

Ampeer

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The Next Meeting:
Date: Thursday, July 2 Time: 7:00 or earlier
Rushton Rd. Flying Field, South Lyon, MI

Sanyo Limit

from Randy Farrell email: csr@castlenet.com

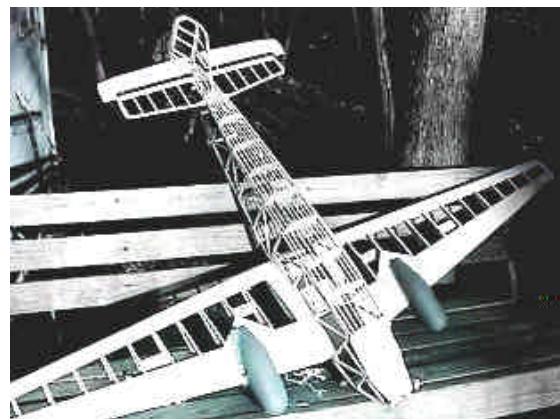
The Sanyo Limit is a RTF polyhedral, t-tail, glass fuselage, mid-performance electric glider. In this particular version I run an Aveox F12LMR brushless motor, 14.5-10.5 Robbe carbon folder, 10-1000SCR Sanyo battery pack with an Aveox FLV controller. The wing area is approximately 490 sq.in. and 58 oz. total weight. I find the performance astonishing for a large 10 cell glider. Climb rate is approximately 3400 fpm and about 40mph vertical. The wing area provides for excellent thermal performance, even in marginal low level lift. This is an elevator-aileron ship and provides a most foolproof hands-off control when in level flight. The aileron setup provides for reflexing for airbrakes, but with the 14.5-10.5 prop a low rpm throttle setting slows the plane down significantly, resulting in slow speed landings with no detectable stall tendencies. This plane is a great aileron glider trainer in my opinion and with the previously mentioned power plant, makes for an enjoyable fly-expert or novice. The pricing of

the Sanyo Limit is another drawing card. It is available at under \$250 dollars RTF less drivetrain. I give this plane four stars (****) for above average overall performance and low price.

Another version I run often is a 14-1000cell scr pack and 12.5-10 Aeronaut carbon folder with no other changes. This ups the performance threshold to 90mph-level flight, 50mph vertical and approximately 4300fpm climb rate.

JU52

Ashley Davis email: Ashley-Davis@buildermarts.com



What's in this issue?

Sanyo Limit - Ju52 - Verti-Go - For Whatt it's Worth - Aberle Editorial - Let's Try An EDF - Amptique Rating - Another Ju-52 - Peeper Rating - LeCrate info and rating - Hots rating - Electra rating - Cloud Dancer info - another Electra rating - June Meeting - Mid-America Electric Flies info - upcoming events

Thanks for your help earlier. I decided on 2.5:1 reduction for 3 Kyosho AP36 motors. Progress so far is pictured.

I discovered that I need a 21 cell charger - I have 8 cell (New ASTRO114D) and controller (AiRob.FX35). Love to sell/trade if you have contacts.

(You might want to contact Ashley about his charger and speed controller. I also would like to mention, as Keith Shaw and I have pointed out, year after year, buy right, buy once. Folks, get a charger that will charge 1-30+ cells the first time out! You won't regret it. km)



Verti-Go Rating and Review

from David Segal 76641.2074@compuserve.com

I have just done the first flights on the Verti -Go and it is a lovely trainer. I would give it *****.

Verti-Go

Available from Pat's Custom Models
10313 Snowheights Blvd. N.E.
Albuquerque, NM 87112

Plans sell for \$19.95 or semi-kit for \$39.95 plus \$5 postage. Built-up planes also available. The Semi-kit includes machine cut wing ribs, dihedral braces, fuselage formers and shaped LG wires.

Very good instructions and clear plans. Simple stick construction. I reinforced wing with 1-1/2 spruce spars, instead of all balsa spars, plus gussets added at TE of each rib. I made a hatch under motor compartment and added a small fairing at the top of cabin to fit the windscreen more easily.

I spent about \$15 for sheetwood and sticks not included in semi-kit.

Span: 60", **Wing area:** 600 sq.in., **Weight:** 58 oz., **wing loading:** 13.9 oz./sq.ft., **motor:** Kyosho reverse Magnetic Mayhem truck motor with Leisure 3.0:1 gearbox, **Prop:** Master Airscrew electric 11x7 prop. **Cells:** 10x2000 mah pack. **ESC:** Flightec SP with BEC **Receiver/servos:** RCD 535 receiver, Tower TS-10 micro servos **Covered** with Ultracote

There is plenty of power for takeoff with steep climbout. It cruises at 1/2 throttle and is very steady and easy to fly. Test flights were 8 to 9 minutes with power remaining after landing. Landings require very long approaches, as it just floats.

