td>
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<td>Equivalent on Resistance</td>
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<td>Weight with connectors</td>
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Variables:
a. multiplier: 0.5 acceptable; 0.6 good; 0.7 very good
b. 27.8 brushless Aveox & MacCim, 25 ALL Astro Flight motors, 22.5 ferrite, 17 AP-29/S480, 11 S400
c. A level flight speed of twice the stall speed is required to do nice, round loops. This is more than adequate for any bomber or transport. At three to four times the stall speed, good maneuvering and fighter type performance is achieved. (Keith Shaw)

Hi Ken
I haven't been in touch for a while but have been reading Ampeer every month and your contributions to the eflight list. I try and stay off list as I always seem to get into trouble.
But what about you!!
"Could it be that some of us don't read MAN anymore? At least I'm still very upset with them! - Ken"
(Now it is tougher! Good friend Bob Aberle is writing for them, and I love Bob’s writing!)
Boy that must be nearly anti American!! Just joking.
For my sins I have had my arm twisted to go onto

prop and set the same way in Ecalc: ratio 3.5:1, 27.9 amps, 7,860. This is approximately the same power as the 18 cell version (note the prop RPM) but with less amps, yielding longer flight with the “same” power out.

I also have an Astro Flight 40G, but it would not be used on 18 or even 19 cells. For the AF40G it would be the 534 watts input / 25b = 21.3 cells or 21 cells when rounded. That would yield: 1.82:1 (yes, I still have the old straight cut gearbox with this ratio), 25.9 amps, 7660 RPM. Still meets all criteria.

As you can see, there are always lots of ways to get there from here.

Here is Mitch Poling’s Thrust Formula:
Thrust = (pitch in inches * diameter in inches 3 * RPM in thousands) / 10,000

From the example above using a 7” pitch, 13” diameter and 7,810 RPM: (7 * 13 3 * 7.81 2) / 10000 = 93.8 ounces of thrust.

Some New Zealand News
From: Lex Davidson ldavidson@xtra.co.nz
our new national electric committee. We are to promote all aspects of electric flight to the modelling community in NZ. Looking forward to helping out.

Our club web address is below. Our club is fairly typical of NZ clubs about 50 members and about 1/3 fairly active. Of the active ones, we have 4 who only fly electric (well may be a bit of gliding/ slope soaring) and another 5 who fly good performing electric's now and again. Our last club night had a record turn out because the feature was an electric B 2 - to be flown in the school hall!!!. We got through general business really fast to see this go. The owner hadn't time to test fly so the exhibition was it! Well like the 100's of others that have been sold (think this was the 1st in NZ) it flew. But it was a bit much for our wee hall!!!. Fortunately the owner/pilot is a top flier. It sounded great. Now I am looking forward to seeing it fly outside!! It didn't do electric flight any harm at all.

Attached are two photos. The 1st is of my twin nephews holding my speed 400 powered ME110. This is based on free plans by Chris Golds in one of the UK magazines. Easy to throw and easy to fly.

The other model is my 7 cell F5B ship "Two Hot". It has an Aveox 1409/2 driving the prop. Really easy to launch!! And it is now flying very well- but it has taken a lot of sorting out. Has been great though as in getting it to where it is. I have corresponded with guys in UK and even the designer of the airfoil in Germany.

The other scan is of my attempt at S400 F5B with me looking remarkably relaxed before it's first flight. The white blobs in the background are real NZ lambs which you guys are going to have to pay more for in future because of the tariff just plonked on us. Have you ever tried NZ lamb?

As you know this class was born on Ezone and has caused a lot of mail. I asked for clarification of the rules and started a mega thing on cheating!! Out of that I had some very good ( off the zone) advise from the people who had actually done it. This is a terrific class to play with. The motors are abused but the performance is remarkable. My "Rough As" is a lovely model to fly if you like small and fast. It's climb out is better than anything except our 7 and 10 cell brushless ships. It's speed/ distance performance is good but it isn't so good on duration. I hope to fix that with a 48" wing. If anyone wants a drawing (Modelcad or DXF) happy to prov ide it.

Ken Keep up the good work and good luck with your big event.

NSMAC Web Page: http://home.ait.ac.nz/staff/jroberts/nsmac.html

HobbyFlite Boeing 747-200....Plane Evaluation
From: Grant Calkins CasinoOp@thegrid.net
Channel Islands Condors.
Muroc Model Masters, Edwards AFB.

