



FEBRUARY NEWSLETTER  
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New Members  
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Lester Smith, Bill Elkins Sr. Darrel Andersen, Danny Robinson, Ken Blackford, Ed White, Larry Broddle. A big Welcome to all of you.

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\*\*Special Notices\*\*

If you plan to remain a member of Jayhawk Model Masters we need you to take a few minutes to sit down and take care of business. This will be the last Newsletter you will receive if you haven't paid your 1988 dues. We hate to lose anyone, so why not do it now. Help support your local club.

Instructors

A special meeting will be held immediately following our regular monthly meeting on FEB. 20 at 7:00 PM for those that have been, or wish to be, Instructing beginning pilots. Please, make plans to attend, as it is felt a new format is needed, with many new pilots beginning this year. We need your input.

Name And Number Please

Rule #6 of the A.M.A. general safety code states that you must have your name and address, or A.M.A. number, on or in your model for insurance liability protection to apply. If you haven't already done so, now is a good time to do it. Its a good idea anyway.

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NEXT MEETING: FEBRUARY 20th, at 7:00 PM ( Please Plan To Attend)

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Weight Loss

On one of the nicest flying days so far this year, Don Sherman walked onto the field with his new Fun-Scale P-51. Knowone knew what Don had in mind as he pretended to have engine problems with his newest charge. Brian Sorenson was test flying for Don, and it appeared that shortly after each takeoff, the engine would falter, requireing Don to chase after the ill-fated airplane.

Little did we know that Don had planned it all, I think. Returning each time, panting, with airplane in hand, he would set it on the ground, and lean back slapping his tummy saying. " I needed the excersise anyway" " Who needs an excersise club when we can have fun like this".

Sorry Don  
Dave

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NEWS FLASH: Chuck Hardman sets new record for Crosswind Landing Attempts. I think it was 17, wasn't it Chuck?

DP

IMPORTANT MEETING \*\*\* TRANSMITTER FREQ. CHECKS

MARCH 19, 1988 \*\*\*\* 7:00 P.M.

MR. TOM RUNGE, President of ACE R/C in Higginsville Mo. has graciously accepted my invitation to bring test equipment to the March 19 meeting and check our transmitters for frequency problems. This is a one time chance for all of us to find out just how good (or bad) our equipment is, and also whether it needs a tune-up or not.

In conjunction with the tests, Mr. Runge will also present a very informative talk on changes in federal law that will effect us all in the next three years.

PLEASE PLAN TO ATTEND THIS IMPORTANT MEETING.

\*\*\*\*\* REMEMBER \*\*\*\*\*

1. BE THERE ON TIME. (7:00 P.M.)
2. BRING ONLY YOUR TRANSMITTERS.
3. MARK THEM CLEARLY WITH YOUR NAME AND FREQ.
4. BE THERE ON TIME!! (7:00 P.M. OR BEFORE!!!)

PLEASE GUYS, WE NEED A VERY GOOD TURN-OUT FOR THIS TO MAKE IT WORTHWHILE FOR MR. RUNGE TO COME TO LAWRENCE. DON'T LET ME DOWN!

RICHARD L. BALLARD

## 1988 MEETING SCHEDULE

ALL MEETINGS IN 1988 ARE SET FOR THE 3rd. SATURDAY OF EACH MONTH AT 7:00 P.M.  
AT THE GASLIGHT VILLAGE CLUBHOUSE. PLEASE MARK YOUR CALENDERS AND PLAN TO BE THERE!

REMEMBER: 3rd. SATURDAY, 7:00 P.M.

GASLIGHT VILLAGE CLUBHOUSE

FEB. 20	MAY 21	AUG 20	NOV 19
MAR 19	JUNE 18	SEPT 17	DEC 17
APR 16	JULY 16	OCT 15	
<u>7:00 P.M.</u>	<u>7:00 P.M.</u>	<u>7:00P.M.</u>	<u>7:00P.M.</u>

### NEW FREQUENCY FLAG SYSTEM IN EFFECT

Along with the major changes in radio frequencies that became law in Jan. 1 1988 came a new freq. flag system for your transmitters. No longer can you glance around and see if Blue/White or Brown/Black is in use! Not only that, but the flag set that came with your new radio last month is no longer approved for A.M.A. sanctioned events.

I have to admit that this one "sneaked up" on me. I guess I knew about it, but brain fade got the best of me and I didn't warn you about it. After looking at the new system and thinking about it, I would have to say that this is one of the better changes that are now necessary. I think we should all use and support the new flag system. A safer and better controlled flight line will be the result. We could all benefit from that!