I have always found it difficult to read the amps in a static test as the digits start dropping as soon as the meter gives a reading. But the initial burst was 29 amps dropping quickly from there. Half throttle is probably about 12-13 amps.

One small problem with this motor is that the brush end of the motor shaft does not protrude past the end of the motor. In order to press on the pinion I had to take a small wood block and put a small nail with some washers under it to reach the shaft end without damaging the back of the motor. This worked fine.

Takeoff with the Verti-Go startled me. As soon as it cleared the grass it went up at a steeper angle than anything else I have flown. The plans called for a Master Airscrew power package with a geared can motor. I had thought of using an Astro motor but Anthony Assetto recommended the Kyosho motor which Bob Kopski has written about a couple of times. I think this is a great trainer and sport flyer.

Regards, Dave (Keystone Radio Club)

For Watt It's Worth:

Ken Myers

While reading the March '98 R/C Report cover to cover, I noticed an engine review for the O.S. 25FP. The prop data for Zinger wood props looks like this:

Prop	RPM	Thrust (in. oz.)
8x5	14,100	38
8x6	12,600	32
9x4	13,000	50
9x5	12,500	45

9x6	10,900	43
10x4	11,100	55
10x5	10,000	50
10x6	8,900	44

The AF035 geared 2.93:1 (MA 3:1 unit) on ten cells, used in the TigerShark, spins a Zinger 10x6 at 8,950+ rpm, measured using a NorCal AccuTach. Is the AF035, geared as above, an O.S. .25FP? YES! It is that simple!

The O.S. 25FP w/muffer weighs 9.1 oz., 4 oz. of fuel weighs about 4.4 oz., the tank and lines about 1 oz. for a total of 14.5 oz. The AF035 w/MA 3:1 weighs 6.8 oz. and 10 1700SCRC cells weigh 21 oz. for a total of 27.8 oz. The difference is 13.3 ounces, which sounds like a lot, but... These systems are generally used in an approximately 4 50 sq.in. sport/trainer plane. The wing loading for the electric increases by about 4.256 oz./sq.ft., which generally, isn't too bad on a sport model of this size. This doesn't take into account the building differences on these size planes between glow and electric. It is easy to reduce the airframe weight by 8 ounces or more on this size sport plane with good building techniques! Then the difference is only 5.3 ounces, or 1.696 oz. per sq.ft., which is hardly noticeable at all in the flight characteristics of this size aircraft!

Time for a Change?

The following is a copy of a letter that Bob Aberle sent to me, after he'd sent it to George Myers, to be published in Silents Please. With the E-Nats just around the corner, it is time to take a serious look at the competition side of e-flight. For your consideration:

BOB ABERLE
33 FALCON DRIVE
HAUPPAUGE, NY 11788-1204
(516) 724-7517 (phone/FAX)

March 2, 1998

Silents Please Newsletter (SEFLI)

Dear George,

I would like to ask if the SEFLI Newsletter might be willing to publish a suggestion of mine that involves a subject which will become more critical as NEAC and the E-NATS grows in size and popularity. The subject will undoubtedly be perceived as controversial, but it is something that must be aired, discussed and decided upon for our future. NEAC will have a new president by the time of the E-NATS in Muncie this August. At that time I expect to make a formal proposal of this same material. I didn't feel it was fair to stick current President Doug Ward with this controversial proposal just as he is leaving office.

Proposal to NEAC Members and to those who participate at the AMA ENATS.

Up until the present time E-NATS type endurance events have been classified by motor run duration (30, 45, 60 & 90 seconds), by numbers of battery cells (up to 7 cells or more than 7 cells or up to 600 MAH capacity in the case of electric Texaco) and by type of model (sailplane or old timer). What we have not specified is the type of electric motor. It was apparent at the 1997 E-NATS that most of the big winners in the electric sailplane categories were flying brushless motor systems. These systems cost almost twice that of the best conventional brush motor systems. If we don't alter the rules in the near future the E-NATS endurance events could be dominated by those who can best afford the equipment.

My feeling is that we should work towards establishing motor classes so as to separate expensive brushless motors from the less expensive brush motors. A second alternative might be to add additional motor run time to brush motor users as an offset to the efficient and expensive brushless motors. Something like 35 & 50 seconds leaving brushless motor users at 30 and 45 seconds (for the A & B events as an example). A third idea would simply be to leave the sailplane events as open to all motors, but restrict the old timer events to brush motors only.

