the

July 2002

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Ampeer subscriptions are and \$17 a year world wide.

The Next Meeting:

Date: Saturday & Sunday, July 13 & 14 Time: 8:00 A.M. Place: Midwest R/C Society Flying Field – 5 Mi. Rd

What's In This Issue:

Ridge Runt & Slo-Poke - Tiger Moth - Unionville Beaver - Upcoming E-FLI-OWA 2002 - Receivers for Electric Flight - Firebat - Cheap Electric R/C - FOXBAT - X-250 Comment & Schottky Diode -More on Flight Logs - Ultimate BEC - P47N - Plane Ratings - Concerning Serial Packs - VTOL Fan Model Nears Completion - R/C EP Interactive Update - Aircraft Covering Material - events

Ridge Runt & Slo-Poke Conversions

From: David Hipperson ritzi@corplink.com.au

Dear Ken,

Reading about the upgrades and conversions in the February Ampeer made me think about mine. An ideal aircraft, ripe for change is the Ridge Runt fitted with two 7.2V Speed 400's on 7 X 1000 mAh NiCads and push on Gunther props. Mine weighs in at 950 grams exactly or 1 pound 15.5 ounces. From a hand launch, it fairly zips away and is good with some sensible throttle management for 8 minutes.

My Great Planes Slo-Poke (.20 size) flies on 8 X 1700 cells on a Graupner 540 which I suspect is about 23 turn using a 10 X 6 prop. All up weight is 3 pounds 4 oz and flight times are usually around 7-8

If anyone wants more details they should feel free to E-mail me at:

ritzi@corplink.com.au Regards David Hipperson

GWS Tiger Moth

From: John Zook johnzook@voyager.net

Hi Ken.

Greetings to all E-flyers. Just wanted to drop a line about my latest project which is a GWS Tiger Moth. I replaced the plastic struts with 1/16" balsa, and instead of the plastic wheels I'm using Lyte tires from New Creations. I am in the process of repainting the fuselage and wings, as sanding the mold nubs off removed paint. Using masking tape when setting the wings dihedral is a no, no! It pulls the paint off so use instead low grip blue tape. I substituted the GWS prop for an APC 9X6 electric slowfly. It will be using 8 -350 NiCads for power.

I will be building an Ace Simple 400 as well as dusting off my old Goldberg Mirage with a new power system. Looking forward to a great season of electric flying. I will have to wait, as the weather has closed in again up here in the somewhat frozen north. Hope to be flying indoors with couple of club members as soon as I get my TM finished.

Till Then....Fly the electrons out of your plane. John Zook





Unionville Beaver

From: John Rossetti jyuma@axxent.ca

Hi Ken,

Here is a shot of my just completed Unionville Hobby electric Beaver. I was convinced to build it after hearing from Brade Trent and Tod Ablett who have built and flown this plane in British Columbia. I have installed a Phasor 45/3 motor with the Phasor 40/3 Brushless speed controller and will be using a 10-7 Master Airscrew electric prop. This plane weighs in at exactly 100 ounces. The motor puts out at least 65 watts per pound and I am hoping it will fly as well as Brad and Tod's planes do.

Our weather is just a bit too windy for testing new planes, so I will try to be patient and wait for a suitable day.

Regards, John Rossetti

Upcoming E-FLI-OWA 2002

Saturday & Sunday, September 7 & 8

Place: Seven Cities Sod Farm – Junction of I-80 and Iowa 130.

For details and map: www.rc-dymond.com/efliowa/ AMA Sanction #02-0964 AMA License Required There will be a \$15.00 landing fee (covers both days) which includes a raffle ticket for two

Hitec Focus III radios plus other items donated by vendors You must be present to win.

Flying will commence both Saturday and Sunday at 08:30 AM and end at 19:00 PM on Sat. and 17:00 P.M. on Sunday.

This will be a fun-fly only. NO competitive events. Buy, sell or trade is welcome.

Lunch will be available both days catered by Hy -Vee Deli. There will be

Grilled sandwiches, Chips and the like available. You must advise the CD of your intention to purchase lunch in the A.M.

