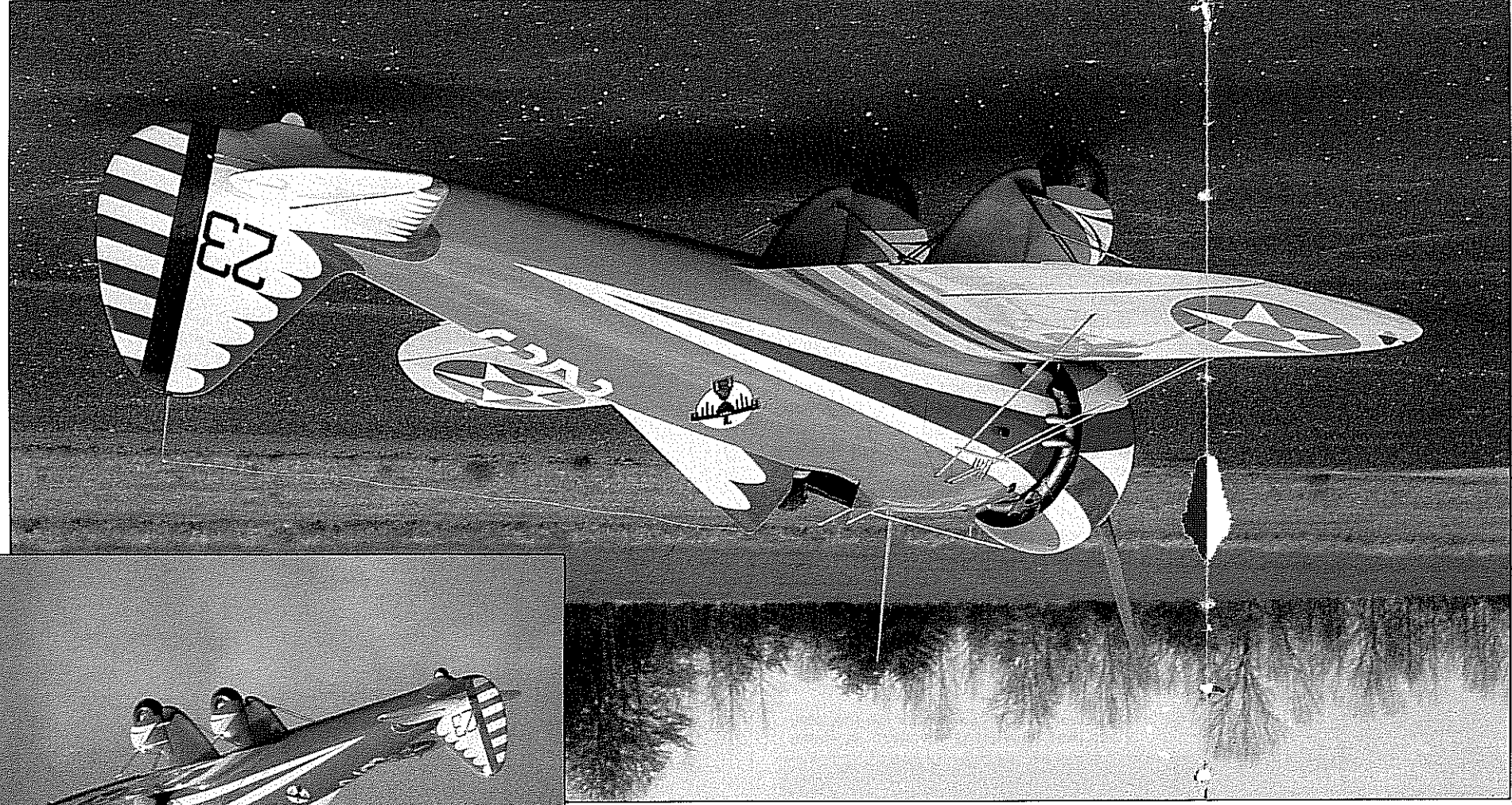
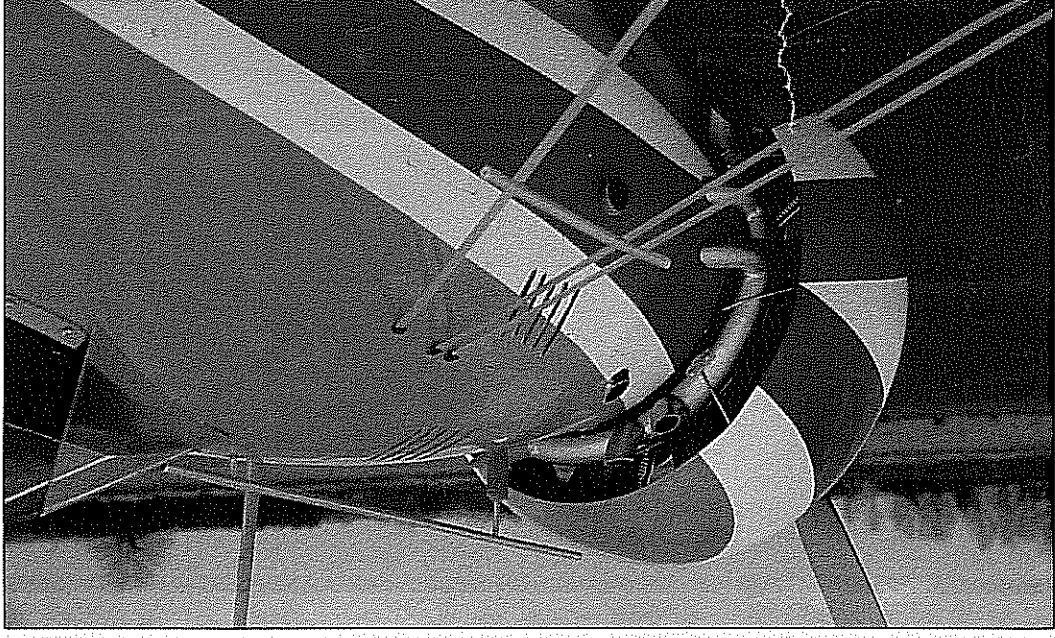