So there you have it, three variants of the same theme. Do we have any comments? Best place for a discussion might be on the E Digest. In the near future NEAC hopes to be on its own website.

Bob Aberle NEAC V.P.

What do you all think? km

From the Pages of:

Electric Flight UK

edited by: Gordon Tarling
 87 Cowley Mill Road, Uxbridge,
 Middx UB8 2QD

gtarling@ndirect.co.uk

LET'S TRY AN E.D.F.

David Jowers

via EFUK, Winter 1997

Never having tried a Ducted Fan powered model before, though intrigued by the concept and inspired by the I.C. powered versions, I thought it about time to experiment. The practicalities of noise, mess, vibration and hard runways required by the I.C. machines had previously put me off. If something came along that was quiet, clean and could be hand launched to suit my small grass flying field, then we just had to give it a go. Thus, it came to pass that I

spied in EFI magazine a simple to build, electric powered ducted fan, (E.D.F.), that utilised the easily obtainable Morley Fan unit.

The model was an all balsa, semi-scale Henschel Hs132, (a WW2 early jet dive bomber), with the motor in a pod on top of the fuselage, exhausting between twin fins, not unlike the Heinkel Hel62 Salamander.

A plan was obtained from Traplet (No. MW2575) which showed the model to be easy to construct, giving a wingspan of 47 inches, (1200 mm) and a flying weight of around 3 pounds. Wings were all built-up, sheeted in 1/16 in. balsa, with the fuselage a box of 3/32 in. with triangular corner reinforcement. Fins and tailplane were all 1/8 in. sheet. (Finish was tissue/dope/brushed enamel). The only difficult part proved to be the shroud for the fan. This was carved and sanded by hand from pink foam, finished with a coating of 5P113 resin. I was going to actually buy some foam, but a friend came to the rescue and handed me a piece he retrieved literally from the middle of the road, that had fallen off the back of a lorry. Very cost effective. (It still had the tyre marks on it, slightly squashed but useable). Controls were to be aileron and elevator, with throttle control for the motor. To help keep the weight down, two micro servos were used with a BEG speed controller.

I realised early on from reading many articles on EDF models that weight control was the key for a good performance and this was duly exercised throughout. However, despite my best efforts, the Hs132 ended up quite a bit tail heavy, unforgivable for an electric model, requiring 6 ounces of lead in the nose for a correct CG balance. The short nose, twin fins and motor behind the CG were not working in my favour, coupled with a rearward battery location. Everything was installed as per plan but to my great annoyance the battery was not in the best position, as it sat way back in its own Liteply cradle, designed for easy access and ejection via the cockpit. Before I ripped out the innards to re-position the battery in a more forward location I had a try at flying her, at a flying weight of 3 lb. 8 oz.

The motor fitted to the Morley Fan was a Kyo sho Mega, 2 x 18T, initially run on 7 x Sanyo 1700SCR. By suspending the plane by its tail from a spring balance and giving full throttle, the weight increase gave an approximate thrust of 350 gm. A little down on the theoretical 400 gm. available from the Morley.

As expected, all I could achieve was an extended flat powered glide, to belly flop some 50 metres away.

By removing the Liteply cradle and the large lump of lead, I re-positioned the battery fully forward to stand vertically on the floor, up against the nose, wedged in with foam under the canopy hatch. This immediately lost some 5

ounces, though still requiring a little lead using 7 cells. Flying this time proved a bit better, able to fly a low flat circuit but not climb at all.

Next, I removed the 7 cell pack plus nose weight and substituted a pack of elderly 8 x 1800SCR cells, to obtain a perfect balance, giving an all-up weight, as good as it ever will be of, 3 lb. 21/2 oz. With the eight cell pack the thrust was now approaching 380 gm. And, at the reduced weight, flying should improve a lot.

At last she flew quite well and was able to climb. With very careful handling she could be coaxed to at least tree height, proving very stable and capable of tight turns, though all manoeuvres were, by necessity, of the flat variety. Speed was not great but the low speed handling very impressive and forgiving.

We were now starting to get somewhere with the flying performance and I was starting to get hooked on electric ducted fans and beginning to establish some parameters.

