There are several notes I need to provide to aid you with the enclosed package. The original kits used 1/16" balsa. Since I wanted to print these directly on balsa sheet I developed the parts for 1/32" balsa sheet. My printer will handle up to 1/20" sheet, but I find 1/32" is a little easier to handle in the printer. As a result, some of the parts have been drawn to allow for cross grain laminations. The fuselage formers are a good example. The fin as also been drawn with a mirror image to allow for markings on both sides. This works fine as long as you are using 1/32" sheet stock.

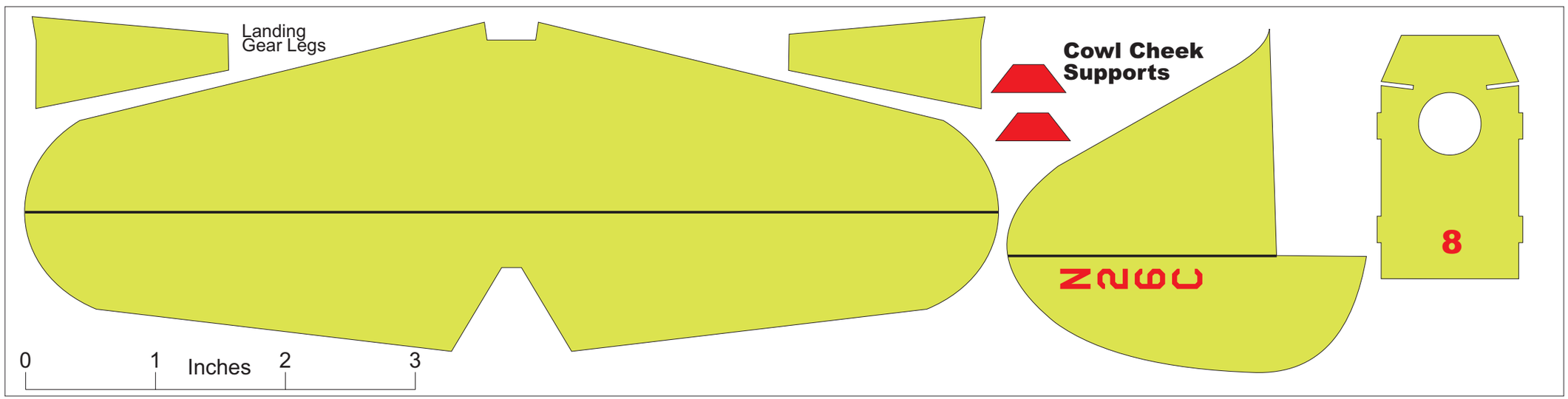
I like to use a removable nose for winding. The parts have been drawn with this in mind. An un-colored nose former has been drawn that is to be part of the fuselage structure. A colored nose piece has also been drawn. The piece when backed with a piece of 1/64" plywood becomes the removable part. The nose former is located to allow the removable piece to nestle inside the fuselage sheeting. I like to use a Peck thrust bearing for 1/32" prop shafts in the removable nose piece.

When using 1/32" sheet for the fuselage sides, I was concerned about the load of a fully wound motor on the rear motor peg. I like to use a piece of 3/32" aluminum tubing for the rear peg. Makes holding the model in a winding stooge very easy. To create a bit more strength at the rear peg, I apply a 3/8" diameter disk of plywood to the inside of each fuselage side at the peg location. This has proven to be more than adequate for a fully wound motor of 1/8" Tan II rubber. A piece of 3/32” OD aluminum tubing is used for the rear motor peg.

The original Goldberg kits did not have any color applied to the balsa. I have added color and markings in a manner similar to the old Top Flite Jigtime models. Carl Goldberg was responsible for the Jigtime series when he was with Top Flite. The colors chose are based on colors used on the full scale aircraft.

I do hope you build and enjoy a model from this plan package.

