the

October 1996

Page 1

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The Next Meeting:

Date: Thursday, October 3, 1996 Dublin Community Center just N. of the village of Union Lake on Union Lake Road - 7:30 P.M.

### **Attention Newsletter Editors:**

Please do not copy Greg Gimlick's Review of the MEC Turbo 10+ from the September '96 issue of the Ampeer. It was not for public distribution, and the printing of his review was an error on my part. I am taking every precaution to see that this situation never arises again. If it is too late, and you have published it, please put the following article into your next issue.

The Ampeer will continue to remain an open source of information for you, and rest assured that ALL precautions will be taken henceforth to present only republishable material.

## **Editor: Ken Myers MADE A** MISTAKE

In the September issue, I reprinted a review of the MEC Turbo 10+. This was done without permission of the author, Greg Gimlick. It was taken from a posting to the ModelNet Forum, as stated, but I have since come to learn that these are not public statements. It

was also reprinted out of context, as it was in response to a continuing thread through the summer of 1996.

This kind of thing will never happen again in this publication!

I would like to now set the record straight on several points.

1. The MEC system works as advertised in the planes it is recommended for! That is exactly what Greg said, but some of you may have missed it. It is a quality system and deserves your consideration whenever you need a high performance motor application. MEC is a great company in our electric community and Roland Peterson has worked very hard to provide a very good product at a reasonable price. I cannot urge you enough to always consider this system, when you have the proper task in mind for it. The system has been flown all over the country, demonstrating its power and performance. It will be seen in many of the planes at KRC and was in

What's in this issue?

Editorial Error - TigerKitten Review - Have Your Parts Laser Cut - What You Need to Be Competitve at the E-Nats - the September EFO Meeting -Editoral; Letter from Doug Holland - the '96 E-Nats - E-Nats Photos - More on Micafilm - Smaller Pinion for AF 05 motors - Shaw's New Bearcat!



a plane at the E-Nats in Muncie as well. I've personally flown planes with a former version of this system, and they were **IMPRESSIVE**! The newer versions are even more refined and tuned into performance.

2. Greg Gimlick is an absolutely charming individual! He is extremely knowledgeable about electric flight and is a more than capable author. Since some of his comments in the review were out of context, it might seem that he was being a bit sarcastic, or even caustic. This review was NOT WRITTEN FOR PUBLIC VIEW, he was simply talking as though to a few very close friends at the flying field. We talk to our friends differently than we write - more openly and more sincerely - while good writing sticks to the facts and leaves out innuendo. By publishing Greg's review as a review, I'm afraid I've injured his credibility as an author. To all the manufacturers in our electric community, I can only say, Mr. Greg Gimlick has the ability to test and review your products in a very dignified and respectful manner. Please do not take the review, published without permission, in the Ampeer, as typical of his writing style or personality. It was a private communication that should never have seen the light of day.

Please know that I am very sincere in what I'm saying here - I really blew it. MEC and Greg both deserve better than what happened because of my careless act. It won't ever happen again.

The following really great review comes via "Watts Current", Sept. 1996, the newsletter of the:

Westmoreland Electric Soaring Society, Inc.

Edited by: Doug Ward

R.D. #1, Box 189

Irwin, PA 15642

DWard79207@aol.com

(the following is reprinted with the implied persmission of newsletters by giving the source and its author)

# Ace Tigerkitten, electric version... by Albert Wahrhaftig

A couple of months ago the following review came in by Albert Wahrhaftig who is quite taken by this Ace kit. While I was at the Celebration of Eagles, Bob Benjamin, the designer of the Tigerkitten gave me a full lecture on the virtues of this model. I was truly impressed when I saw how the model performed in Bob's hands and even more when he let me peer inside to check out its secrets--none. But let's let our reviewer

have the floor. --(DW)

I first saw the Tigerkitten "E" as published in ModelAviation, September 1991, it was love a first sight. First there was the appeal of its looks, a graceful 1930's style low-wing monoplane with an open cockpit and big, streamlined wheel pants. That's my kind of airplane, all right.