The Kyosho motor is a nice ballraced motor with replaceable brushes, I picked mine up second hand for £10 from a friend. He found it overpowered his model boat somewhat, which spent more time out of the water than in, flying from crest to crest. I am still unsure what the voltage range data for it is. It was not until I read the instruction sheet that I belatedly twigged that I could adjust the timing of the motor. This gave a small improvement to the thrust, now approaching 390 gm. and very close to the theoretical maximum for the Morley Fan. With the fan/motor giving as much thrust as I could coax from it on 8 x 1800SCR Sanyo cells, there was not much more I could do for my all up weight of 3 lb. 21/2 oz.

The flying performance gave an easy hand launch but a non-spectacular climb, so vertical manoeuvres were not possible, due to the low power/weight ratio, more like a powered glider. Duration has been around three to four minutes. However, the Hs-132 has provided me with some valuable data for the future and given me some good incentive to pursue electric ducted fans further. She looks marvellous in the air and has that characteristic whistle sound of the early centrifugal jet engines, especially at part throttle. An anomaly I have found is that the Morley Fan on the Hs-132 performs better at two-thirds throttle than at full, though I am not sure why? The inlet is clear with no long ducts.

As an experiment, and a cost effective one at that, the Henschel Hs 132 has been a success. Although expecting it, I was disappointed at the lack of aerobatic performance but we were limited by the design/fan constraints. I would greatly appreciate any tips from experienced EDF flyers on how to improve the existing setup if possible. Otherwise a more powerful or better suited motor, different fan or more

cells will have to be investigated, which would probably mean considerable outlay. Testing can be an expensive exercise.

I really enjoyed finding out about Electric Ducted Fans through practical experience and have to admit that I am now hooked. (The era of the fifties and sixties jet prototypes are giving me ideas). I shall never forget that first successful flight as she flew majestically by, with that delightful jet whistle of a bygone era. Great!

Data

Model:	Henschel Hs132, (semi-scale), Traplet plan, MW2575.
Construction:	Balsa, built-up
Finish:	Dope/Lightweight Tissue/Brushed Humbrol Enamel
Flying Weight:	3 lb. 21/2 oz. (Fus: 14oz ; Battery - 17 1/2 oz Wing + Motor/ Fan: 19oz.)
Fan:	Morley Jet Elec
Motor:	Kyosho Mega, 2 x 18W
Cells:	8 x Sanyo 1800SC
RServos:	2 x Hitec H580 Micro
Speed Controller:	Multiplex 40 Amp BEG
Receiver:	Futaba FPR138DF



Amptique Rating

Dereck Woodward email:woodwadd@erols.com

My latest - a Three Star rating *** for Spirit of Yesteryear's "Amptique". Built to teach Sue, my wife, to fly. Lightweight and simple all wood model is easy to build but watch for wing warps in that light structure. No problems getting the RC gear in, I moved the rudder and elevator servos aft of the wing to free up room for 7 x 1700 cells - plan shows 800's. A can motor and Leisure gearbox with 3.6:1 ratio and an 11 x 7 Master Airscrew nylon prop provide the sniff of power it needs to fly for 15 to 20 minutes flights on power. Easily controlled, satisfying to fly, recovers well from odd attitudes. If the plan was updated to show modern standards of equipment I'd give it four stars - there's more than a novice should have to figure out as it is.

Very good value for money.

Regards, Dereck

(Who has just got his MaxCim brushless - now let's really rock and roll quietly!)

Another Graupner Ju-52

Dr. Walter I. Thyng email: docwt@worldpath.net

I finally got to test fly one of my winter projects: a Graupner JU 52 semi-scale kit. Wing span is 59". Mine came in 4 oz under the claimed flying weight which I think was 56oz, so mine weighed 52 oz. Motors were from the kit provided by Graupner: 7.2v S 400s and 6/3 scale props. Battery was 7/1700. ESC was from New Creations R/C and included BEC. Servos were 4 TS 11s. I added flaps because almost all the parts were there in spite of the plans saying they weren't.

This bird flew right off the board -- no a single click of adjustment! Amazing as it was difficult to build due to poor wood, extremely brief instructions and hard to read plans.

Covering is aluminum Monokote. Decals were stock as provided.

Take-offs were authoritative, but scale-like. This is no rocket ship. All recommended settings were dead on. Stalls were straight ahead and gentle. Just add power and fly out. Loops required a slight dive. Rolls require a strong heart (will try increasing throw), but they aren't scale anyway. Spins required both rudder and ailerons (as did rolls) and stopped instantly when controls were neutralized. They looked like the JU 52 had just met an Allied fighter and was on the way down! Landings were rock solid with or without flaps, but the flaps made a dramatic difference in angle of descent and approach speed. They really work!

This plane requires a hard surface runway. I can't imagine it getting up out of any grass longer than a golf green. They say you can hand launch it. You try. I wouldn't!

