

PHOTOS BY FUDO TAKAGI

Peanut Nakajima Ki.27a

By WALT MOONEY . . . Ah, so . . . do you have a yen to build a Japanese peanut? The star performer in the aviation portion of the Manchurian incident of the late '30's, this was about the best fighter of the time.

• This little Japanese fighter was probably one of the very best in the world at the time it was first built in 1937. It was a classic low wing, fixed gear, light weight, highly maneuverable design. In addition, in service it was painted up in what would appear to be very pretty color schemes. A three-view for this airplane can be found in "Fighters" volume three, by William Green, published by Hanover House. The Ki.27a is the model in the photographs.

As a choice for winning a Peanut contest using the present AMA rules, it is not the best, but for fun it will do fine and it is a pleasure to look at with the red trim, looking almost like a modern racer. The model was finished with white tissue and red (of course) insignia, cowl front, fuselage and wheel pant stripes, and tail decoration.

The real airplane had plenty of dihedral, but the horizontal tail is not very large, so this has been enlarged, as indicated on the plans, in the interest of more stable peanut flights.

The flying surfaces are constructed in the standard fashion. The curved outline pieces are cut from sheet balsa. The wing ribs are cut from sheet balsa. Assemble the wing directly over the plan. Cement the two spars in place in the rib notches, except for the center rib. Do not put cement in the center rib notches as the wing is assembled. After the assembly is dry, cut the leading and trailing edges at the centerline and proceed to shorten the spars very carefully at the center just enough to allow the proper amount of dihedral to be put under each tip. Then cement all joints in the center line at the center rib.

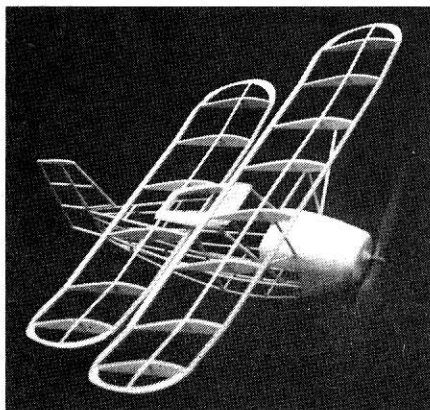
Tail surfaces are built flat over the

plans. When dry they are removed from the plan and the rib form pieces added to the top and bottom of the ribs. When these are dry the airfoil contour is sanded into the tail surfaces.

The tail surfaces can be built with the contour pieces omitted, if desired, for a small decrease in weight and a slight decrease in scale appearance.

Sandpaper is used to shape the leading and trailing edges of all surfaces. The leading edges are given a rounded contour, and the trailing edges are tapered to a more or less triangular section. Don't forget to add the little triangular gusset at the front of the vertical tail, or you will get a wrinkle in the tissue covering at this point.

The fuselage is built using the keel and bulkhead technique which is fairly common in kitted scale models, but which has not been used very often in peanut scale efforts. As a consequence, a detailed description of the method used for this model will be undertaken.



Next Mooney Peanut is this Lederlin Flying Flea. "Look, Ma, no stab!"

From the leading edge of the wing forward, the engine cowl is made as a separate assembly. Get some "A" grain 1/32 sheet. Cut two rectangles to be used as the wraparound part of the cowl and edge glue them into a single sheet. Cut out two former rings and proceed to make a barrel-like assembly by wrapping the sheet around the rings. When this assembly is dry add the laminated sheet balsa front of the cowl. A Williams Bros. thrust button is used, and a dummy engine is built up inside the front face of the cowl around the thrust button.

Select the wood for the fuselage stringers carefully so they are all of about the same consistency. An extra stiff stringer or an extra limp one can result in an unwanted fuselage warp. Cut a top and bottom keel out of firm 1/16 sheet. These keel pieces should run from the front of the wing to the most aft bulkhead (After the fuselage is completely assembled, they will be cut away for wing clearance and the cockpit opening). Cut out all the fuselage bulkheads. Note that they are notched only for the keels and then only for half the keel depth. The stringers will simply be cemented to the outer circumference of the bulkheads.

This technique results in a smoother fuselage covering, because the bulkheads will not touch the tissue which will only be attached to the stringers.

Cement the bulkheads in place on the keels. Make sure they are correctly located and perpendicular to the keels in plan view. Now fit two opposite side stringers to the bulkheads. At this point you should check all the possible stringer positions to make sure that no bulkhead

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Dirty Dan. After having people mix us up all week, Saturday Rich and I decided to put the whammy on everybody. I wore his banana farmer hat, complete with his "official" badge that proclaimed the wearer was none other than Rich "von" Lopez. And Rich wore my semi-famous Hoss hat, plus pinning my press badge to his jacket.

Rich and I were standing side by side when that good ol' boy Marvin C. Denny came up to Rich and laid it on him about how much he enjoys the C/L column in MB! With Rich nodding his head and emitting "thank-you's", I had to turn away, I was laughing so hard! Sorry, Marvin, someday I'll introduce you to the real Dirty Dan and give you a chance to get even!

To those who have never been to a NATS, I must say that you have never been to a *real* contest. Plan on going next year, no matter where it is. The NATS isn't a contest, it's an experience, and you're missing out on a real trip by not attending. ●

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has been cut under or over-size. Trim and fit as required. Then cement all the stringers in place in pairs on opposite sides of the fuselage. Now cement this assembly to the engine cowl assembly.

A thorough sanding at this point is in order. Cement a carved balsa tail cone in place.

Now carefully cut and fit a place for the wing and the horizontal tail. Also cut out a hole for the cockpit area. Fill in between two of the stringers on each side to provide a rear motor peg mount.

Cover the model components with light weight tissue. Water-shrink the tissue, and when dry, dope in the standard fashion.

Assemble the model and add details. The canopy can be formed over a mold. This one is small enough to be made in one piece on the good old Mattel Vacuform . . . or you can make the canopy out of flat sheets by cutting and fitting each area of the canopy, since they were all flat wraps on the original airplane. The tailskid is cut out of hardwood scrap and jammed into the tail cone. Landing gear legs are made out of five laminations of sheet balsa and carved to shape. The center lamination must have its grain going the long way of the legs for strength. Wheel axles are short lengths of wire. The antenna mast was carved from a toothpick. The antenna wire is monofilament fishing leader. The gunsight is a short length of aluminum tubing.

The wing fillets are cut from bond paper according to the patterns. Use the patterns as a guide, because they may need to be adjusted to fit your exact model.

Roll the fillets on the tapered end of a small paintbrush handle to get the

varying bend radius required in the fillet pieces. The bottom fillet is put in place last and cemented to the other fillets very sparingly. When dry it can be trimmed with a sharp blade just to match the upper fillets and give a good sharp trailing edge on the fillet system.

The pitot tube is simulated with a piece of bent straight pin. How's that? Well, let's say it isn't straight when its finished.

The front of the cowl and the trim on the wheel pants was painted with plastic model paint after several coats of dope had thoroughly sealed the balsa. All the rest of the color trim was done with tissue. The model was double-covered with white tissue to simulate the white background area for the fuselage and wing Hinomarus. The Hinomarus, the striping, vertical tail decoration are red tissue. Engine detail is black and silver paint. The prop is a cut-down North Pacific plastic, painted silver with the tips left red.

Flight trim includes about 1/32 of washout on each wing, and a small amount of down thrust.

Have fun knocking those imaginary Polikarpov bipes out of your imaginary Mongolian sky with this Peanut Nakajima KI.27a. The real ones are supposed to have accounted for 1250 of the enemy against a loss of only 100 of their own number in the Manchurian incident. ●