Flags and number plates are available at most hobby shops or you can easily make your own from 1/16 plywood. The new flag system will be required at all A.M.A. sanctioned events and will be necessary at our spring fun-fly. Why not get your transmitters set up with the new flag & number plate right now while you are thinking about it!

### CONVERTING "OLD RADIOS"

I understand that KRAFT MIDWEST is doing conversions on many of the older radios including Kraft, Futaba, World, K-Line, Ace, Hobby Shack, JR, and some others. Rates are reasonable compared to the cost of a new system, and the work is said to be of excellent quality. Expect an 8-10 week turnaround right now because everyone else waited till the last minute just like I did!!! The place to write or call for info is:

KRAFT MIDWEST  
117 E. Main St.  
Northville Mich.  
48167

or phone: 313-348-0085 for information and help.

## FREE C.G. FOR YOUR FLITE-CRAFT KIT

As most of you know, every airplane needs a C.G. to fly properly. Unfortunately, not all kits come with one. It is also possible yours has become lost or oil soaked from long use. One of the great things about belonging to the Jayhawk ModelMasters is that every once and awhile (O.K., hardly ever!) you get something free! Such is the case with this newsletter. You will find enclosed, a free C.G. for your airplane. If you have more than one plane you can make copy's of this one.

"Ah Ha!" you are saying to yourself. "If my plane didn't have a C.G. because the manufacture was TOO CHEAP TO PUT ONE IN THE KIT, how will I know where to put this one?" Very simple!

Pick up your plane and find out where it balances. Now glue the C.G. on this spot with Hot Stuff. There you have it!

A perfect C.G. every time!

RLB/RCM MAGAZINE



Cut & Glue

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### How To

Several of you have ask how I managed to cut out the cartoon character I used on my Big Stick? Its difficult to sketch a pattern out on Mono-Kote, so simply trace, or sketch your pattern on plain paper. Cut it out to the finished size, then tape all the edges down with Scotch tape to the (back) of the covering material your using. When everything is taped down, turn it over. There should be a perfect imprint of your subject on the other side. Turn it back over, and simply start cutting. When you finish, you'll just peel off the backing and apply it as you would anything else with a sealing iron.

Dave Plamann

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### TEST REPORT: ROBERT HINGE POINTS

I am always looking for easier and/or better ways to do things. After I experianced a hinge failure in flight with some Klett type hinges, and after I became thourghly tired of digging little slots in balsa, I started looking for a better Hinge. I found two "Better Hinges", and the Robart is one of them! The Sig Easy Hinge is the other!

What makes the Robart better is that you don't have to dig slots to install them. They are Round! All you need to do is drill 1/8" holes at each hinge location and glue them in with Epoxy. They come in several sizes and types, but the ones you need for most jobs is the #308 set. (15 p/pk, steel pin, Standard size).

There is also a style called the "Horny Hinge Point" that has a control horn made right on it. (#302 4 p/pk.) These are neat and also save some time and work, in that you install the control horns when you put in the hinges! There is no chance of getting a control horn offset from the hinge line and building in some unwanted differential travel.

Give these Hinges a try. I think you will like them!

RLB

## R/C SCALE MASTERS

If you scanned through the Feb. issue of the A.M.A. magazine you know doubt noticed the color photos of the winners of the Scale Masters championships. I mean, how could you miss a TBM-3 with folding wings or an F-4 Phantom with a Playboy Bunny on its tail? These planes look like ghosts from the past that have somehow been magically shrunk to 1/5 or 1/6 scale and frozen in time. How do these guys do it? I must admit that I have no idea!