The sound of those three motors on a low, close and slow fly-by is awesome. This will make a nice "cool my jets" bird for after I've flown the Corsair or my "Electra-Hog" (just a hint about my next test once I get the pics taken).

Because of the negatives mentioned above the best I can give this kit is ***.

Peeper Rating

Steve Gurley, Mesa Electric Silent Aviators
email: kj7wk@ix.netcom.com

Airplane: Northeast Sailplanes Peeper

Rating: ****

Comments: The airplane comes with a nice glass fuselage, along with wings and empennage which are nicely finished

with glass/carbon, and completely finished except for cutting out the elevator and ailerons. Aileron servos fit into carefully cut holes in the bottom of the wing on each side. The aileron and elevator "hinges" are Clear Scotch Brand tape. This plane flies nicely without a rudder control. The assembly instructions are clear and easy to understand except that the CG indicated didn't work out. I found the CG to be quite a bit further forward of the balance point indicated.

The little (15oz. all up including battery pack) plane uses a 6V SP400 motor with 7, N-500AR cells. I built packs using three double, end to end cells with the seventh cell mounted across one end of the pack. It looks like a triangle of double cells with one on the base of the triangle on one end. A Jeti 20 amp ESC is used to regulate the speed.

After the first flight, I painted a large area of the wingtips with a fluorescent red paint because this little rocket can go "Stealth" in just a few seconds against a cloudy sky.

I get 2.5 to 4 minutes of flight time depending on how much throttle is used during the flight.

Since we fly off a dirt desert flying site much of the time, I found that a small strip of bathtub anti-slip along the bottom of the fuselage, protects it nicely. I thought it would be too heavy, but it turned out to be only a few grams of added weight and well worth it for the protection it affords. The Peeper is about 24" long and has a 39" wingspan. The wing is very thin and slips through the air allowing for a pretty quick flight, however it also flies very slowly --- almost to a walk and has very nice manners with no nasty tip stalls etc.

Price: Some people might think this ship is a little pricey at over \$200.00 including the motor and prop system, but if the Peeper gives me as many great flights in the future, as it has in the past, I will consider it a bargain.

LeCrate - Graupner Ju-52 - E-Hots - Electra

George Scrimshaw email: viking@redshift.com

Thought I'd send a couple of my evaluations of some of the planes since my impressions of some are at odds with those on the site, so maybe for variation.

LeCrate Rating: ***

I built a LeCrate 6-7 years ago and used a Kyosho can motor set for reverse rotation using a Kyosho gear out of an old Kyosho Zero that had bitten the dust. With an on-off Kyosho controller with BEC and using a standard receiver and servos it flies well. I have used a 6 cell 1200, a 7 cell 1200, a 7 cell 800 and both a 6 cell and a 7 cell 1400 in it

with good results. It is a gentle flier with a reasonable climb--behaving like an old time free flighter. It glides well and in proper conditions can maintain altitude in a thermal. For what it is designed it is very satisfactory and relaxing to fly. I have been surprised that the gear teeth have survived the jolts of the on-off control, but it survived the Kyosho Zero with the same set-up. I may put in a proportional control some time!

Graupner Ju-52 Rating: **

Ju52-Graupner. A nice kit but mine had problems. A number of vital, irreplaceable (in the US) parts were missing. Instructions have major gaps which are best bridged if you have a lot of kit and scratchbuilding experience. Instructions and parts supplied do not match photographs--for example only 4 ply cowl mount parts are given but photos and careful measurement of the plans show that there should be 8 pieces, or 4 double the thickness. If built with only the 4 parts the cowl mounts would be insecure. Directions on wiring the motors impossible without gluing the wires in the wing attachments unless the method is changed to obviate this. At one point you are told to place the front wing mounting dowel in place but not to glue it -- no mention is ever made of this later, so better glue it. Other gaffes would mean if you follow their directions and timing, you will build and glue several parts that will have to be torn apart to do the next step. With considerable care, reading ahead, and improvising the weird parts, it can be built. The standard 400 motors and scale props have been criticized by others, but I found them quite adequate. It took off (asphalt) in 30 feet or so and climbed at a scale angle.

Unfortunately, I had built the wing/aileron set-up as described, although I added aileron differential by separating the cable (snake) attachments to the servo wheel to give more up than down. Major problem --limited "up" available without the aileron touching the wing trailing edge. Climbed to about 50 feet and tried a gentle left turn, so far OK. Gave right aileron and rudder (you need rudder coordination for this aircraft) but instead of straightening up, the left bank steepened into a spiral into the ground--no recovery possible. I have rebuilt with changes to the ailerons but haven't had a chance to fly again. The problem was that the left "down" aileron created more drag than the right "up" aileron could counter and rudder was not sufficient to overcome it once the turn had started. This has the potential to be a nice scale-like flier, but watch out for the hidden construction and flying problems.