Davenport Radio Control Society will have drinks available both days.

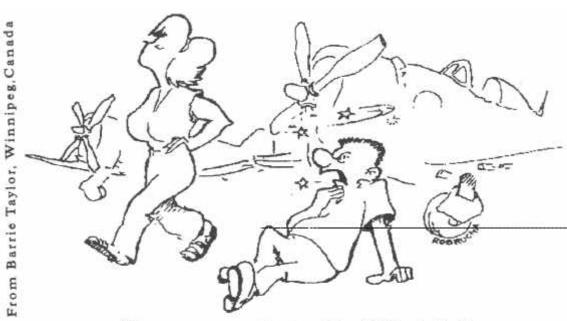
Several vendors have verbally committed to attend.

Hope to see you there!!!!!

For further information: Jon McVay 319-895-6527 Togflier@AOL.com

Receivers for Electric Flight

I received an interesting email from Bob Larson in Las Vegas, NV. He was wondering if there is a database anywhere that lists current receivers that work well with electric flight systems. Since I am unaware of any such



I was commenting on the P-47s, lady!"

database, I thought that it might be a good idea to start one. He noted that he had problems with the FMA Quantum and new Airtronics Stylus. The problems were solved, in both cases, by swapping out those particular receivers for different ones. Nothing else was changed. Anyone else have any other data?



NEW AIRPLANE RELEASE!

From: Heather Rose HROSE@hobbico.com Presented for Informational Purposes Only

Firebat Electric ARF - standard version

Almost-Ready-to-Fly Radio Controlled Electric Pusher
Jet

Speed 400 motor and 2 props included! Sleek, simple and fun!

A definite departure from the ordinary R/C flying scene - and a blast to fly! The Firebat has the exciting profile of a jet fighter, with a futuristic-looking canard design that's both unique and functional. A couple of tools, some epoxy adhesive and just 2-4 hours are all you need before you're ready for your first flight. And the Firebat delivers versatile performance, with clean, inexpensive electric power!

Made of high-density molded foam that's both lightweight and durable.

Doesn't require special radio mixing (such as for a V-tail or elevons) or micro servos; you only need a 3 - channel radio with 2 standard servos.

Appeals to newcomers and experienced pilots alike, with a wide range of airspeeds.

Small enough and quiet enough to be flown at a park or sports field*.

*NOTE: If flying in a public or residential area, please be sure there are no R/C flying locations within a 5 mile (8km) radius. This will eliminate the possibility of radio signal interference. Always fly in a safe and responsible manner, well clear of people, cars and buildings. Always launch plane skyward, away from people and obstacles.

Smooth, quiet electric power is provided by the pusher-mounted Speed 400 motor; two propellers are also included.

The functioning canards control the Firebat's pitch control, making the plane 'stall-proof' when decreasing airspeed.

The basic airframe is made of 8 pre-formed foam parts that fit together securely without carving or sanding; all necessary hard ware, including servo linkages, is supplied.

No expensive mini or micro servos are required. Preformed compartments hold the plane's on-board radio gear, including room for 2 standard-size servos.

A simple hand-launch is all you need to get the Firebat airborne and ready to perform swift fly -bys and graceful aerobatics. Also makes a great combat flyer!

Firebat Electric ARF -Wingspan: 31.25 in (794mm) Wing Area: 342.7 sq in (22dm2) Weight w/battery: 24.0 oz (680.4g) Wing Loading: 10.1 oz/sq ft (31g/dm2) Fuselage Length: 31.75 in (806.5mm)

GPMA1400 Standard Version

Includes: Speed 400 motor, 2 props

Requires: 3-channel radio w/2 standard servos, servo extension (9" for standard receiver; 16" for micro receiver), 10-20A speed control w/BEC, 8-cell 600-1100mAh NiCd battery, charger

GPMA1405 Deluxe Version! Includes speed control, battery pack and charger!