Paul Bradley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Cowl Cheek
Supports
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N266C
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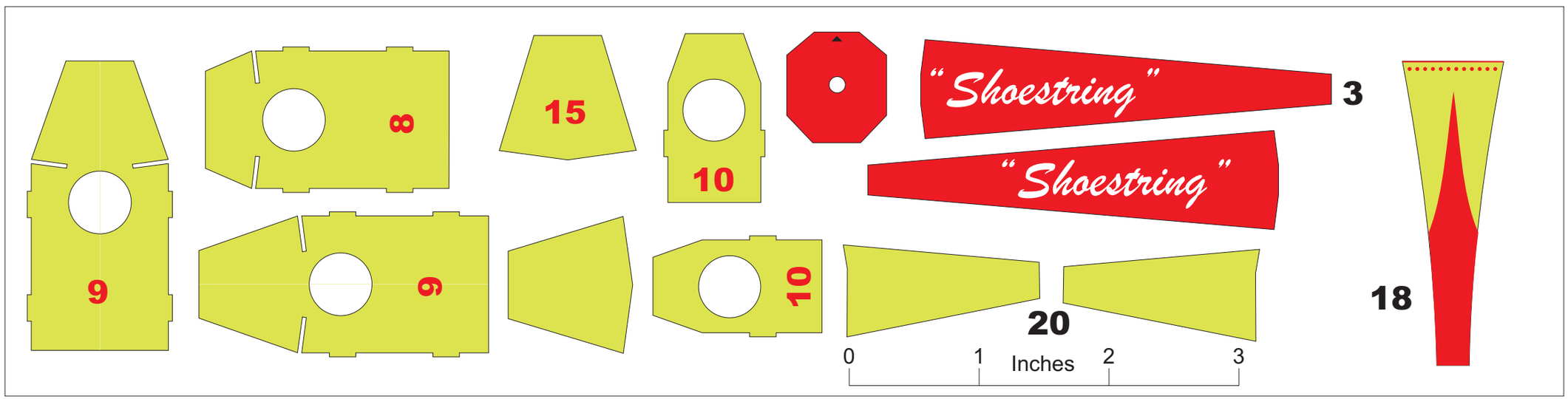
Inches
2
3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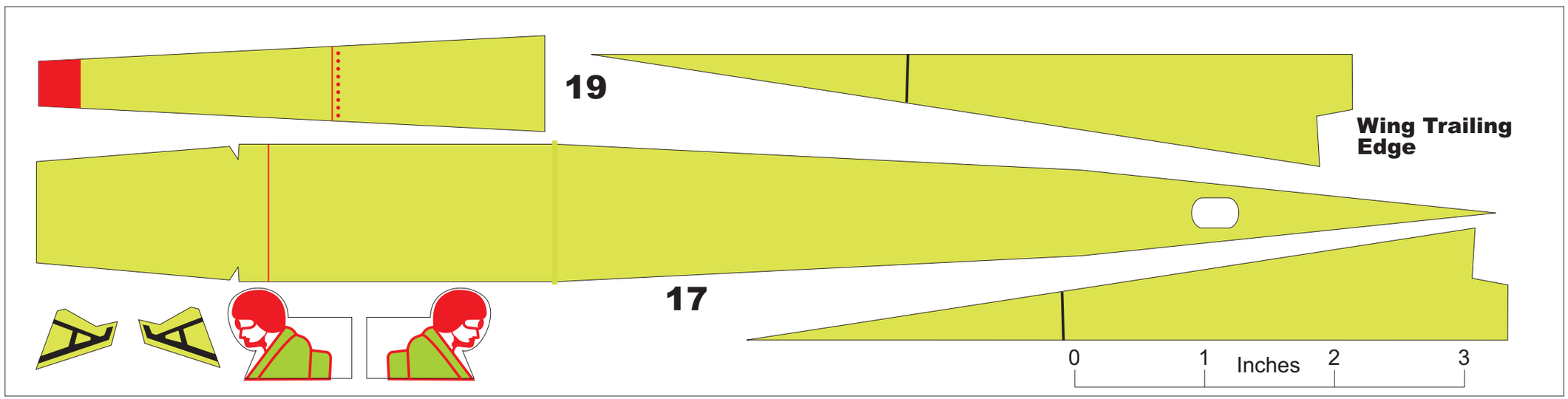
15
10
"Shoestring"
3
"Shoestring"
9
6
10
20
18
0
1
Inches
2