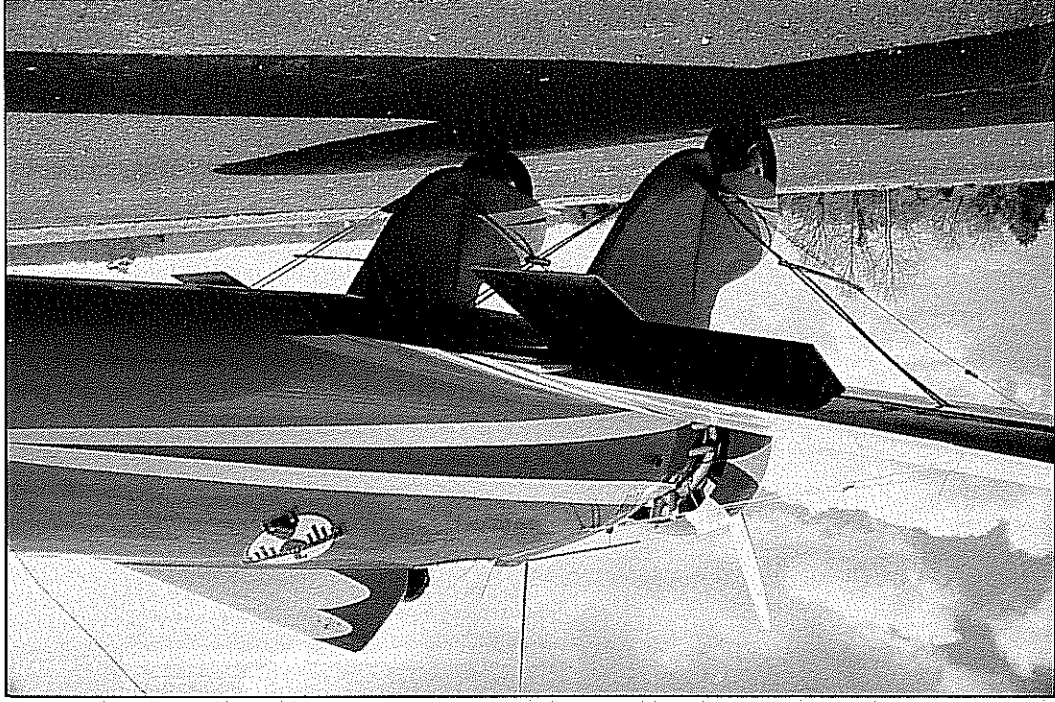