Includes: Speed 400 motor, 2 props, 10-20A speed control w/BEC, 8-cell 600-1100mAh NiCd battery, charger

Requires: 3-channel radio w/2 standard servos, and servo extension (9" for standard receiver; 16" for micro receiver)

Cheap Electric R/C

From: Merle Davies mp_davies@yahoo.com

Hi Electric Flyers,

I recently visited the Wal-Mart in Port Huron, MI. From the TOY Department I purchased the following item that you may wish to investigate.

ESTES < www.estesrockets.com > "SKY RANGER" Radio Control Airplane at a cost of about \$30.00. This a foam model with a wing span or 22 inches and come s with a with single stick transmitter ...using PULSE CONTROL STEARING from days gone by. All is included, except batteries... 6 @ AAA for Transmitter...3 @ #76 Type "Button Photo" Batteries (\$2.50 each)...4 @ C Type for Charger.

This could be a FUN indoor type.

I enjoy your Newsletter and Mid - America Electric

Flies.

I just received my copy of the "RC Microflight" newsletter. There was a mention of a couple of websites. **Dynamics Unlimited**...of USA www.slowfly.com **Didel SA**...of Switzerland www.didel.com

I visited the two places and found them worthwhile.

(Thanks Merle, and especially thanks for sending the "hard copy" of the directions. Very interesting! KM)



Ferrite Twin Motors on One Gearbox From: Chispas rdd53650@mail.telepac.pt

Hi Ken.

This is an follow up to some e-mails I sent you last October about a twin motor gearbox. The work on the Kyosho Trainer 40 ARF and the Twin Gearbox was delayed by other projects, bad weather and festivities, but it's finished, at last.

The first three flights were made on February 17 and the photos taken on the second sortie on March 10.

The plane weights 3375 grams (119 oz), wing span of 1,6 m (63 inch), wing area of 43 Dm2 (666 sqd inch) giving an wing loading of 78,5 gms/Dm2 (25,73 oz by sqdfoot).

Power is from 15, 2000 cells, and has a 12x10,5 Graupner prop spinning at 7500 RPM at 35 Amps,

relation of the gearbox is 4:1 on two Yokomo13 Turn, "lay-down" brushes, wired in series and a Protech Opto 8-30 cells ESC. The radio gear is standard and the undercarriage is an Multiplex unit of 3 mm Dural.

There was no try to get less weight as this is to be a demonstration to my fellow club member's that "a normal electric plane can fly", as all of their "gassers".

The plane flies extremely fast and is powerful. It can roll while climbing, but the overweight kills the "trainer-like" flying. On other hand, it is useful to get the feel of bigger and heavier planes while testing the Twin Gear.

The duration on the 2000 mAh cells is short, 3.5 minutes of full power, so I will have to get 3000 mAh cells to extend it to 5 minutes.

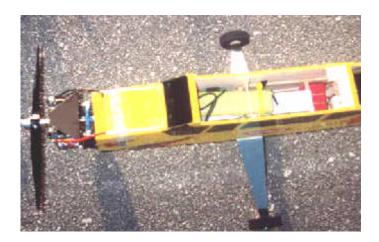
I have also tested a 12x 10 APC "E" prop, it gets more RPMs on lower consumption but at the medium RPMs it is worst. Maybe the plane needs more speed to fly level than I anticipated.

The next step is to get a kit of an all-built up plane, and get its weight down, as a way to get more from the Twin Gear on 14 to 16 cells and from 4 to 4.7:1 relation on the gearbox.

If anyone is interested on this type of motorization, they can get theirs from Ratby Aeroplanes at http://www.bizonline.co.uk/ratbyaeroplanes/tg.htm or they can make their own. I can provide the design. I sent you some photographs, hope they can be useful.