3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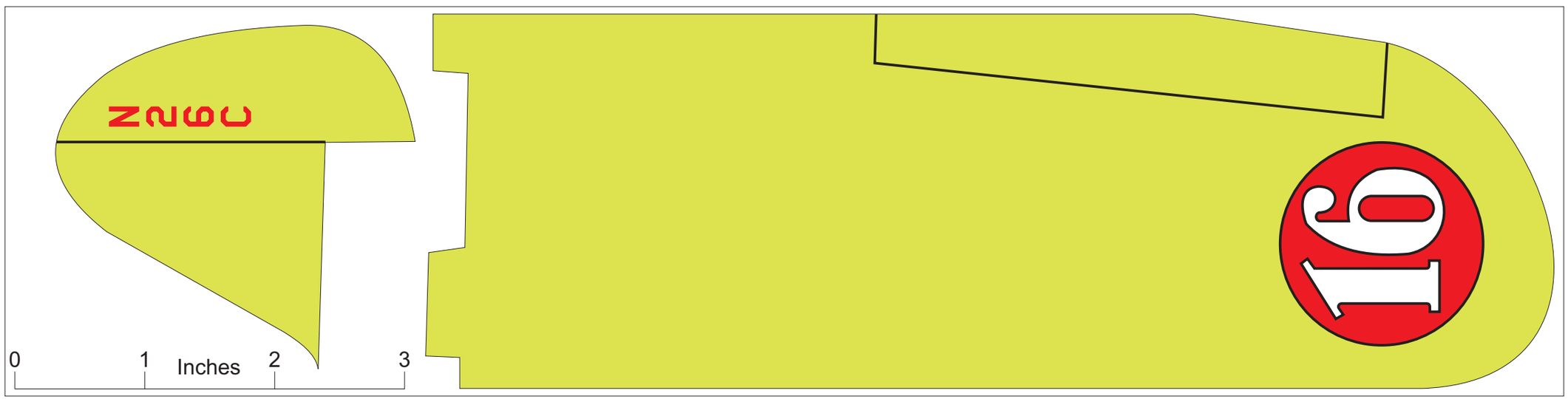
17
Wing Trailing Edge
0
1
Inches
2
3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Inches
2
3
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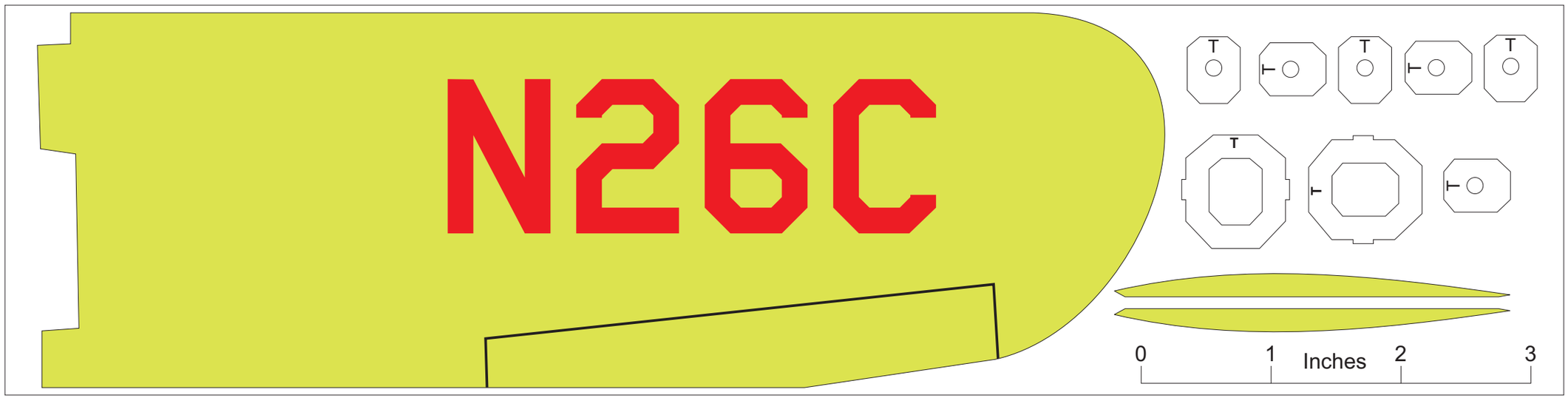
N26C
T
T
T
T
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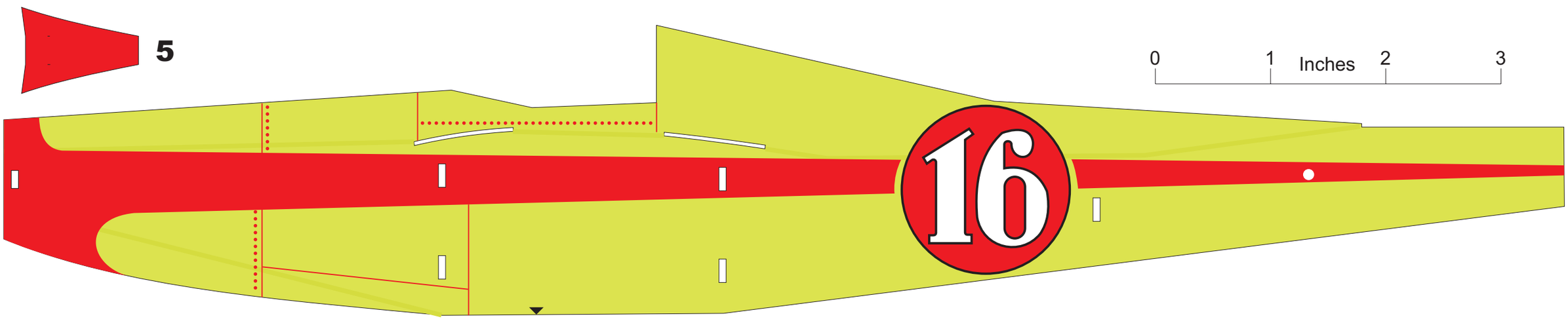
T
0
1
Inches
2
3