# CONSTRUCTION "PEASHOOTER" P-26A

by Dan B. Santich

From out of the classic era comes the most colorful fighter of all time.

Photos by Eddie Shinlever



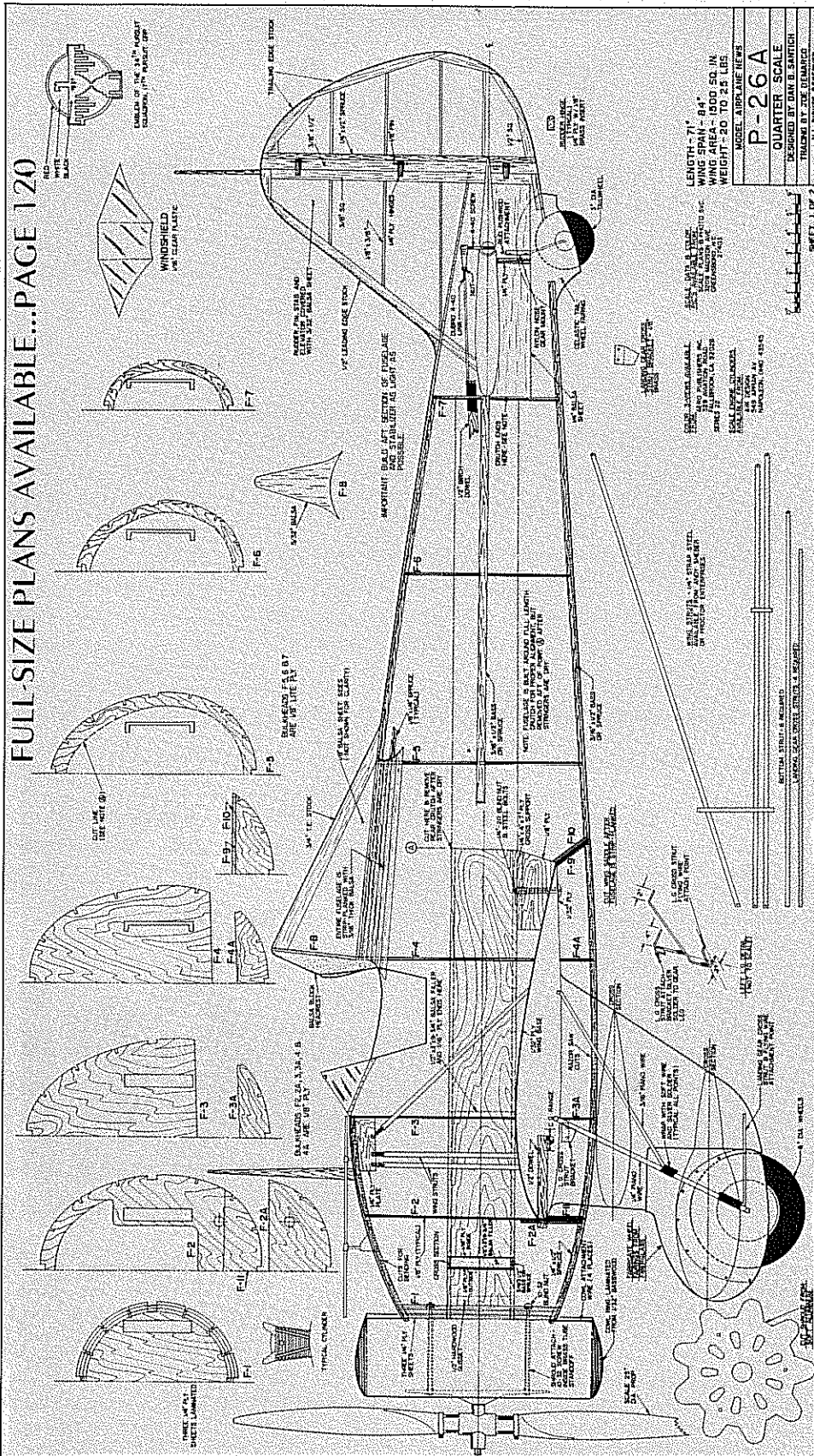
**T**HE PEASHOOTER IS AS close to a big pattern plane as you can get! I came to this conclusion after having both designed and built some 10 giant scale models of various performance capabilities, and "pattern performance" plane. My Peashooter turned out to be a new learning experience as well. Not from a fly-ing standpoint, but from the contest ex-posure. It's a plain and simple fact that you darn near have to have a plane that flies like a pattern ship to rank at most contests. (Please don't let me dissuade you from building that Cub! There are few sights as beautiful as a Cub doing "lazy eights" or a "touch and go.") Unfortunately, few judges

appreciate this beauty.) In fact, my Peashooter just recently qualified for the U.S. Scalemasters Championships by plac- ing in the top five at the Mint Julep in Kentucky. And that was the first contest my Peashooter entered! With a distinctive look- ing airplane such as my P-26A ablaze in such an uncommon splash of beautiful colors and patterns, how could it lose?