Electric Hots Rating: (yep, zero stars)

Built according to kit directions. Used the included motor, recommended prop and a good 7 cell battery pack. I tried several packs to make sure, discharging and testing showed them all to be good. Weight came in slightly lower than the recommended weight. Used a small receiver and small servos with an FX35 ESC. First attempted flight --full throttle resulted in a fast taxi. Hand launch resulted in a full power glide into the grass. Replaced the motor with a hotter Kyosho can motor--this gave a faster taxi. Removed the landing gear and hand launch gave a longer glide into the grass at full power. Tried various props but never got it airborne under its own power. Put it on the shelf; considered a geared motor but needed more speed, not more torque. Don't know why it won't fly with any combination of motors props etc.--others have reported good performance but I haven't been able to get any performance. Put it on the shelf.

Electra Rating ****

Built stock with the included motor and folding prop. Hand launches easily. Climbs easily at 35-40 degrees and reaches good altitude in a few minutes. I have used it mostly slope soaring and can fly with the motor off in slope lift, but can climb to good gliding altitude at least 4-5 times and have enough power to adjust landing point. Haven't tried much aerobatics, it seems heavy for looping with the standard wing. Generally a very satisfactory powered glider. Now going on 4 years without significant damage.

Cloudancer

John A. Williams email: qyetfli@home.com

The picture is of John's Cloudancer with some of the E-Zone mods. It has flown successfully with an AF25G turning a 12x8 prop on 16 cells. Very nice work.



Goldberg Electra - Another Rating
Grant Calkins email: CasinoOp@aol.com

Rating: *1/2 (3.5 stars)**

This plane is a superb motor glider. Huge wing for the size of plane, with polyhedral for extra stability coming out of turns. ROG quickly (landing gear not in plans - I added it), very stable in flight, turns well with rudder-only, but pretty susceptible to high winds. Catch a thermal and you could have 1 hr flights! My first (and 14th) plane. An excellent, fun, easy to build/easy to fly airplane!

My specs:

Motor 550 can (included, adequate), ESC is AstroFlight 217F, JR radio and servos, 7x1400 mAh flight battery, 270 mAh Rx battery, 8x4 prop with spinner (included), all-up weight 50 oz, WS 78". Elev, rudder, and ESC only. Only complaint (minor) is fuse is kind of flimsy owing to objective of low weight, and the internal arrangement could be more efficient.



June Meeting

The June meeting was held at the Rushton Rd. flying field. It was a beautiful evening for flying. Ken brought Steve Minter, from England, along. Steve got to see Richard Utkan fly his S400 powered Gentle Lady, Mike Holroyde fly his Amptique, Ernie LaBelle's Amptique fly and Ken's Eaglet 50 fly. Jeff Hauser and Jack Lemon each took a turn with Ernie's Amptique. Bob Clapp had a computer radio glitch and couldn't get his S400 motor started - odd! Good time.

For Sale:

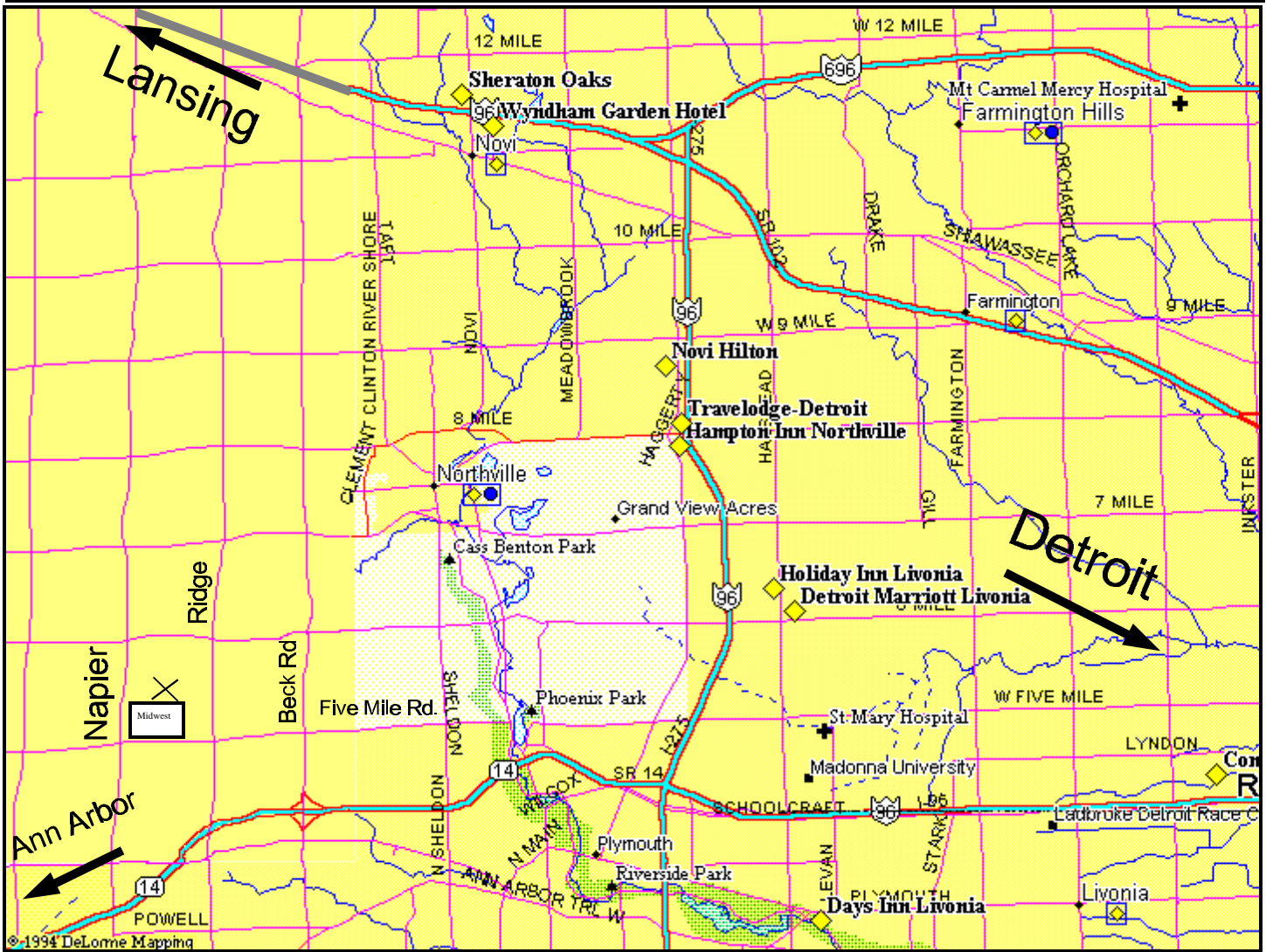
from Gordy Stahl - email: GordySoar

I have that Pou Du Ceil tandem wing complete with servos battery pack, 15 gear FAI still in good shape and a few other goodies. This is the Orange French replica, and the ship the Lazy Bee was fashioned after. I'm looking for \$150 plus shipping. Nice flier, I just am traveling too much and am focusing on TD contest flying.

Also:

I've got a bunch of 1700's, still \$2 each plus shipping Min. order 50 cells. Cash or check

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



**Mid-America Flies
Hotel List - 1998**
(note: prices NOT updated for 1998)

Rates were believed to be per night on the weekend for 2, and were the best information I could get on 11/10/96. Please call for current rates

Novi Hilton 21111 Haggerty Rd. 236 rooms 800-445-8667 248-349-4000 \$79	Sheraton Oaks 27000 Sheraton Dr. 206 rooms 248-348-5000 \$75 - \$85	Wyndham Garden Hotel 42100 Crescent Blvd. 152 rooms 800-222-4200 248-344-8800 \$64 - \$74	Hampton Inn Northville 20600 Haggerty Rd. 125 rooms 800-426-7866 313-462-1119 \$76
Travelodge Detroit 21100 Haggerty Rd. 124 rooms 800-578-7878 248-349-7400 \$55	Days Inn Livonia 36655 Plymouth Rd. 72 rooms 800-325-2525 313-427-1300	Holiday Inn Livonia 17123 Laural Park Dr. N. 225 rooms 800-465-4329 313-464-1300 \$85	Hotel Baronette 27790 Novi Rd. 149 rooms 248-349-7800 \$79

To locate the Mid-America Electric Flies flying field, site of the 1998 Mid-America Electric Flies, look on the far left side of the map, where X marks the spot near Five Mile Road and Napier. The field entrance is off of Five Mile Road. M-14 can be entered and exited via Beck Road.