Then there is the quality of its engineering. Here is a plane specifically designed for electric by someone who obviously knows what he was doing. Nowhere is there a mite of excess structure, unnecessarily heavy material or artless construction. The many photos were dynamite, clearly showing important features of the design and exhibiting a quality of craftsmanship that I envied. I sent away for the plans, but didn't build the model at that time because I was limited to seven-cell batteries and a seven-cell charger and wasn't ready to invest in the necessary equipment for nine-cell packs that Benjamin recommends for an Astro cobalt 05. Now that Ace R/C has kitted the design, I have gone ahead and built it, so our story can continue.

Even if you decide to build the kit, I recommend that you obtain the original construction article, if possible.

Dispensing with specific instructions on how to build the plane (these are supplied with the plans), the article is instead crammed with information on the underlying philosophy of this design and a lengthy discussion of appropriate equipment--batteries, speed controls, connectors propellers, etc. Also, you can see two versions (Astro 05 and 15 for power) of the Tigerkitten flying in promotional videotapes issued by AstroFlite. The video convincingly demonstrates the aerobatic capacities of this design. Your local hobby dealer might be able to lend you a copy. Mine did.

**The Design:** We are talking about a 54" wingspan, 450 square inch plane which weighs 50 to 60 oz. depending on hardware and builder skill. This airplane has been designed for a geared Astro cobalt 05 and nine cells or a geared Astro 15 on 12 cells. To this, Ace has added instructions and motor mount material for use with an MEC (Model Electronics Corporation, where Bob Benjamin is employed as a consultant /test pilot--DW) turbo 10 motor.

The design is unusual in several respects. The Tigerkitten kit is available in both electric and glow versions. Unlike many contemporary electric kits, mostly adaptations from glow designs, the glow version of the Tigerkitten was derived from the electric one. Modifications for the .25 glow

model largely consist of the substitution of hardwood or ply for balsa in critical places. Glow instructions are added in italic type to the original electric instruction manual and are obvious paste-on sections which were added to the original electric plans.

Accessibility has obviously been an important design consideration. Removing the cowl exposes the motor and motor mount for inspection and adjustment. A hatch, retained by a single spring-loaded latch, runs from the firewall to the rear of the cockpit, making battery changes quick and easy.

Most of us know that in a crash, our heavy batteries thrust forward, obliterating everything in their path, and, fairly often, an obliteratee turns out to be an expensive radio receiver. Something else I particularly like about the Tigerkitten is that a 1/16" ply deck runs from the firewall to the rear of the cockpit and it is supported on longitudinal rails and retained by wood screws. The batteries are mounted topside on this deck and the radio switch, arming switch and charging jack protrude upwards through it at the rear where they are easy to reach through the cockpit. The receiver, speed control and receiver battery are all located on the underside of this deck where they are protected from flying batteries. All this hardware is easy to reach for service from the bottom of the fuselage by removing the wing or the entire deck with all equipment can be unscrewed and lifted out. Fine idea!

**Construction:** Be prepared to spend some time building this kit. All flight surfaces are built-up and the fuselage is an assembly of 3/16" square sticks. No special tools or techniques are required, but this is nevertheless a builder's model. There are, of course, very adequate construction instructions in the kit. I intend to do no more than note a few tips about things that are not obvious from the plans and booklet.

Wing tips and Tail tips: The tips of all flight surfaces are constructed free-flight style by laminating four layers of 1/16" balsa strips around a form. Supplying die-cut forms with the kit would have been a nice touch, but you are left to your own devices. The instructions suggest sticking a "fence" of pins in the plan and laminating around them, but this I would discourage. The result is bound to be irregular. What I do suggest is that you cut strips of 1/64" ply off the scrap edges of the die-cut sheet in the kit and glue these to the edge of cardboard forms. This will provide a smooth, clean edge which you can then wax by rubbing with an old candle to prevent the laminations from sticking to the form.