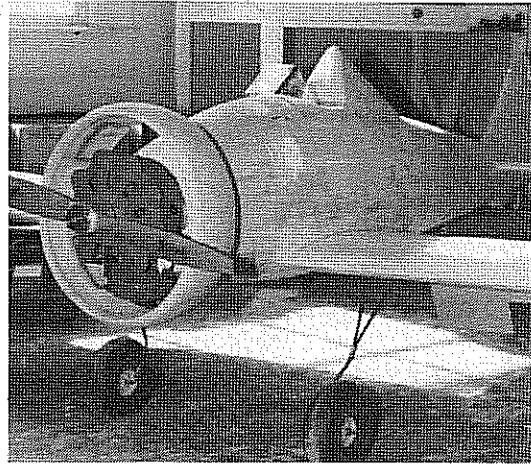
A determining factor could have been that the Peashooter was the only giant-scale Peashooter that the judges, competitors or spectators had ever seen. There is something to be said for originality. How many P-51s or Pits can there be? Thousands! How many Peashooters are there? Yours and mine!

Yet, data on the Peashooter is relatively easy to find. Aero Publishers, Inc., (329 Aviation Road, Fallbrook, CA 92028) has an excellent book full of photographs and color 3-views for \$3.95 plus postage. Ask for Aero Series No. 22. Also now available is a complete packet of color photographs that include everything from the cockpit to the tail wheel from Scale Plans & Photo Service (3209 Madison Avenue, Greensboro, NC 27403). The sub- ject attracts in both cases the one I chose to duplicate and is the only existing Peashooter still in flyable condition. It is now on display at the Planes of Fame Museum in Ontario, California.

Hard to believe that P-26 is a product of the same firm that makes today's Boeing 747—but it is! It looks great from any angle and is a real "eye-catcher" in its striking paint scheme. But looks are not the only virtue of Dan Santich's newest scale effort; it is a fine perform- ing airplane—"pattern performance" says the designer!



LENGTH - 71"  
 WING SPAN - 84"  
 WING AREA - 1500 SQ. IN.  
 WEIGHT - 20 TO 25 LBS.  
 MODEL AIRPLANE NEWS  
**P-26A**  
 QUARTER SCALE  
 DESIGNED BY DAVID B. SMITH  
 TRUSS BRACE WING METHOD  
 ALL OTHERS PATENTED



Ready for paint, the Peashooter cowl can hide that big Kioritz with no problems.

lot of paint, and it adds up. My preference is Super MonoKote. Now don't balk! Some of the most beautiful airplanes around are finished with this plastic miracle. If done properly, there is no covering lighter or more beautiful.

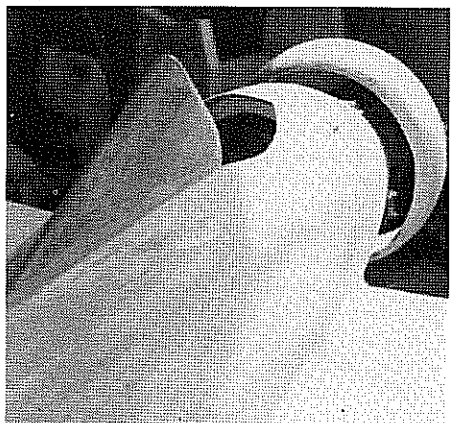
My method is to sand the wood super smooth, then fill the pores and cracks with a super-thin layer of auto body polyester filler, such as Black Magic or White Streak, then sand smooth again. Apply a coat of Coverite Balsarite and then cover with Super Coverite. Over the Coverite the Super MonoKote is applied.

Try my method. You will be surprised at the results: No grain, no bubbles and no wrinkles. Beautiful! You can even use MonoKote over the fiberglass wheel fairings with no bubbles.

How about a few pointers for the fuselage construction? The fuselage is easy to build but takes time and careful fitting. After all the parts are cut according to the plans, make two crutches 47 in. long, and slip the bulkheads into position.