Happy landings and best regards. Paulo "Chispas" Faustino

Portugal



Please Send Ampeer Subscriptions or Renewals to: Ken Myers 1911 Bradshaw Ct. Walled Lake, MI 48390



FOXBAT

Review of kit from Dymond Modelsports By Grant Calkins, Channel Islands Condors, Camarillo, CA; Muroc Model Masters, Edwards AFB, California

Grant Calkins' email: CasinoOp@worldnet.att.net

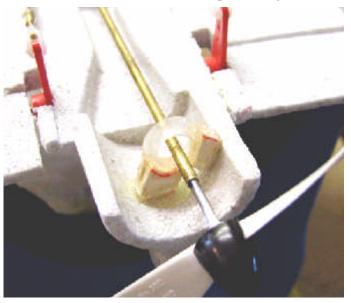
The FOXBAT is an all foam kit from Germany and sold through Dymond Modelsports of Oshkosh, WI. The plane features a Speed 480 motor with Gunther flexible prop. The motor is wired back wards to be a pusher, and the prop is also reversed to achieve the most efficiency. Another intriguing feature is the live front canard which acts as the elevator, allowing the rear ailerons to just be ailerons and not elevons. This saves one servo and eliminates the requirement of employing a computer radio.

Wingspan and length are each approximately 31", and the all-up weight turned out to be 18.5 oz with an 8x1000 mAh NiMH battery pack. Once trimmed out and properly balanced, the FOXBAT is an excel lent flyer.

All the major subassemblies are bonded together with either white glue or epoxy (don't be tempted to use other adhesives as I started to....they melt the foam). The molded fuse has nice places for servos, motor, radio Rx, speed control, and flight battery. But, exactly where you locate these items is another question, because with the motor mounted in the rear as shown on the plans, the plane cannot be balanced no matter where you locate the flight battery! This is a problem. The solution was found in an article I read in the October 2001 issue of Electric Flight International magazine, where a British flyer named Steve Webb accidentally stumbled upon the phenomenon of the stable extended prop shaft. Under the right conditions you can add an extended prop shaft to the motor and, without bearings of any kind, the prop shaft will stay completely stable (no wobble at all) at normal motor speeds.

Mechanically, I simply CA'd the brass extension shaft to the motor on one end and to a short hunk of wire (same diameter as motor shaft) on the other end. Worked fine. When the motor starts and stops there is a very short transient period (perhaps 0.1 sec) where the shaft wobbles momentarily.

For stability during this transient period I "constrained" the shaft inside a 1/2" plastic ring.



I had to move the motor 6" forward from the specified rear mounting position to have any hope of balancing the model, and with the flight battery all the way forward in it's obvious mounting slot, only 1/2 oz of lead was required in the nose to achieve correct balance.

The Rx and speed control are buried in the belly of the fuse, one on top of the other, and layers of aluminum foil were laid to try and eliminate any RF interactions among the parts. Finally, I ignored the plan of laying the Rx antenna in slots molded in the underside of the wings, and instead routed it a little through the forward fuse before exiting up to the tip of one of the tail fins. Several of us in the Condors had had "range" problems with a similar popular foam ARF that we concluded were most likely due to improper antenna placement. That's another story, and if I ever do find that model in the rattlesn akeinfested bamboo downwind of our field, I will do further tests!

From experience with a similar moveable -canard model I was somewhat skeptical of how the canards would perform on the FOXBAT. But I needn't have worried, as the first flight at the model field of Edwards AFB on Feb 21 went without a hitch.

Once trimmed, and adding some exponential to the overly sensitive ailerons, the FOXBAT flew like the Russian supersonic fighter of its namesake. Beautiful against the clear winter sky of the high Ca lifornia desert. Since this is a hand-launched model it's best to land it on grass, but the hard lakebed surface at Edwards hardly added a pimple to this smooth flyer. This is the best \$59 kit you will find anywhere....get one for yourself!

(Sure looks like the Firebat presented earlier. KM)



X-250 Comment & Schottky Diode From: John Konstantakatos jkon@otenet.gr

Hello Ken.

I flew the modified X-250 with semi-symmetrical airfoil, and dihedral (aileron version). 100% improvement over the standard wing. Inverted flight is now as easy as right side up. A young modeler took controls of it and said its the easiest model he has flown.

I have a question please. What is the use of schottky diode applied across a motor's terminals?