**Wing:** The part I like least is the building of wings, then the part of wings I like the least is installing the webbing. Guess what? The Tigerkitten has webbing the full length of the spar, on both sides. It is very strong and light,

so I will live with it. The Model Aviation article stresses the importance of strengthening the wing by notching the ribs into the trailing edge. In the kit, this is rather inconspicuously shown on the plans, but it receives no mention in the construction booklet. Do it!

A step that is specified but which is also easy to overlook is the addition of 1/16" balsa strips along the trailing edge, both top and bottom. This not only thickens and strengthens the trailing edge, but it also allows the rib capstrips to join flush with both the trailing edge and leading edge sheeting where a similar use of balsa strips occurs.

**Fuselage:** There is a lot to do here, but nothing very mysterious. As in the case of the wing edges, the fuselage longerons receive a lengthwise 1/16" strip which extends from the aft edge of the forward fuselage sheeting to the rear of the fuselage. Otherwise, the instructions lead the builder through the construction steps quite nicely. **One thing not to miss:** The construction manual says to drill an 13/64" hole in a plate which will be tapped to receive a wingmounting bolt. I believe the size of that hole should be 11/64". Better too small than too large!

Hatch: The hatch extends from the firewall to the rear of the cockpit and it is made by bending 1/16" balsa over a structure of stringers and formers. If you use it as supplied, the front former will block two ventilation holes which have been laser-cut into the firewall. The former at the front of the hatch is not strong enough to withstand the removal of the corresponding amount of material. My solution was to bond some scrap fiberglass (left over from the material supplied for joining the wheel pant halves) using thin CA to the rear of the former to increase its strength. Once the hatch is assembled, the material can be cut away easily with a sanding drum on a Dremel tool. Be careful not to trim the hatch sheeting flush with the front of the forward hatch former. This sheeting should protrude over the top of the firewall. The best idea is to install the completed hatch and then sand the sheeting flush with the firewall. (In case you wish to communicate with the author of this piece, his e-mail addresses are: AlbertW4@aol.com or albert.wahrhaftig@sonoma.edu--DW)(Sorry, no land mail address was given - km)

## **Get Your Parts Laser Cut**

The following comes via "Watts Current", Sept. 1996, the
newsletter of the:
Westmoreland Electric Soaring Society, Inc.
Edited by: Doug Ward
R.D. #1, Box 189
Irwin, PA 15642
DWard79207@aol.com

(the following is reprinted with the implied persmission of newsletters by giving the source and its author)

For those of you who don't mind building but hate cutting parts, Dave Meyers of Laser Arts, 445 East Cheyenne Mountain Blvd., Suite C-112, Colorado Springs, CO 80906, offers custom precision laser cutting along with a host of services related to this sort of project.

He states: "We can cut up to 1/4" plywood and up to 1/2" balsa. Our machine has a 17"x24" work surface.

"Laser Arts can scan and scale your original drawings or plans or we can go direct from your AutoCad version 12 or 13 .dwg files. We can also work from any .dfx file or any image generated in formats recognized by Corel Draw, ver. 3 or greater. We're still experimenting to see what is possible on our new machine! We guess that most builders will send hand-drawn images, but we also want to assist all you hi-tech types.

It is best if your parts drawings are laid out to conform to common balsa sizes, however, we can arrange parts sets to fit a variety of balsa sizes which we stock at great prices. We can also engrave parts as we cut them with tic marks, reference points and numbers to make assembly easier.

Laser cut parts require little to no sanding and, depending on the accuracy of your original drawings, fit together like a puzzle. Lightening holes and interlocking tabs and slots are no problem.

Price schedules are now available and we are fully operational." (Please send an SASE to the address listed at the top of this article. --DW)

### What Does It Take to Be Competitive at the Nats?

by Ken Myers in response to a question from: Phil Pearce 111 E. Geneva Dr. Tempe, AZ

Along with his renewal for the Ampeer, Phil sent a very nice note with a question about what it takes to win at the E-Nats. Of course he asked about equipment, but that is only part of the formula. In both electric sailplane, A & B, and Old Timer, A & B, it was not a question of equipment. All different kinds of planes and power systems placed well!