The 48" wing span HobbyFlite Boeing 747 is a beautifully crafted rubberized Styrofoam ARF, weighing just 11 oz empty. Just put your servos, Rx, ESC, and flight battery into the indentations between the fuse's two halves, and seal it up. Stab and rudder fit securely into pre-molded pockets in the fuse (I glued them in) as do the wings (don't glue them in, they need to separate in case you crash). Motor is Speed 400 6v attached to rear as pusher, and it works great. Prop is 6x4 - package contains 2 - and it merely presses on the motor shaft. Neat! Control surfaces are clear plastic with control horns already attached and pre-connected through fuse to proper servo area. I used Pixie14 ESC, 2 Cirrus 21 micro servos (elevator and rudder), JR Rx. Hand launches easily straight as a rail! Flight times easily 6+ minutes on the 8x800 mAh pack I had handy, longer I'm sure with 500's. Flies so smoothly and realistically (the included decals are excellent) that everyone will think United Airlines just flew by.
At about $100 including ARF plane and motor kit, don't know how this RC 747 could be much better! A solid 4 1/2 stars. An add-on aileron kit (requires 2 more micro servos) is available for about $30, and a 4 EDF add-on (wow!) kit is coming very soon.

The plane is available from The Jet Factory (http://www.ejets.com/index.htm) or directly from the manufacturer (http://www.hobbyflite.com) (805) 490-8681.

(I saw Pat Mattes fly this past weekend, Sept. 18, at the Donnelsville, OH non-meet. Flies very nicely. KM)

**Tips on Learning Electric Flight**

From: Pat Smith smithpat@flash.net

Ken,

I have been to your site and read your newsletter many times but never before took time to say what an excellent job you do and what a great service it is to e-fliers everywhere. I cannot imagine the amount of work and time you must invest, but you should know it is greatly appreciated.

My thirteen-year old son and I decided about two years ago to try model aircraft and were attracted to electrics from the start. We made more than our share of mistakes, the biggest of which was not finding a club before starting. Not that we did not try, we live in a rural area and it just took a while.

We started with a Kyosho Cardinal ARF (not all that bad of a setup), crashed a lot, learned a lot. Somewhere between that and a Midiwatt I found an instructor who convinced me to build an LT-25 and put a noisemaker out front. I took one lesson, found out the majority of what I was doing wrong and went home to build another plane.

We started with a Kyosho Cardinal ARF (not all that bad of a setup), crashed a lot, learned a lot. Somewhere between that and a Midiwatt I found an instructor who convinced me to build an LT-25 and put a noisemaker out front. I took one lesson, found out the majority of what I was doing wrong and went home to build another plane.

In large part, because of information on your site, a Seniorita (added ailerons, tail-dragger) with Astro 15, MAT belt drive, 12 cells is what I would say I really learned to fly on. My son can fly it too, although he is still just a few flights short of solo.

There really is no reason not to learn to fly right from the start, and that is electric. By the way, the instructor I found is a hobby shop owner. He is one of the good ones in the old-fashioned sense, always willing to help, no matter where you bought your stuff. When we first met, he took a fairly dim view of electrics, thus the LT-25 to learn to fly. I was in his shop last week and we were discussing how things have changed in the short time I have known him; there, on his shelves, were several electric ARFs (Nora, Hummel, Zagi) and he was quick to inform that he had contacted several other sources and would now be able to supply the needs of his rapidly growing electric clientele. He also sold the LT-25 on consignment. (Too bad -- you had a great electric conversion there! KM)

I must say that the best supplier I have done business with to date is Kirk at New Creations.

Someday I'll be one of the guys sending in plane ratings, right now I am still too much a novice to give advice. (I don't think so. You just did! KM)

As I mentioned above, the Seniorita is a special plane. We also were fortunate enough to come across an old Ace Tigerkitten kit (For Everyone's info: there is a kit in the hobby shop at the Donnelsville, OH field. KM) and cannot wait for proper conditions to try it out. We enjoy building and are always looking for the next project. Speaking of which, the links to Winger and StreamRC gave me an error message - do you have any suggestions? (I really, really need to get all of the site updated. Right now I've extended my days to 48 hours by eliminating sleep and working twice as hard. ;-) KM)

The closest electric club to us, that I know of, is the Dallas, TX group. We live about 250 miles south of there and are planning to attend their big event held Oct 2 & 3, any chance of you being there? It would be nice to meet you. (It sure would be nice to go. KM)

Again thanks for all you do,

Pat and Taylor

**The September EFO Meeting**

What a perfect night. It just doesn’t get much better for flying. The attendance was very good, and there was a lot of flying until dark.

Jim Young had his completed Mr. Mulligan. It looks great. The Rushton Rd. field doesn't lend itself to ground take-offs, as the grass is always too long and too thick. Jim has flown this plane and will be repowering it with a geared 40, to give it a bit more power. Jim also had his 02 brushless Extra flying. Fast and smooth!