Thank you Best regards John

A diode is a two-terminal electronic device that permits current flow mostly in only one direction. Most diodes are semiconductor devices. A diode has a low resistance to electric current in one direction and a high resistance to it in the reverse direction. Its purpose is to keep any electricity generated by the motor, yes it generates as well as uses electricity, from feeding back into the speed controller and damagi ng it. Some controllers have them built in, or with some of the smaller or less expensive ones, they require the user to install it across the motor terminals.

More on Flight Logs

From: Ray Fontainevze 3nwt7@verizon.net

There is a flight logbook at: http://www.lammers.ca/FlightLog/ Perhaps it is the one Edward Russell was looking for. Thanks for the Ampeer. Just great.

New Product Announcement - The Ultimate BEC

From: Jeff Meyers jsmeyers@earthlink.net

Hi Ken,

I just wanted to let you know about our new product, "The Ultimate BEC."

The "UBEC" is used in any application where a speed control cannot supply a BEC function. The beauty of this product is that it only weighs 20 grams! That is much less than a flight pack and does not have to be recharged.

Here's some info on my website: http://www.koolflightsystems.com/ultimatebec.htm

Best Regards, Jeff Meyers

This is a very interesting product, and I encourage you to visit the site to check out the possibilities. KM



P47N

From: Walter Thyng docwt@lightfirst.com

After a long tale of woes including changing positions, the P47 has flown.

Here's the info:

Top Flight Gold Edition P47 modified to "N" standards by stretching the wing three inches at the root, squaring the wing tips, adding the bubble canopy and the unique rounded dorsal fin. Power is a MaxNeo geared 3.53/1 on 21 cells using a 14/10 prop (APCe and Zinger so far) 34 amps static; weight ready to fly 10.5 lbs. Robart retracts. Color scheme is based on my cousin's



(Col. Harrisont R. Thyng) command plane based on Ie Shima in 1945 (413th FG, squadron and section unknown)

Flight summary.

Take off is much better with flaps (don't ask me how I learned that!). Roll on short grass was about 75', climb out was scale like at about a 30 degree angle. The only trim correction needed was a substantial amount of down elevator (tests suggest a slightly rearward c/g and a need for down thrust on the motor). Once speed was built up it appears that e-calc was right on. Nice big round loops were possible from level flight. Rolls were a sight to see --- perfectly scale-like.

Slip-essing into a strafing run produced considerable speed build up (again, very scale-like). Control throws as per the plans seemed right on for my style of flying.

Unfortunately, I can't say much about landings except that full flaps are VERY effective and you can't go around with them deployed and you need to keep the nose down and build up speed after you suck'em back up (again, don't ask me how I know!). Unfortunately a retract hung up (I forgot to cycle them after the first flight) and I had to make a belly landing. E verything went fine until I heard a thump and saw the wing and fuse part company. When I got to the plane (in the weeds, actually swamp) the wing was undamaged, but something had karate-chopped the fuse just behind the canopy cutting it nearly in half. Repairs will be relatively simple and this great flying bird will be back in the air in about a week.

I'm very pleased with this conversion. I'm sure that after repairs and some fine tuning, it will be one of my favorites.

I'm new at sending photos, but I'll make an effort. Let me know if you need something different for the Ampeer.

The pilot figure is from Acadian R/C. I call him "Stumpy" as I had to shorten his lower legs to get the position I wanted. The all-up weight with parachute is very light!

Airplane Ratings

From: Charles Varvaro crv1944@email.com

Hi Ken,

Just found the EFO web site. I'll be back often. Here's some notes on a planes I have for your Airplane Ratings.

Plane: Aveox EMBAT

4 stars

Kit purchased from Aveox

Type: sport

w/s 48" Airfoil: SD 7003 All up weight: 52 oz. wing loading: 25 oz sq ft

Power system: Aveox 1406/3 brushless motor with Aveox controller, 3:1 in line Dymond gearbox. Total

weight of motor and box 10 oz.