That doesn't answer his question - then what placed the "winners". Pure and simple, having a plane/power combination equal to the task and knowing the airplane they were flying!

The plane/power combination must be able to provided enough power to get to the highest altitude the pilot can comfortably see the plane, in the time allotment. The time allotments are in the rule book. Power systems that can do this are geared and typically include **Astro Flight, AVEOX, MaxCim** and **MEC** products. The cells used are capable of allowing high current drain for the time allowed and include **Sanyo SCR** and **SR Batteries**. Although any cells capable of producing these power levels will work. High rate speed controllers or electronic on/off switches were also used.

There was no one type of sailplane, that by design, was "better" than the others. Bill Jenkins, the very best there that weekend, used a modified **Astro Flight Challenger**, but others using different models with "regular" and composite construction were right on his tail! It was his masterful flying of a plane, that he knew well, that kept him ahead in points. He had matched his power system, plane and practice to the task, and it really paid off!

By reading Bob Aberle's (Flying Models) and Frank Korman's (Model Aviation) articles on the E-nats, you should be able to have a good idea about the equipment used by the winners. But again, I cannot stress this enough, it is practice, practice, practice that pays off. Fly in dead calm, fly in lift, fly in sink, fly in wind, fly in rain (no lightning PLEASE!!!), fly, fly, fly, Spot land every landing.

It is my understanding that the same provisional events will be run next year. Phil was particularly interested in these events. Since they are currently evolving, they are what we (the electric community) make them. We are still taking input from the fliers of these events and refining the tasks. Again, with these tasks it is still the same combination as above. Choose a plane/power system that meets the requirements of the event and then just have a ball flying it! Fly it for fun. Fly it in local contests and fun flies. Learn what it can do, and how best to do it. Vague, yes - but that is the way it is. You become competitive when you compete, and since these are "new" events, you are setting the "standards" to be followed.

Glen Poole and Bob Aberle are excellent resources for 1/2A Texaco. Bob Aberle, Tom Hunt and Glen Pool are also an excellent resource for Speed 400 Sailplanes. Tom Hunt, Bob Aberle and Bill Griggs can fill you in on Speed 400 Pylon racing. I know they'd love to help anyone interested.

The easy-going manner in which the 1996 E-Nats were run allowed a lot of input and decision making by the contestants. Yes, there were rules that were followed, but they were not inflexible and EVERYONE understood and agreed to any changes before they were made. Just show up, compete, and become a part of history.

Let's not forget that this is a fun hobby, with GREAT people. Follow my suggestions and you will be a winner, no matter what your placing, because you will have done your

very best!

See you all at the E-Nats 1997!

Address for products and people mentioned here: (Please note that this in not an exhaustive list! Any other manufacturers or individuals who can supply equipment or help should let me know, so that I may present your information and or contacting address to our readers. km) Astro Flight, Inc., (Bob Boucher) 13311 Beach Ave., Marina Del Rey, CA 90292 (310) 821-6242 --- A world leader in motors, speed controllers, chargers and electric accessories

**AVEOX Inc.**, (Dave Palombo) 31324 Via Colinas #104, Westlake Village, CA 91362 (818) 597-8915 --- super efficient & powerful brushless motors and speed controllers MaxCim Motors, (Tom Cimato) 57 Hawthorne Dr., Orchard Park, NY 14127-1958 (716) 662-5651 or 76331.3712@compuserve.com --- efficient brushless motor & controller 7 - 27 cells

**Model Electronics Corp., Inc.**, (Roland Peterson) 6500 6th be a fun thing to do. The club will be purchasing the Ave., Seattle, WA 98117 (206) 782-7458 --- very powerful ferrite motors & gearboxes and planes for their power systems.