5
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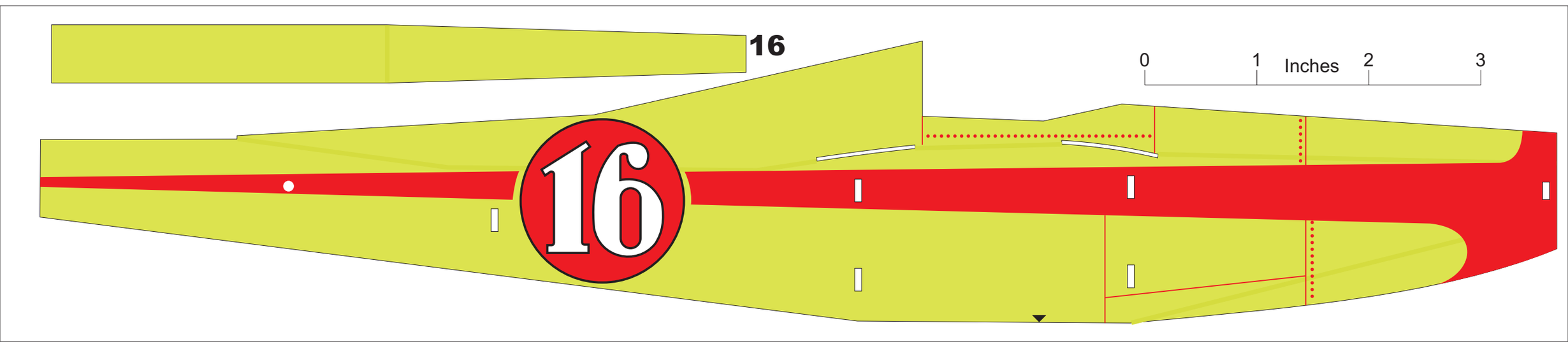
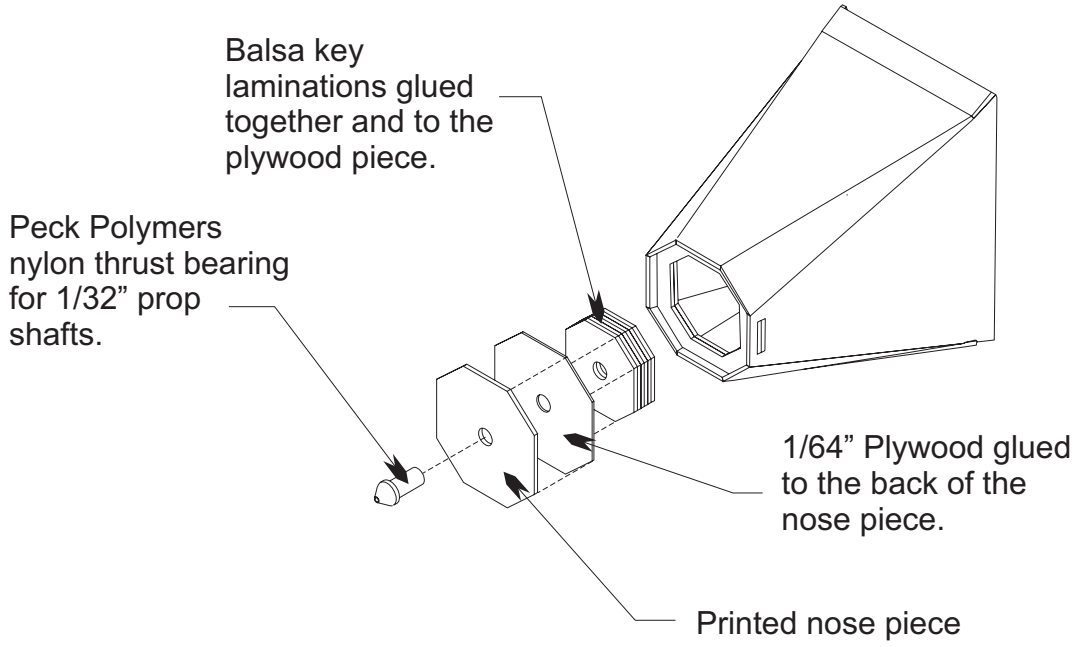
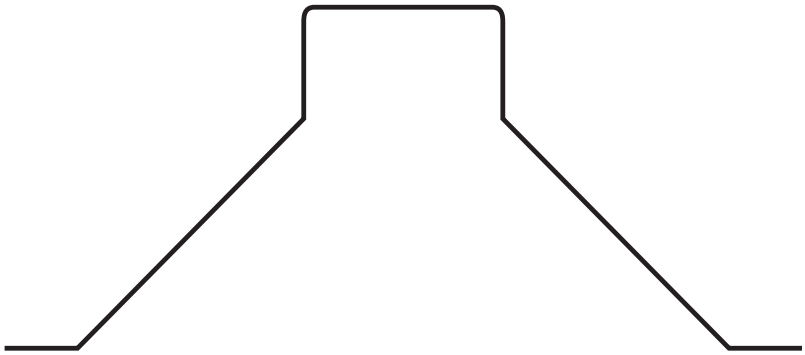
1
Inches
2
3
16