Prop: Master Air Screw 15 x 12 folding prop cut down to 11" with a yoke that adds an extra 5 degrees of pitch.

Battery: Sanyo 2400 mAh 12 cells with sermos

connectors

Receiver: Hitec Super Slim 7 channel using 4 channels with 4 Hitec HS-81 servos

With this set-up the EMBAT goes over 85 MPH during 5 to 6 minute flights with unlimited vertical. Very aerobatic, but doesn't track quite like an Electrostreak or pattern plane. Reflexing ailerons up during landings helps a lot or you will need lots of room without a good headwind.

Construction is pretty straight forward conventional with built-up balsa and it goes fast.

Plane: ESO Speed by JR Models

Four Stars Rating

Type: Hotliner Motor Glider Sold by Dymond Model Sports

82" w/s with SD 7003 airfoil 560 sq in

Loading: 11 oz sq ft All up weight: 62 oz.

Motor: Jeti Phasor 30/3 Sensorless Brushless Motor

weight 7.8 oz.

Controller: Jeti 40-3P weight 1 oz for current to 40

Amps, 6 to 12 cells, and BEC Battery: 10 cell Sanyo 1300 mAh

Direct Drive Prop: Aero-naut 10 x 6.5 folding Hitec SuperSlim 7 ch receiver Wt. .81 oz using 3

channels

Servos: 3 Dymond DX200 MG weight 0.8 oz

This ARF hotliner sailplane has a fiberglass fuselage and a very strong obechi over foam one piece wing with a reinforced spar. It will climb at a 75 degree angle to a speck in the sky in about 15 seconds. From that altitude it is a thrill to split S towards the ground at 100 MPH plus speeds and use the stored-up energy to do power-off loops and rolls. The motor/battery combination is good for 5 climbs. This plane also makes a very fast slope soarer in winds over 20 MPH. It will only thermal in strong lift.

Construction consists of mounting the horizontal stab above the T-tail, drilling the bolt holes in the wing, and installing the motor, controller, receiver and servos. This can be done in a few hours.

Multiplex Combat Pico-Jet ARF

Rating: 4 stars

Type: sport w/s: 35"

Motor: Pusher Speed 400 reverse rotation direct drive

included in kit

Battery: 1100 mAh Nickel Metal Hydride 8 cell

Prop: 4.9 x 4.3 included in kit

Controller: Dymond D50 for 6 - 12 cells with BEC rated 50 Amps (overkill for this motor, but I didn't have any

other use for it) with brake disabled

Receiver: Hitec Super Micro 555 5 channel using 3

channels with elevon mixer

Servos: 2 Hitec HS-60 Super Micro

This inexpensive, fast, durable, easy to build, maneuverable model turns heads at the field. The prop has a great buzzing sound that just adds to the models appeal. My only problem is that the press-on props tend to fall off after a while. Get the combat version of this plane with more flexible foam. The non-combat plane tends to crack, especially in the nose area, after hard landings.

Just a brief suggestion. I would like to see the date when the rating was submitted by an individual. I was tempted to email my experiences with their planes to the reviewers to compare notes, but wouldn't if the review has been posted for a while.

(Great idea. Thanks. KM)

Concerning Serial Packs

From: Rob Zinck robonline@cyberus.ca

Hi Ken,

That was a good article and very clear (*April 2002 Ampeer KM*). The one thing that might have made it better would be to mention that instead of plugging a black and red connector together, it is more correct to use

a short piece of yellow wire (same gage) with yellow Sermos connectors on it. Then use it to connect the two packs together. That allows the rule "Never plug a black connector into a red one" rule to hold true. Also it's a very visible reminder that there is a special connection here

(Thanks Rob. Nice tip. KM)

VTOL Electric Ducted Fan Model Nears Completion

From: Andrew Watson docwatson@awatson1.fsnet.co.uk

Hello Ken,

You may remember I mentioned that I was attempting to build an EDF VTOL scale model of the Boeing X32b Joint Strike Fighter. Well....