Don had is Bits’o This-Bits’o That flying very well,
and that is where I got the photo for this issue.

Ken did a demo on straightening bent shafts. (Don’t ask.) He then flew the straightened shaft, and all went well.

**The Upcoming October Meeting**

**IMPORTANT NOTE:** The October meeting will be held at Camp Dearborn, on GM Road, just west of Milford, MI. It will be on **Sunday, October 17** and start about 10:00. This will be our annual Fall Fly Out and we’ll provide lunch and lots of time to fly. The EFO will be the guests of MISS. They will have a winch set up and be flying gliders while we fly electrics.

When you get to the gate, tell them that you are flying at the Fall Fly Out with the MISS (Michigan International Soaring Society) group. They should not charge you. If they do, you will be reimbursed.

If you fly electrics and our gliders, you are welcome to join us all. AMA is required. See you all at the Fall Fly Out, Sunday, October 17, at Camp Dearborn, Milford, MI.

**Efly Photos from the UK**

From: Simon Kidd simonkidd@learnfree.co.uk

Ken,

I’ve attached some really exiting models seen last weekend at a fly-in near Bristol in England. The tail-less model is a replica from a 1930s film called 'things to come'. Some excellent ducted fans at this show including an F16 (unfortunately I was enjoying watching it too much to take a photo).

PS - the 3000 mAh SAFT SubC NiMH batteries are still going strong.

**Springfield’s Efly Non-Meet**

Azarr announced that the Springfield Club field in Donnelsville, OH would be open to efliers on Saturday, September 18. His idea was to have a few local folks come out and fly their electrics. They did!!! They were also joined by many folks from far away! What a surprise. The response was actually overwhelming. With lots of locals, lots of spectators and many of the best known eflers in the midwest, this turned out to be a fantastic day.

The weather was absolutely perfect. Everyone had a good time and many thanks go out to the Springfield club for providing this venue for the many KRC deprive delectrics.

It is my guess that there were at least 30 fliers there and close to 100 planes.

It was an especial treat for me, as Pat Mattes allowed me to fly his TwinStar, which flies great and does wonderful touch-and-goes, and Jim Ryan “stole” my Lightening 250E for a couple of exciting aerobatic flights.

Tim McDonough, of Springfield, IL, even showed up with the Ferris, mentioned in this issue. Yep, she still
Upcoming Events:

**Sept. 25 and 26** San Diego Fall Fun Fly - two days of fun flying and outstanding vacations activities. Visit the web site a [http://sefds.org](http://sefds.org) for detail or contact the CD, Don Wemple, at DonK126@aol.com or call (619) 469-5566.

**October 2 & 3** DEAF 13th Annual Fly-In at Seagoville, TX (south-east of Dallas) - Dallas R/C Field - Paved & grass runways, plus a nice sized pond! LMR events-7 Cell Old Timer (#618) and 7 Cell Sailplane (#610), Speed 400 LMR Sailplane, Speed 400 Pylon Racing, Stand-Off Scale w/ 2 minute flight, Percentage Weight Lifting, All-Up-Last-Down, Lightest A/C to Fly 10 Minutes w/ NiCads

**October 2** the Burlington County R/C Club Spring Season Opener Electric Fly will be held...in October! (yes, that’s right km) Club field in Hedding, NJ. Check the web site at: [http://home.earthlink.net/~jgprusz/bcrc01.html](http://home.earthlink.net/~jgprusz/bcrc01.html) or contact Bill Bowne at beaglvr@erols.com Competitions will be “light-hearted, fun” events.

**October 9** The PioneerR/C Club / Peninsula Aeromodeler is co-hosting the Annual Electric Fun-fly at the Peninsula Aeromodelers field at Half Moon Bay, CA Brian Chan email: vgg1@flash.net

**Oct 10** The Devil Mountain Electric Fun Fly will be hosting their annual e-fun fly in Pleasanton, CA. Brian Chan email: vgg1@flash.net

**Oct 10** MISS/EFO Fall Fly Out (see this issue)

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**Donnelsville (cont.)**

flies just fine.

Jim Ryan had his fleet there, and all flew great. Many of the visitors and spectators could not believe the speed of Jim’s Skat and that it was Speed 400 powered. There was a fellow flying a Curtiss Robin, I believe, that was doing an excellent job. I really meant to talk with him and tell him what a nice flying plane he had.

Don Belfort flew a couple of his famous “light-weights”. As always, he has to “buck the trend” and so he has a built-up Zagi. It flew wonderfully!

Ralph Weaver flew his Limit and several mouths dropped as they had not seen this type of performance in those parts.

As usual, Pat Mattes flew and flew and flew and flew!

Steve Horney and his son spent a lot of time at the flight-line as well. Even more – but I’m out of space!