As you will note on the plans, the entire inside of the fuselage is removed aft of F4, so perforate the bulkheads as described. This method will insure against the making of a banana against your will. The strips that form the outer shape are cut from 3/16 in. sheet balsa using the Master Airscrew Balsa Stripper.

Remember to take your time here and



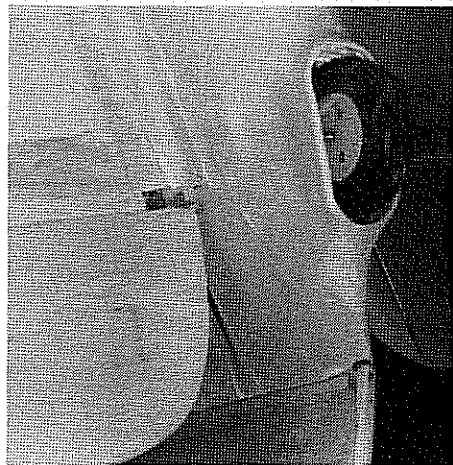
High headrest is a design factor that gives the P-26 much of its unusual look.

Peashooter, be prepared also to build a fence to protect it from your overly enthusiastic scale buffs, because I guarantee you this bird draws attention like no other model!

For actually building the Peashooter, I'll start with its weight. The weight makes the difference between a feather and a brick. For the Peashooter, we want a feather.

To achieve the feather weight, some careful wood selection must take priority. Your adhesive resin (epoxy or polyester), covering and finish will all add to the weight, so take them into consideration. This is a model where you may be tempted to go wild with a super finish. Who could resist?

But, *be careful*. Large airplanes require a



Fully faired tail wheel is accurate and functional; Dan is a real craftsman.

make each strip fit perfectly. The results will be worth the effort. Mark the location of the wing cutout so you will know where to cut when the fuselage is completely covered. Also, mark for the cockpit cutout.

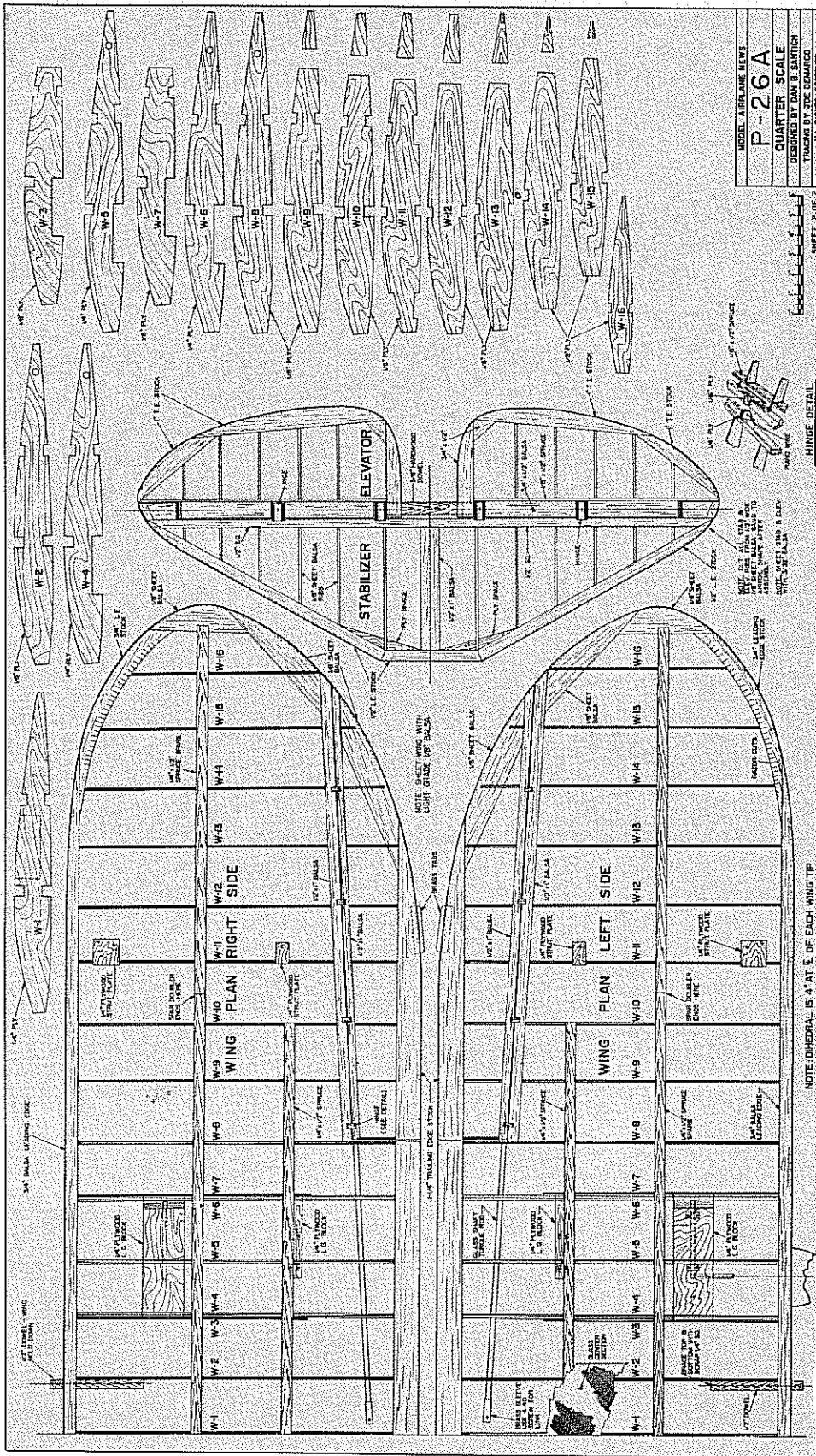
The Peashooter also has a long tail and a short nose, so keep *everything* rear of the CG as light as possible. Do not sacrifice strength for weight and, again, do be prudent in your wood selection.