After getting about 50% of the X32b built the US Dept of Defence announced that the Lockheed X35 won the contract and so I had to start from scratch again. I used the X32b frame to test the integrity of the fans and basic control unit which worked well and gave a 'scary' amount of thrust.

I have now redesigned the X35b (hover variant) and have attached a picture of the Lockheed plane to give you an idea of how it will look.



The numbers go as follows... 3 x 86 mm diameter 6 bladed fans (Wemotec HW620's) run by Plettenberg brushless HP220/30 A3 S P4 mot ors. Each motor can handle 1KW+ pity the cells cannot. Cells are 24 x 2400mAh matched and zapped AUW expected to be 9 lb. Current draw - 75A (25A from each motor) Duration at hover approximately 2 minutes

The model includes 3 pizo gyros for control of the 3 axis, pneumatic micro spring air retracts with scale sequenced UC doors. Working scale hatches for hover mode, and a really neat way to hide the 2 rear fans from view when hovering.

I will attempt to finish the model over the Easter break and let you know how I get on with the initial hover testing. \$2000 of kit (at least) so don't rush me.

My URL www.awatson1.fsnet.co.uk
Dr Andrew H. Watson – Plymouth UK
P.S. I'm actually wearing my MSU t-shirt which I got
after staying there for a few months while doing my pHd.

Lansing isn't it? (*You bet. Only 1 hour west of here. KM*) I was there in September and October. Overnight the weather dropped about 25 degrees C, sunburn to frostbite....geezze!



R/C Electric Powered Interactive Update From: Robert Riggle Jr. webmaster@rcepi.com

Hi,

I now have kits and plans of my lates t creation I call the Electro-Star 600. This is a redesign of the Electro-Star 15. After a lot of thinking of new ways of lightn ing this plane up, I was able to cut 8 oz from the original weight of 72 oz.

Electro-Star 600 Specs: Wing Span: 62 in. Wing Area: 1129 sq. in. Flying Weight: 60 - 72 oz

Power: Speed 600 or Magnetic Mayhem with 3:1 or 3.5:1 Gearbox and 12x6 APC

Electric Prop.

Cells: 8 - 10 (Enough room for 12 Sub Cs)

Wing Loading: 7.65 oz. Sq. ft. Airfoil: Modified Clark Y Radio: 4 - 7 channel

You can buy the Electro-Star kit or plans on my Online Store on www.rcepi.com

Members can download the plans free at http://www.rcepi.com/members_login.html

If you are not a member and would like to sign up go to http://www.rcepi.com/members_login.htm l

Robert Riggle Jr R/C Electric Powered Interactive www.rcepi.com

Aircraft Covering Material

From: Merle Davies mp_davies@yahoo.com

Hi Builders and Flyers,

Wish to share another bit of information which some have...some have not. (*Sorry, I don't know where Merle got this info. KM*)

Cove	ring	Ma	tarial	hne	Tte	Weigh	ŧ
COV	311119	IVIA	teriai	ana	HIS	weign	I.

manufacturer	product	g/m2
Indoor Model Supply	y Polimicro	1.3
WES-Technik Gmbl	H 2um clear mylar	2.2
WES-Technik Gmbl	H 2um aluminized myla	r 2.6
Indoor Model Supply	y .012 oz cond. Paper	3.7
Risteen Ass. Ltd	3um MicroLite	6 to 9
Indoor Model Suppl	y .020 oz cond. paper	6.1
WES-Technik Gmbl	H 4um aluminized myla	r 6.8
WES-Technik Gmbl	H 5um clear mylar	7.0
Risteen Ass. Ltd	5um MicroLite	10 to 15
Sig Mfg. Co.	light silkspan	12
Esaki	Jap tissue (Lite Flite)	12
Dow Chemical Co	Saran Wrap (R)	20
Solarfilm/Nelson	SoLITE (LiteFILM)	20
Sig Mfg. Co.	heavy silkspan	21
Coverite	clear Micafilm	22
Solarfilm	Airspan	23
Klaus Salzer	standard Polyspan	25
Coverite	CoverLite	28
Solarfilm	Litespan	29
Coverite	colored Micafilm	35
Solarfilm	standard Solarfilm	42
TopFlite	transparent MonoKote	57
TopFlite	opaque MonoKote	75

I checked the Web trying to find this table, but couldn't. It seems correct, as I have some of these numbers already. For those of us not on the metric system: to find the number of ounces per sq.ft. divide the weight in grams from above by 305. If you want ounces per sq.yd., divide by 33.9.