Bob Aberle & Tom Hunt can be reached at: ModelAir-Tech, P.O. Box 12033, Hauppauge, NY 11788-0818 (516) 979-1475 or THunt95147@aol.com --- belt drives for larger motors, plans, kits all electric, great source. Lots of NATS-type plane plans and some kits available. **B&T R/C Products Inc.**, 508 Lake Winds Trail,

Rougemont, NC 27572 (919) 471-2060 --- Source for SANYO batteries - 11 A.M. - 7 P.M. EST

**SR Batteries**, Box 287, Bellport, NY 11712 (516) 286-0901 --- industry leading batteries, motors, speed controls, chargers and most electric flight supplies.

Glen Poole - (708) 420-4237 --- 1624 Redpoll Ct., Napierville, IL 60565

Bill Griggs Models, RR2, Box 64, Canastota, NY 13032 (315) 697-8152 or 102341.2605@compuserve.com --plans and kits for the Rocket micro pylon racer for Speed 400 motors.

#### Also - - -

A special thanks to Phil Pearce, 111 E. Geneva, Tempe, AZ for the sheet of SkyShine and SkySheen. These are great reflective strips for those high flying e-gliders and Old Timers.

SkyShine is available in a 3"x18" strip for \$5.00 SkySheen is available in: 2"x48" - \$5.00; 2"x36" - \$4.00; 1"x48" - \$2.50; 1"x36" -

\$2.00.

These really show up on your plane at altitude. Send a check or M.O. to Phil today and really see where you're going. Phil's phone number is: (602) 966-6384

### The September EFO Meeting

This was really a good one. Ken held it at his house and it started with the good news that the Mid-America Electric Flies will continue. The Ann Arbor Falcons and the EFO will still be running the events and the venue will be the Midwest R/C Society field on 5 Mile Road, in Northville Township, MI. There is easy access to the field from M-14, a major expressway. The field is very good with a smooth grass runway and all the facilities needed for this event, including a lot of parking.

The members looked at the latest data from Sanyo batteries and Ken printed out some motor and battery data he has, so that the members might take it home and "study" it. We also looked at some old books on e-flight, including Bob Boucher's original The Quiet Revolution and Ian Peacock's Introduction to Electric Flight.

It was decided that trying Electric Round the Pylon would necessary pylon equipment. If you'd like to participate and fly at our meetings through the winter, you'll need to purchase the plans and motor from Skonk Works. Ken will have the catalog at the October meeting so that we can place a club order and receive the club discount.

The members also watched some video shot at Sturgis and the E-Nats in Muncie. They also watched the promotional video supplied by CMI for the plane featured in last month's Ampeer. It is really impressive, at least on video. I believe we've piqued some interest in this machine. Does anyone have any "real life" experience with this plane yet?

At the next meeting, Ken will cover how to gather motor data information. See you then.

# Who Do You Vote For? **Editoral** by: Ken Myers

and a letter from Doug Holland

No, I'm not talking national politics here. I'll leave that to you, but I'm talking AMA election. Many times we receive the info from those running for the different elected positions of our academy, but we really don't know who would be the best person for the position. (Please read all of the biographical information printed in Model Aviation and sent to you in the mail.)

The following is a letter from Doug Holland. I've known Doug for many, many years. He's been very active with the AMA for a long, long time, but best of all, he's an electric flier! He is a gentleman, in the truest sense of the word. Please read his information carefully and make up your own mind. If there are any other people running for AMA

elected office that would like to see their information printed in this newsletter, I will be very happy to do so. Doug is the only one to have given me information, and therefore the only one presented here.

This does not imply that others running against him can't do a great job!!! We are blessed with so many people that want to advance our sport - I love it!

You make up your own mind.

### from Doug Holland

I am the incumbent Executive Vice-President of AMA and a candidate for reelection to a full term beginning January 1, 1997. I was appointed by the Executive Council in February of 1996 to complete the term of Dave Brown who was elected President of AMA. I am a certified public accountant and have been practicing for 46 years. At the present time I am the Senior Partner and President of C.D. Holland and Company, PA.