Since the Peashooter's nose is so short, you can really beef-up the front end. You will note that there is a 3/4 in. firewall. You could even use a 1 in. firewall if you wish, but don't go less than 3/4 in. These big engines require some strength up front. I do not use shock engine mounts but, instead, let the fuselage absorb the vibes. By doing so, I have achieved increased engine performance over the shock-mount method.

Also, covering on a model of this size can add up to a lot of pounds in weight, so be very careful about that beautiful finish. My model was 21 lb, less fuel, off the board, and I was surprised that it balanced out perfectly. I used a Kioritz 2.4 cid for power, and was very happy with that selection.

You will undoubtedly have your own powerplant choice, but I have found the Kioritz hard to beat. It's a heck of an engine. A 20x10 prop seems to be the best selection for performance. My Kioritz turns about 7,000 rpm and pulls the model straight up.

The wing is well able to carry this load,

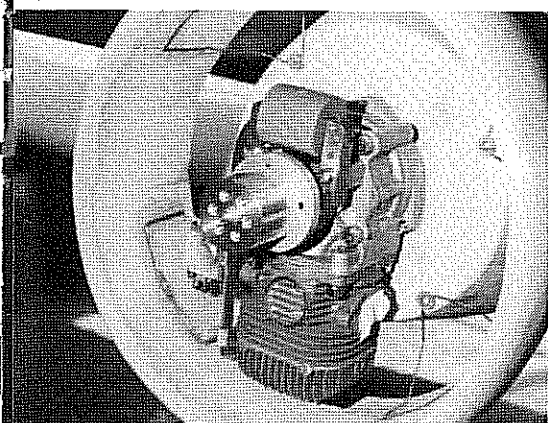


WOOD - AIR LINE LEVELS  
**P-26A**  
 QUARTER SCALE  
 DESIGNED BY DAN B. SMITH  
 THROAT BY THE GAMBRO  
 ALL RIGHTS RESERVED

SHEET 2 OF 2

HINGE DETAIL

NOTE: DIMENSION IS 1/4" AT E. OF EACH WING TIP



Most chainsaw engines run best in the inverted position, Kioritz is no exception.

so build accordingly. And be sure to build into the wing at least a 1 in. wash-out. The center section and the landing-gear supports will also need to be beefed-up. Outside of that, use light ply or even balsa. The spars are doubled out to rib W-10.

Well, enough of all that construction. How about flying my Peashooter? Without

a doubt, it is the smoothest, most responsive and groovingest model I have built to date. For those of you who remember the Taurus, the Peashooter's aerodynamic moment, performance and speed (about 50 mph) are quite similar. At 50 mph the Peashooter is ab-

(Continued on page 86)

(Continued from page 65)

solely rock stable, easy to predict and visible darn near forever!