16
16
0
1
Inches
2
3

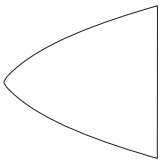
Removable Nose Assembly



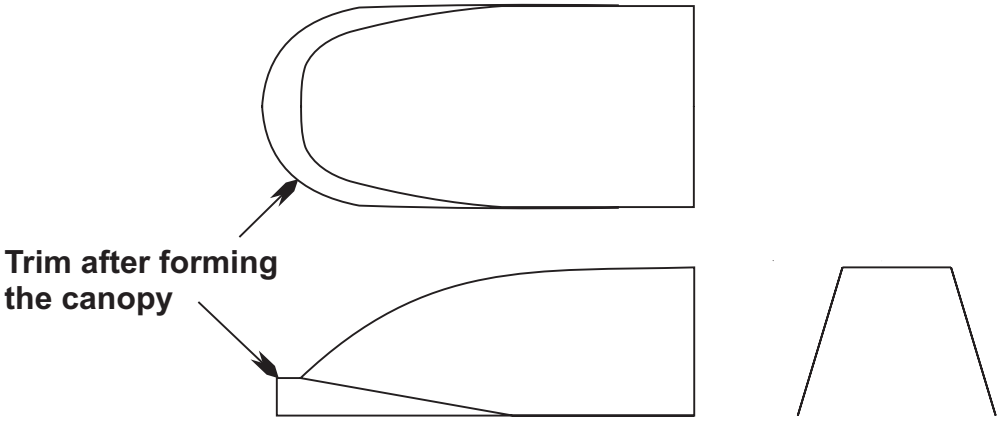


.025 Piano Wire

7/8” or 1” Wheels



Spinner



Canopy

Shoestring

One of the smoothest-looking midget racing planes ever built was the famous Shoestring. In September 1951, it won the Continental Trophy event at the National Air Races held in Detroit, with a speed of 199.7 miles per hour. This is the highest speed ever attained in this event.