The Executive Vice President of AMA is responsible for the financial operations. This includes matters of finance, budgeting, daily accounting operations, and structuring debt to acquire fixed assets. There is involvement with the federal tax law because of the amount of our revenue and because we generate Unrelated Business Income due to sales of advertising by Model Aviation. I have a great deal of academic training as well as vast practical experience in all of the items previously mentioned, plus a great deal of involvement in management consulting. I have served on the finance committee for three years. All these factors stand me in good stead to perform for you the work that is required by this position in a manner that is both knowledgeable and professional.

My involvement with model aviation goes back to 1935 where I began building model airplanes at a YMCA camp. I have been involved in indoor, free flight, U-control and radio control categories. I have been an active participant in free flight, U-control, and radio control, having been both a contestant in many events, including various nationals, as well as a CD for over 30 years. I am presently active in electric flying.

Due to my love of modeling and my extensive business experience in the field of accounting, finance, and management, I feel I am adequately qualified to serve as the Executive Vice President of AMA. I will appreciate your support.

### **Doug Holland**

### A Closing Word from Ken

The **EFO** doesn't support one candidate over another for AMA office. There was meant to be no bias for or against anyone running for office, although only one letter implies this. I'll print anyone elses' information, upon receipt. Some will say that I've presented only one side or view. Doug is

the only one who gave or sent me infomation, I printed it. I gave **MY** opinion. Please, research and vote as you wish.

# The 1996 Electric Flight Nationals AMA Headquarters, Muncie, IN

What a wonderful three days. The weather on Saturday, July 20, couldn't have been better. Sunday got worse and worse with pouring rain and lightning stopping all flying by early afternoon. Monday started off dreary, but the weather improved as the day continued.

Attendance was up a lot, as you will note when you look at the results. Tom Hunt and Bob Aberle had brought along a good deal of equipment from SEFLI and the AMA provided the rest.

The folks that came to help were outstanding. Eric Diedrick was an unexpected bonus! Without his help, the whole thing would have been much harder. Phil Smith and his wife were also a great help. .Don McQuillen of Iowa City, Iowa was a super assistant in the impound area. Ron Morgan, Director of the Nationals, and his assistants provided all the things we needed or forgot. The contestants themselves pitched in and did a wonderful job of helping. All of this great help made my "job" a lot easier, and I sincerely appreciate it. There is still a very warm glow in my mind, when I think back on the wonderful times and wonderful people there this past summer.

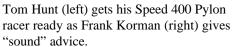
There was a banquet on Saturday evening, at the Robert's Hotel. The awards from Saturday's flying were presented in front of the 30 people attending the banquet. Doug Ward was nominated and voted as the new head of NEAC. He will be representing the electric flight community, and NEAC, as the head of this SIG.

On Saturday, both Sailplane and Old Timer got in all of their rounds, while on Sunday, the Old Timers completed their rounds, but Sailplane was stopped after two rounds, because of the dangerous weather, which just wouldn't go away. As with fliers everywhere, when the weather dumped on us, we all gathered under the "Big Top" and talked and talked and talked electric model aircraft. In that way, it was really good, but extremely disappointing for the competitors who were really close and could have improved their standings. Folks went back to their hotels and trailers as dinner time approached and hunkered in for the night. Everyone was wet, but looking forward to the open flying and provisional events on Monday.

Sunday was cloudy and cool in the morning, and it was decided to fly the Speed 400 pylon first. This turned out to be a lot of fun, and the spectators seemed to enjoy it, especially once I learned to keep mine closer in on the course!!! My thanks to the turn one pylon flaggers for

(cont. on page 8 - photos next page)

# October 1996 The Ampeer page 7





A couple of Mike Stewart's Big Ones, flown on the "Fun" day.

Tom Hunt and Don Belfort fight it out for 1st in Speed 400 Pylon Racing.







## **Bob Aberle Photos:**

- **1.** Tsutomu Matsumoto of Japan receives 3rd place in Class A Sailplane
- **2.** Pilots' meeting, Ken gives directions
- 3. Banquet at Robert's
- **4. & 5.** Howard flies, Bill times and Ken Launches a great combination!

wading into the almost waist high wet grass to flag for us! Are you guys dried out yet?