And handlings are something to behold as well. For a ship with such a narrow track on the mats, ground handling is surprisingly good.

The outline of this model is pure scale, so if the judges give you less than a perfect score on Accuracy of Outline, tell them to have their eyes examined! Deviations for "a good flying model's sake" are a semi-symmetrical airfoil and slightly enlarged ailerons.

Flying the Peashooter for me is sheer pleasure personified. To me, that's what flying is all about, and this plane fills every desire for beauty, performance and pizzazz. All in all, I'd have to say that this giant scale Peashooter is great! When new ideas evolve (like giant models) it can be agonizing to have to wait for the suppliers to provide that new airplane. Kit manufacturing is an expensive venture and I am amazed at the already fine selection of giant kits being produced.

For the most part, these manufacturers offer a value unparalleled in our hobby, and I sometimes wonder how they can do it! There are many subjects still awaiting discovery by the manufacturers, and, hopefully, we will soon see as much of a variety as we now have in smaller designs. But for now, the Peashooter is one of the few fine giant scale models available to us.

To see what I mean, just build a Peashooter. If you don't build one, then you'll just have to drool over your buddy's. I'll bet he's already started to build his!

## OFFSHORE

(Continued from page 55)

present this is also true for models. "The only advantage a canard seems to have is the ability to execute fast wide-open turns. What a modeler must decide is how much reliability is he willing to sacrifice for good-turning ability. You must also remember that your canard must pass over its own wake. It is impossible to pass over this wake without getting some wetted area

Barry Willes is typical of someone who is just getting started in boating, and would like to find out what type of boating activity is going on in their area. Here's what his recent letter asks:

"I am 16-year-old and have just built my first boat. It is a Dumas DV 10 with a Fuji .099 for power. I have read your articles and they have helped me a lot. I do have three questions for you though: 1.) Is there a class for my type of boat? 2.) Do you know of

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on the following mass, which will cost you any boat clubs in the Cleveland area? 3.) Where can I get a NAMBA and IMPBA rule book?"

Well Barry, the answer to your first question is both yes and no. IMPBA does have the A Mono class, which is for engines up to .11. Unfortunately, I have never seen this class run as a separate class.

Even at the IMPBA Internats, the class is run combined with B Mono (up to .21). As far as NAMBA goes, it would run in the A Mono class again up to .21. Don't give up though, as the boat can still be run in the IMPBA A-B class or the NAMBA A class.

Though you will be running against boats with larger engines, you will find that in most cases, the boat that wins races is the one that finishes consistently, not necessarily the fastest one.

To find out if there are any boat clubs in the Cleveland area, first check with all the hobby shops, they might know of one. Then write to either the NAMBA (NAMBA Internation, 6073 Sunrise Drive, Lower Lake, CA 94947) or IMPBA (IMPBA Office 24310 Prairie Lane, Warren, MI 48089). Each organization has a list of their clubs in the USA.

To obtain one of the rule books, again write to the above organizations. The rule books are usually given to members as part of membership. If you don't belong, they may sell you one for a nominal charge.

I have yet to go to a club meeting where one of the main complaints wasn't "where can we get new members?" Maybe the answer is to just look around. Leave notice with all the local hobby shops of your club meetings and where you run your boats.

Then talk with the shop owners. Tell them you exist. Leave the addresses and phone numbers of several of your club members who can be reached for information. This way, when someone comes in the shop and asks if there is any boating activity in the area, the owner can give more information than the usual "yes, I think there are some people around here who run boats, but that's all I know." There are a lot of people out there who are interested in our hobby, just give them a chance to find you.

Looking for a new fuel tank for your boat? Kress Technology (27 Mill Road,

Lloyd Harbor, NY 11743) has a line of tanks a little different than what you are probably used to.

This tank has a molded-in vent so that you only have one line going through the stopper, which happens to use a threaded nut rather than a screw to tighten the plug. Write to the next month I'll have a review of Prather's new 7.5 tunnel boat, and a how-to on gold leaf lettering. It's not expensive or really difficult, but it can sure make for a neat-looking curate reproduction of shapes and

thicknesses and proportions and colors. Finishing requires attention to detail—at whatever scale, requires good drawings and photographs attained through research and cooperative effort. There is more of this good stuff around today than ever before, and more groups and organizations devoted to making it available.