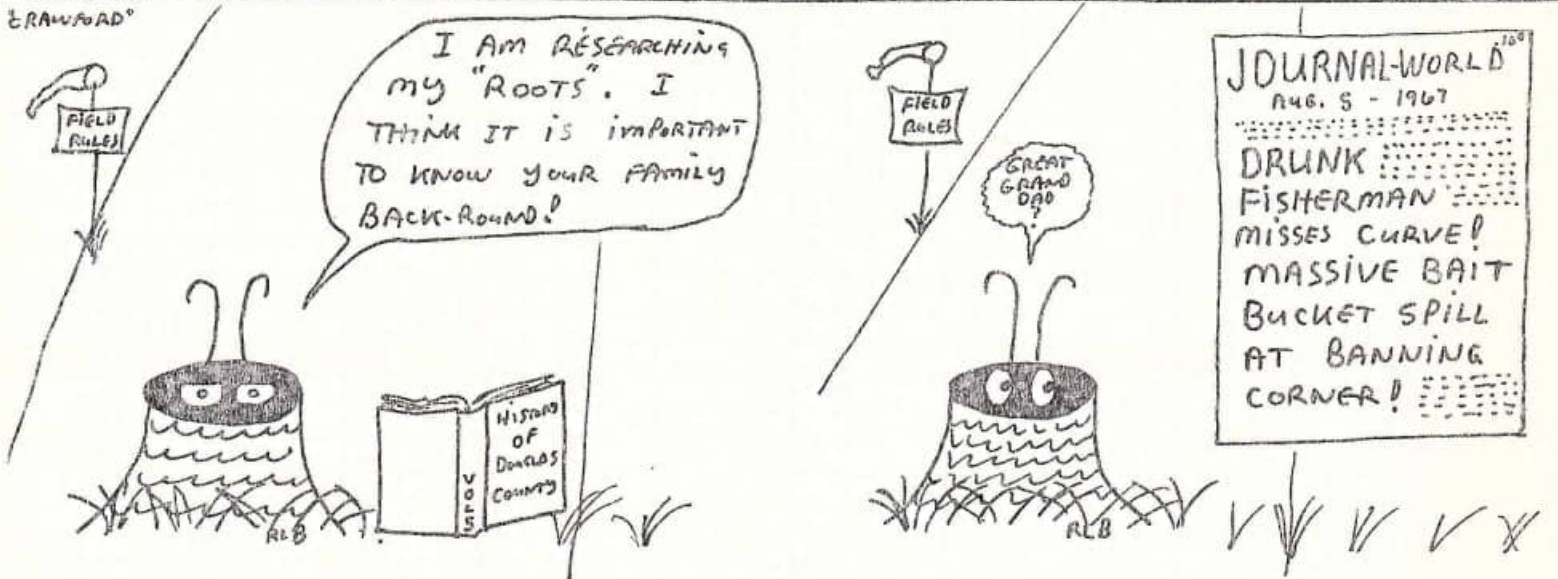
I used to think that I was a pretty good builder until I decided to try a scratch built "Fieseler Storch". As things started to come together, I realized that I was way in over my head. I was soon wondering how to progress from a point that demanded both an exact two-piece windshield glue line and a perfect cowl, panel, and covering joint, all in the same space? I don't know the answer because I couldn't decide which to do first and ended up making a mess.

Oh! Its a small mess by most standards, but a mess none the less! My windshield on the Storch wouldn't get me into the outhouse at the Scale Masters. In fact, it would result in a combined belly laugh from the judges that would cause a bad wind shear back here in Kansas!

The only thing I can figure out is that there really is magic, or else those guys are world champions and I am not! I'll have to think on it some more, but in the mean time, I guess I just might build another Great Planes Big Stick next time!

FLY SAFE RLB

ERAWFOAD



## DEFINITIONS TO PONDER (TAIL MOMENT)

Why do some airplanes seem to be very easy to fly at 100 M.P.H., while others seem impossible at 1/2 the speed? What makes one design "Squrrly" while another is calm and relaxed to fly?

**TAIL MOMENT:** The distance between the wing and tail center of pressure.

There is a more precise and scientific definition, but this pretty much covers it, in laymans terms. The longer the distance, the smoother the reaction to control input (rudder and elevator) will be. A short coupled wing/tail design will react faster and more violently to control input than a long, drawn out design will. If you don't believe it, fly a Midwest "Hots" some time!

RLB

## HOW TOO: JOIN & GLASS WING PANELS

It seems that most new builders have a lot of unnecessary concerns about working with fiberglass. As their first kit starts to come together, a feeling of dread takes up residence in the back of their mind when they read the instructions that say "Block up wing panels to the correct dihedral, join with epoxy, and glass the center-section of the wing!"

Actually, if you have built a kit to the point of joining the wing panels, you have already proven that you have above average ability, and are able to follow plans and instructions. Joining the wing panels will present no problems if you use the same care that you did during building. What follows are suggestions on joining and glassing a wing that work well for me. If you have a better way, please feel free to share your method with us!

### SETTING DIHEDRAL AND JOINING WING PANELS

The idea here is to join the wing panels while maintaining alignment and proper dihedral. Perhaps the best way to do this is to make wing tip blocks of the correct height directly off of the plans. Using scrap balsa, you can cut wing supports that match the bottom wing contour by tracing a pattern directly off of the plan side view. Then measure and cut them off at the right height to support the wing tips above the bench at the correct distance.