With the end of the pylon racing, the sun came out and the 1/2A Sailplane and 1/2A Texaco had really nice weather to fly in.

There was a bit of fun flying taking place as well. Mike Stewart's big Spitfire is really impressive. There was also one of Sig's new electric sailplanes flying very well.

At the end of the day, awards were passed out for the Sunday and Monday events. A "highlight" of the closing "ceremony" was Mike Stewart's birthday, yep, birthday cake for ALL!

I know that this is not a full report with all the blow by blow descriptions sometimes given. My view of the goings on was all in pieces. I was here, I was there, doing this and doing that and making sure everyone had what they needed, when they needed it. I feel that it was a good meet and the contestants made it a fun meet. I've already volunteered to go back and help Doug next year, so I hope to see you there. Maybe I'll even get to see some flying! Just kidding. By the way, I do have a new idol - Mr. Bill Jenkins!!! He could keep anything up over the lift given off by a Bic! What a flier.

If you've been thinking of possibly getting something from ModelAir-Tech to compete with next year, just check out those finishes by Bob and Tom. They sure know what they are doing!

The following are the official results follow:

### **AMA classes:**

Class A Sailplane: 1 Bill Jenkins 2 Robert Taylor 3 Tsutomu Matsumoto 4 Denny Carter 5 Paul Perret (30 entrants)

Class B Sailplane: 1 Bill Jenkins 2 Tom Hunt 3 Bob Aberle 4. Paul Perret 5 Ralph Weaver (22 entrants) Class A Old-timer: 1 Bill Jenkins 2 Bob Aberle 3 Don Belfort 4 Jon McVay 5 Tom Hunt (13 entrants) Class B Old-timer: 1 Bob Aberle 2 Tom Hunt 3 Wayne Fredette 4 Glenn Stucker (9 entrants)

### **Provisional:**

1/2A Sailplane: 1 Ralph Weaver 2 Tom Hunt 3 Don Belfort (12 entrants)

Speed 400 Pylon: 1 Tom Hunt 2 Don Belfort 3 Bob Aberle (6 entrants)

1/2A Texaco Old-Timer: 1 Tom Hunt 2 Jon McVay 3 Bob Aberle (4 entrants)

More photos, including those taken by Phil Smith

can be found on the EFO WEBsite at: http://members.gnn.com/KenMyers/homepage.htm

### **Another Micafilm Tip**

In a recent phone conversation with Colin McKinly, he reminded me that thinned white glue makes an excellent adhesive for MicaFilm. This is what he's used on many of his famous Old Timers for years. By thinning white glue, and then "painting" onto the parts of the airframe where the MicaFilm will attach, very high heat can be used to shrink the MicaFilm. (Not so high as to "destroy" the material, please.) It can also be used as the adhesive for the places where the film attaches to itself. Thanks for the reminder!

### Help Arrived for the Smaller Pinion for an AF 05

In Response to Dereck Woodward - mstwdw@aol.com

In the last issue you saw the following plea:

"Does anyone out there know of a way of fitting a smaller pinion on to the Astro's oddball shaft size? Without a major machine shop as backup, that is. I'm sure I've heard of it being done, but didn't take notes and feel that the Astro will perform better for a 3:1'ish ratio than the present low reduction it comes with."

During the September EFO meeting, Jack Lemon brought the information that Windsor Propeller Company (Master Airscrew) does! I knew this, somehow it had gotten lost in my short term memory. Anyway, you can contact Windsor Propeller Co., and they only cost \$2.50 a piece. They are designed to work with their gear-boxes.

Windsor Propeller Co. 3219 Monier Circle Rancho Cordova, CA 95742 Phone: (916) 631-8385

I hope this helps you all.

### **Keith Shaw's Amazing Bearcat!**

Sunday, September 15, 1996 - Midwest R/C Society Field - Northville Township, MI

It has arrived. Keith's most impressive aircraft to date. It is his 1:5.5 scale, 15 pound Bearcat. Powered by an Astro Flight FAI 60 with a ModelAir-Tech belt drive and 32 cells, this plane is awesome. It's vertical performance is spectacular, and low, high speed passes made my heart race. Swinging a 22x16 prop at 4200 RPM, there is plenty of power.