For example opaque MonoKote is 75g/sq.m 75 / 305 = 0.2459 oz./sq.ft. or 75 / 33.9 = 2.21 oz./sq. yd.

You can use this information to predict the weight of the covering on a model. For the covering weight using oz./sq.ft., figure the surface area of the model – TigerShark about 11.5 sq.ft. Monokote covered: 11.5 * 0.2459 = 2.83 oz. in weight for the covering material. MicaFilm = 11.5 * 0.115 = 1.32 oz. in covering material. KM

Up Coming Events

- **June 29** Kingston Electric Fun Fly Southern Ontario, location and directions available online at www.emfso.org
- **July 13 & 14** Mid-America Electric Flies, location Midwest R/C society 5 Mi. Rd. flying field, Northville Township, MI (Near Plymouth, MI) Flyer 2002, Hotel list & map, for more information, call Ken Myers 248.669.8124 or email Ken
- **July 13** Rideau R/C Flyers Electric Fun Fly Southern Ontario, location and directions available online at www.emfso.org
- **July 20** 3rd annual Bluegrass Electric Fly in Lexington, KY Field located about 5 minutes east of the I-75 / I-64 intersection in Lexington, KY. See the events section at our club web page at www.lmacky.org for directions and updated information.
- July 20 & 21 The Voltaires of Central New York 13th Annual Electric Fun Fly Grenadiers field at Caughdenoy New York, about 12 miles north of Syracuse. This is one of the biggest all electric events in the Northeast and draws from Ontario and Quebec as well. Camping is available on site. Lots of grass and a 150' paved runway. The field will be open on Friday evening for early arrivers. Flyers with maps to the site are available. Contact Garret Wikoff 315-695-4271 or wikoff@attglobal.net.

- Tentative Aug. 3 WMAA Electric Fly-in, (Westerville, Ohio, just outside of Columbus), second electric only fun fly, contact Kevin Petrilla petrilla.3@osu.edu Web site: www.wmaa-wags.org
- **August 17** George Ball Memorial Electric Fun Fly Southern Ontario, location and directions available online at www.emfso.org
- **August 24** Propstoppers Electric Fun Fly, Delaware County, Pennsylvania, just south of Philadelphia. Easily accessed from F95. Details will be posted as they develop at www.propstoppersorg Dave Harding, 610-872-1457 davejean1@comcast.net
- **Sept. 7 & 8** E-FLI-OWA, Seven Cities Sod Farm Junction of I-80 and Iowa 130 details and map at www.rc-dymond.com/efliowa information: Jon McVay phone: 319-895-6527 or Togflier@AOL. com
- **Sept. 9** Ron Kirk Memorial Electric Fun Fly, presented by the Clarence Sailplane Society of Western New York Held at the Erie Community College South Campus, contact: Lyn Perry (716) 655-0775 or e-mail Lyn
- **Sept. 13, 14 & 15** NEAT Fair, Downsville, NY NY Tom Hunt CD www.neatfair.org, or email for info neatfair@optonline.net
- Oct. 5 & 6 DEAF 16th Annual Annual DEAF Fly, Dallas, TX Sponsored by the Dallas Electric Aircraft Fliers at the Dallas R/C



The Ampeer/Ken Myers 1911 Bradshaw Ct. Walled Lake, MI 48390 http://members.aol.com/KMyersEFO

The Next Meeting: Mid-Am!

Date: Saturday, July 13 & 14, 2002 Time: 8:00 A.M.

Midwest R/C Flying Field, 5 Mi. Rd.

Northville Twp., Mi – between Ridge & Naiper