Now tack glue the support blocks to each wing tip and slide the panels together at the center to check the fit. NOW IS THE TIME TO CHECK EVERYTHING ONE LAST TIME BEFORE YOU GET OUT THE EPOXY!! If everything lines up and fits as it should, you can get out the glue. Now carefully turn the wing over and using masking tape, tape the bottom of the wing joint to keep the epoxy from running out the bottom.

Mix a small amount of epoxy, and with the joint opened up slightly, apply epoxy to both sides of the center ribs. NOW CLOSE THE WING JOINT AND CHECK THAT THE BOTTOM TAPE IS STILL SECURE. ALSO CLEAN OF ANY EXCESS EPOXY. IF ALL IS WELL, WEIGHT DOWN THE WING WITH ENOUGH WEIGHT TO HOLD EVERYTHING IN PLACE UNTILL THE EPOXY CURES. Right about now you can congratulate yourself because you have just made a perfect wing joint!

### GLASSING THE CENTER SECTION

This is the easy part! There are several good ways to apply fiberglass but I prefer to use 3-M spray adhesive on the cloth and HobbyPox II as the resin binder. Other options include thin CYA, or polyester resin. All work well, but some are much harder to sand than others. After trying them all I still prefer Hobby-Poxy II as the best resin to use for this job. While many kits include a length of 1" wide glass cloth, I don't use it. Get yourself some heavy K&B cloth or 6oz. Bondo cloth and a can of 3-M Spray adhesive.

Spread out the cloth on some newspapers and spray it with the 3-M adhesive. This will do two things. First, it will make glass tape out of the cloth, and second, it will keep the cloth from unraveling and helps it hold it's shape while you work with it. Now cut a 6" width of cloth long enough to go around the wing and overlap the end about 3/4". Carefully wrap the cloth around the center joint and smooth out the wrinkles as you go. You will find the 3-M holds the cloth in place, just like tape.

Once you have the cloth in place, use your masking tape again and mask around the wing about 1/8" out from the edge of the cloth. Now mix about 2 oz. of HobbyPox II and apply to the cloth using a small piece of foam rubber to smooth and spread the epoxy. If you have a heat gun (or hair dryer) apply just enough heat to the epoxy to thin it out. This helps to wet the cloth and aids wood penetration.

About 24 hrs. later you will have a super-strong wing joint ready to sand and cover! Easy wasn't it?

## CHECK LIST FOR THAT NEW AIRPLANE

### BOLTS, SCREWS, AND KEEPERS IN PLACE AND TIGHT

- ( ) Servo horn screws
- ( ) Servo mounting screws
- ( ) Engine mount bolts to firewall
- ( ) engine to mount bolts
- ( ) Landing gear bolts
- ( ) Wheel collar set screws
- ( ) Axle bolts and lock nuts
- ( ) Nose gear steering arm set screw
- ( ) Quick connectors have keepers in place (Better yet, use the washers and rivit on.
- ( ) Quick connector set screws tight

### ENGINE/FUEL SYSTEM

- ( ) Tank wrapped in foam rubber
- ( ) Fuel lines not kinked or chafing on cowl edge, etc.
- ( ) Fuel filter in place and tightened
- ( ) Hooked up correctly (Vent to muffler, Klunk to carb.
- ( ) Prop edges sanded and tips painted white. (Master Airscrew props)

### CONTROL SURFACES

- ( ) Tug firmly on everything that moves to insure good henge mounting, etc.
- ( ) Check Snap-Links and other connectors to make sure they are firmly in place.
- ( ) Control surfaces move freely without binding
- ( ) Control surfaces move in correct direction
- ( ) Nose wheel centered and not moving excessivly (Too much steering)
- ( ) Throttle trim kills engine at low position on stick and trim
- ( ) Wings are not warped
- ( ) mininum control surface gap