Only a few moments into the flight, Keith started to put it through its paces. Rolls, loops, point rolls - it was like he'd been flying it for years. This is one of his very finest. The retracts with synchronized doors are outstanding.

This 81 inch span beauty has to be seen to be believed. It is finished in black with a gold eagle body on the fuselage, and gold eagle wings on the wing. It represents an air show version of the aircraft, which later went on to become a racing plane.

There was also another special treat that day, as I also got to see his new "little" Zlin fly. Like all of Keith's planes, this 19 oz. 4-channel is very aerobatic. The power system is what makes it really unique though. It is powered by a proto-type of the Astro Flight brushless motor. This power system really moves the Zlin around the sky.



The Bearcat and the Zlin on September 15, 1996



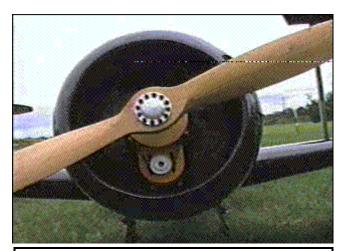
Keith feeds the 32 cells of the Bearcat.

Even though the day was overcast and a bit windy, Keith flew a second flight, which was even better than the first. This bird took to the skies like it had always been there.

Please notice any background in these pictures, as they were taken at the same field where the Mid-America Electric Flies will be held in 1997. We are fortunate to have the Midwest Radio Control Society offer us the use of their fine facility. Keith and I hope to see you all there on July 12 and 13.



Larry Verna helps Keith check out the retracts before the first flight.



The Business End! The AF FAI 60 mated with the ModelAir-Tech Belt drive provides power to the 22x16 prop. Note the "cool" prop hub Keith made!



The wheels leave the ground for the very first time in this picture. What a delight.

### The Next EFO Meeting

The October 3 meeting of the EFO will be at the Dublin Community Center on Union Lake Road, just north of the village of Union Lake, across the street from St. Patrick's Church.

There will be two topics for discussion that evening.

**Topic one:** A teaching session on how to collect and use motor data. If you'd bring a plane with the power system in it, with Sermos connectors and easy access to the motor terminals, I'll spec your system that evening for you. Don't forget to charge the radio system and power battery. You'll also need your charger. I'll provide a 12v battery.

**Topic two:** The purchase of round the pylon plane plane plans. I've received some good information from Pat March, Mr. ERTP himself. I'll share this information with you. Please bring your checkbook or a few extra dollars so that I can take your order and get it off the Pat. Hopefully, we might have some of the planes ready to fly by the November meeting.

The November and December meetings will not be held at the Dublin Community Center. They have other functions going on there on our meeting night. I'll keep you informed. If we do have some planes ready, I can probably arrange to use the gym at Dublin Elementary, if it is not already in use.

See you all on Thursday, October 3.

### **Upcoming Events:**

Oct. 5/6 DEAF Fly-In, LMR events & All Up/Last Down, lighest RC, weight lifting, Dallas RC Club field, Seagoville, TX, Greg Judy (817) 468-0962

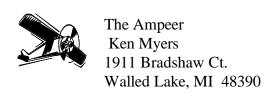
October 26/27 8th Annual Gulf States Electric Fly-In, Stan John (504) 386-1478, P.O.Box 0990, Madisonville, LA 70447

**November 2, 1996** Midwest's Largest R/C Swap Shop, Odeum Sports and Expo Center, Villa Park, IL, 10 - 4, for information call (630) 941-9292

To Reach Ken Myers, you can land mail to the address on the front page. My **E-mail address** is: 102575.3410@compuserve.com

#### **EFO WEBsite:**

http://members.gnn.com/KenMyers/homepage.htm



Next Meeting: Thursday, October 3 7:30 - at the Dublin Community Center on Union Lake Rd., just N. of Union Lake