Comfort Inn Livonia 29235 Buckingham Ave. 112 rooms 800-221-2222 313-458-7111 \$65 - \$95	Detroit Marriott Livonia 17100 Laural Park Dr. N. 227 rooms 800-228-9290 313-462-3100 \$72 - \$79
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Mid-America Electric Flies

AMA Sanctioned

Saturday, July 11 & Sunday, July 12 , 1998

Hosted by the:

Ann Arbor Falcons and Electric Flyers Only

Site Provided by the:

Midwest R/C Society

your Contest Directors are:

Ken Myers phone (248) 669-8124 or
KMyersEFO@aol.com

Keith Shaw (313) 973-6309

Flying both days is at the Midwest R/C Society Flying Field - 5 Mile Rd., Northville Twp., MI
(see map)

Registration: 9 A.M. both days

Flying from 10 A.M. to 5 P.M.

Gold Stickered Transmitters are REQUIRED!

All 50 frequencies will be used

Saturday's Events

All Up - Last Down
Longest Timed Flight
Best Scale
Most Beautiful
Best Multi-motor
Best Sport Plane
CD's Choice

Sunday's Events

All Up - Last Down S400 only
Longest Timed Flight S400 only
Best Scale
Most Beautiful
Best Mini-Electric
Best Ducted Fan
CD's Choice

All Planes Must Fly To Be Considered for Any Award

Night Flying Possible, Weather Permitting, Friday & Saturday Nights

Refreshments will be available at the field both days.

There will be a pot-luck picnic at the field on Saturday evening.

Come and join us for two days of fun and relaxed electric flying.

Even though this is called a contest, the purpose is fun and the enjoyment of sharing the electric experience.

Come, Look, Listen, Learn - Fly Electric - Fly the Future!

Saturday's & Sunday's Awards:

Plaques for 1st in each category

Merchandise drawing for ALL entrants

Upcoming Events:

June 27 & 28, **4th Annual Kingston Radio Control Modellers Electric Funfly** Contact: Martin Irvine (613) 389-9457 or <email:mirvine@kos.net, Kingston, Ontario, at the Yarker outside Kingston Ontario, (roughly 1/2 way between Toronto and Montreal), and an hour north of Watertown NY.

June 26, 27 & 28, **DEAF/Ezone Electric Expo & Rally**, Symposium on Friday, flying on Saturday & Sunday. contact Frank Korman (214) 327-8411/email: FSKorman@aol. or Jim Bourke (972) 680-1220/email: jbourke@ezone.com Also visit the <http://www.ezonemag.com/>

June 26th, 27th & 28th **MARCEE98** At the 3M R/C flying field. e-mail info at mlroerig@mmm.com Phone: 612-426-5018 see <http://www.isd.net/3mrcflyers/events.htm>

June 27 **Northern Connecticut RC Club 11th Annual Electric Fun Fly** - Ellington, CT - Ron Torrito, 1625 Main St., East Hartford, CT 06108 w/SASE for maps and event brochure - Email: 102127.1060@compuserve.com

June 27 and 28, **The 16th Annual Boeing Hawks/Puget**

Sound Electric Model Flyers Electric Fly-In, info: Bernard Cawley, 29838 48th Avenue South, Auburn, Washington 98001. (253) 839-9157 or e-mail: 75613.2621@compuserve.com or bernard.e.cawley@boeing.com

July 11 & 12 **Mid-America Electric Flies** (info in this issue)

July 18 and 19 **Voltaires of Central New York Tenth Annual All Electric Fun Fly** --- Grenadiers Field, Caughdenoy, NY. Contact Garret Wikoff 315-695-4271, email: wikoff@ibm.net or Gordon Wheler, 5 Old Farms Ln., Cazenovia, NY 13035.

August 2, 3, & 4 **AMA/NEAC Electric Nationals**, Muncie, IN at AMA Headquarters. Old-timer, glider and S400 competition. Contact: DWard79207@aol.com, president of NEAC

August 8 & 9 **Fort Wayne ElectriFly** contact: email: Pat-Ingrid-Mattes@Juno.com, Pat Mattes, Yoder, IN

August 15, **5th Annual SEFLI Mountain Fly-Inn**, East Dover, VT, AMA sanctioned Class A event. Fun-fly for hand launched electric models all day (and into the night!!), Class A and B electric sailplane and Class A old-timer events – contact: Tom Hunt (CD), email: THunt95147@aol.com



The Ampeer
Ken Myers
1911 Bradshaw Ct.
Walled Lake, MI 48390

**Next Meeting: Date: Thursday, July 2
Time: 7:00 or ASAP
Rushton Rd. Flying Field**