### RADIO SYSTEM CHECK

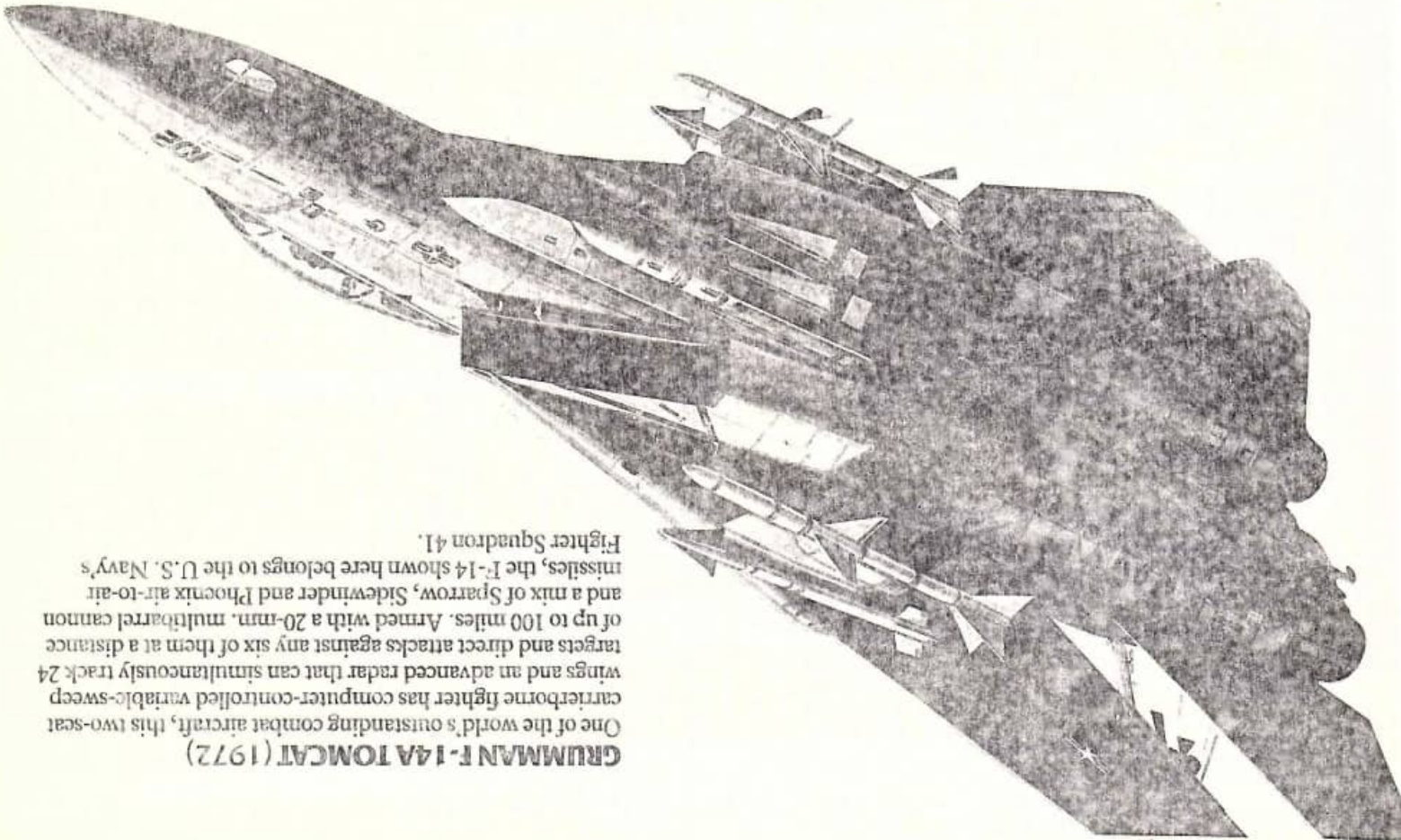
- ( ) Batterys fully charged (at least 16 hours) and check O.K. on ESV meter
- ( ) Receiver and battery pack in foam rubber and fuel proof plastic bag
- ( ) Trims centered on primary flight controls (with controls centered)
- ( ) Control throws not excessive (Set up according to instructions or plans)
- ( ) Receiver on-off switch free of binding and moving full travel on and off
- ( ) Radio plugs are plugged in all the way
- ( ) Antenna routed away from servos and other wires

### OVERALL AIRCRAFT SYSTEM

- ( ) C.G. (center of gravity) is in correct position (NOI TAIL HEAVY)
- ( ) Tighten prop nut "TIGHT" every time you go out to fly
- ( ) Engine run correctly (Good idle, mid-range, and top end)
- ( ) Range check radio both with and without engine running
- ( ) Controls move in correct direction ( CHECK AGAIN!)
- ( ) Name and A.M.A. number in or on plane

Following these simple checks and checking off each item as you go will assure a successful first flight. Take the time to go through the check list. It could save your new plane on its maiden flight. I know because I forgot to glue in the henges on the tail feathers on the last one I built!!!

RLB



**GRUMMAN F-14A TOMCAT (1972)**  
One of the world's outstanding combat aircraft, this two-seat carrierborne fighter has computer-controlled variable-sweep wings and an advanced radar that can simultaneously track 24 targets and direct attacks against any six of them at a distance of up to 100 miles. Armed with a 20-mm. multibarrel cannon and a mix of Sparrow, Sidewinder and Phoenix air-to-air missiles, the F-14 shown here belongs to the U.S. Navy's Fighter Squadron 41.