Second, given a sense of how the original aircraft was designed and built, decisions have to be made about scale, powerplant, and construction to match. Again, good research and cooperative effort can make when no 1918 altimeters are available, or no anything possible here. Information about 1945 airspeed indicators? How to work a machine gun? Wheels? Propellers, especially given the difference in engines? Cockpit covers? Fabric lacing? (It turns out that commercially-available boot-hooks correspond almost exactly to original lacing-hooks, but boot-hooks are the same size as the originals.) What to do for the 85% reproduction? Or a 1/2 scale model? Tire treads appear on contemporary motorcycle tires that plastic to give a sense of the shape of the framework entirely and go to sheet wood or to make possible a frame that looks like the original. It may be necessary to give up the provide different kinds of strengths, in order to make possible a frame that looks like the duplicate the materials exactly. He can design his structures to correspond piece by piece, and also the problem of the builder's ability to reproduce tiny fittings. It may be convenient to move to other materials that provide different kinds of strengths, in order to make possible a frame that looks like the original. It may be necessary to give up the framework entirely and go to sheet wood or plastic to give a sense of the shape of the

airplane at the expense of the exact structure. But the builder interested in the proper effect will still need to know what the original framework contained, where the members showed, and how thick 1/2 in. tubing really is when reduced to 1/4 scale.

Builders of aircraft of the 1930s and 1940s can use small-scale steel tubing, brazed or welded, depending on the size of their reproduction. Smaller scales, like 1/4 and under, may need to rely on sheet balsa or other woods, combined with aluminum, plastics, or epoxies. But again, the builder needs to know how the original was built in order to achieve the correct look of the finished product.

But when we get to the late 1940s, and to WW II, the building of full-scale reproduction aircraft becomes a real problem. The originals were too heavy, too complex, and too powerful to be replicated with original structures. Nobody can reproduce the massive steel and aluminum fittings of a Corsair or a Northrop N3PB. Almost nobody can afford to feed a 1000-2000 hp engine to power it with. Full-scale reproductions become nearly impossible to build, so builders who want to fly a Spitfire or a Sea Hawk generally go for something part-scale, with a smaller engine, and there are drawings and kit-builders at all levels to accommodate them.

Construction of these 65%-85% reproductions usually relies on combinations of steel-tube fuselages with plywood or fiberglass covers, and wood-part wings covered with plywood or fiberglass. Smaller-scale

## SCALE, SCALE, SCALE

(Continued from page 58)

John Olan, c/o Model Airplane News, 837 Post Road, Darien, CT 06820.

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reproductions (R/C or unguided models) can have heads all over the aluminum panels. How big were the original rivets? How were the heads formed?

All these problems, at whatever scale, require information, which requires a network of sources, which requires cooperation, and quite information, which requires a network of sources, which requires care and gentleness—and come from trick paint alone, but in the accurate reproduction of shapes and

curate reproduction of shapes and kinds. Finishing requires attention to detail—at whatever scale, requires good drawings and photographs attained through research and cooperative effort. There is more of this good stuff around today than ever before, and more groups and organizations devoted to making it available.

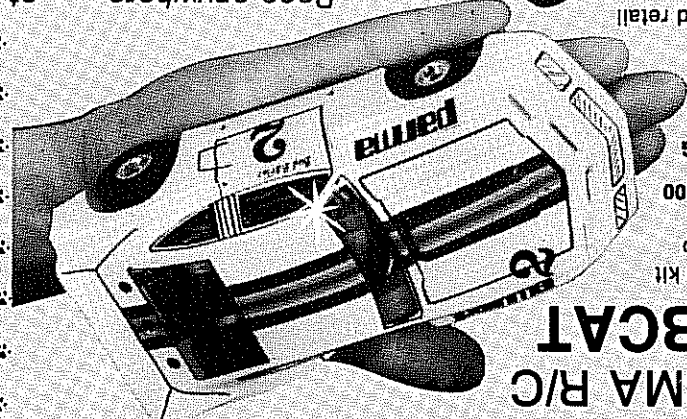
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## A MIGHTY HANDFUL!

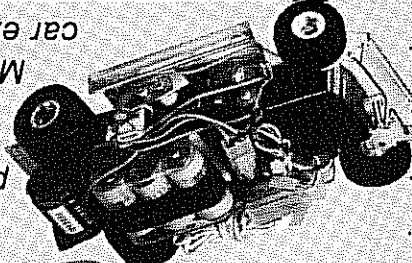
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