Along with the beautiful lines and high performance of the Shoestring, the finish was outstanding. The colors were bright chartreuse trimmed with fire-engine red, rubbed down and waxed to a high gloss.

Shoestri

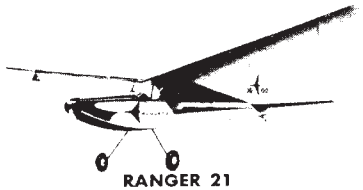
FLYING MODEL, KIT

FLIES 15-30 SEC., 150-

Wingspan	18"	Designed and
Length	15"	
Weight	1⅛ oz.	

SPIRIT OF ST. LOUIS
KIT P1

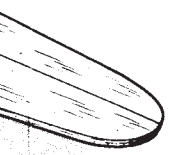
SHOESTRING
KIT P2



RANGER 21
KIT P3

CARL GOLDBERG MO

CHICAGO



string

ODEL, KIT D2

EC., 150-300 FT.

Designed and drawn by:

Carl Goldberg

Paul E. Del Ghetto

RG MODELS inc.

YOUR SUGGESTIONS WANTED!

Modelers often have ideas for improvements. We will be happy to hear from you by post card or letter on:

1. Your suggestions.
2. What you like best about our models.
3. What three new models you'd like to see us bring out.

Be sure to include your name, age, and address so we can reply and thank you.

HOW TO WIN YOUR PILOT'S LICENSE!

A pilot must of course study, practice and finally pass certain tests before he can win the coveted certificate. The performance standard set for your model is not difficult, but it will take some effort. So read the following carefully.

First, build your model carefully and accurately, following instructions. Cement all the joints firmly. Sand the entire model neat and smooth, with rounded edges especially on the wing and tail. Keep it light.

Second, follow the Flying Instructions to get your model in perfect "flying trim." Get lots of practice in flying it, and learn to make small adjustments to help it fly more smoothly. Study and follow the section on How to Make Extra Long Flights. Keep practicing.

Third, have your model timed to see how long it can stay up. The timer can be your teacher, scoutmaster, parent or a friend, and should use a stopwatch or a sweep-second watch. When you have successfully achieved the necessary time as shown in the application, fill it out and send it in with 10c to cover the handling and mailing costs.
Within a short time (allow three weeks), you will receive a handsome certificate inscribed in your name, giving real recognition to your building and flying achievements!

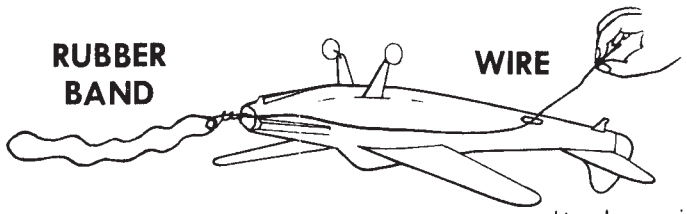
LICENSE APPLICATION

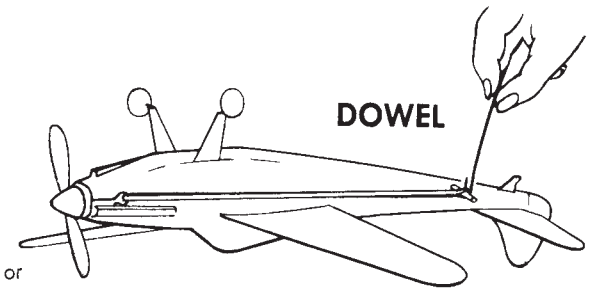
To Carl Goldberg Models, Inc.
Chicago Ill.

I am enclosing 10c to cover the costs of handling and mailing my pilot's license. My plane, Shoestring, had to fly at least 14 seconds to qualify. It made a flight of ..... seconds.

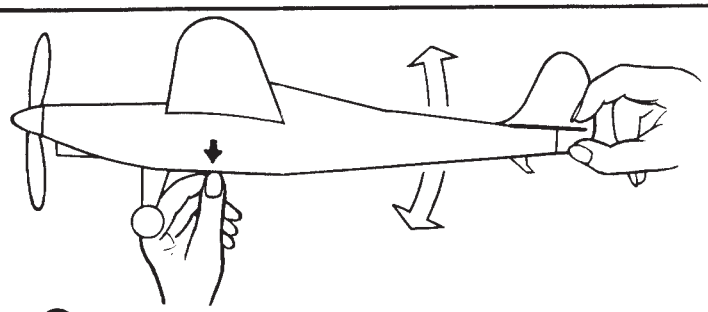
Name ..... Age .....
Address ..... Timer's Signature .....
City ..... State .....

FLYING INSTRUCTIONS

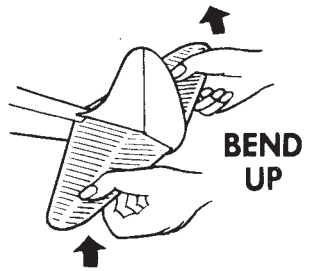


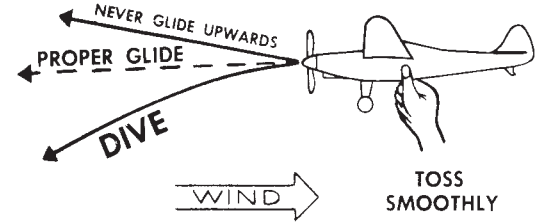


1 Use long wire (from hobby shop, florist or hardware) to help install rubber motor. Insert dowel at rear.

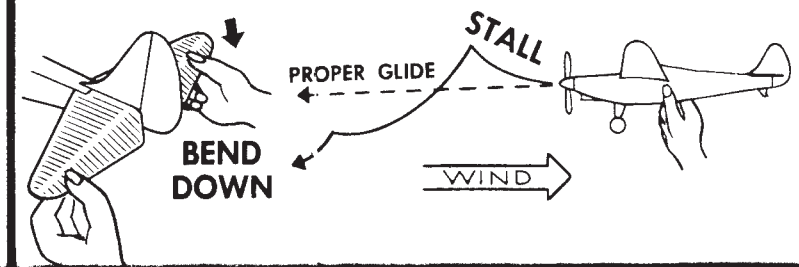


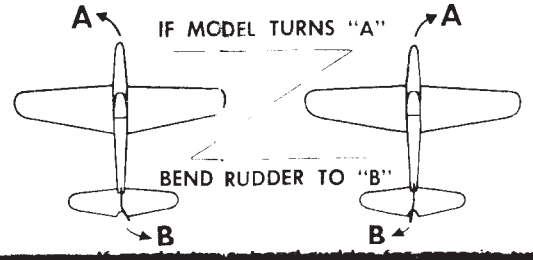
2 Balance model as shown. Add modeling clay to front or rear to make model balance at arrow.

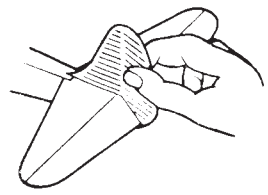




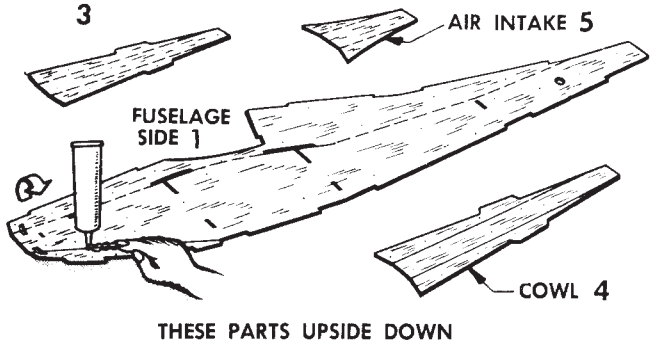
3 Make test glides over tall grass. Should model dive, bend tail up a little at a time until the glide is smooth.



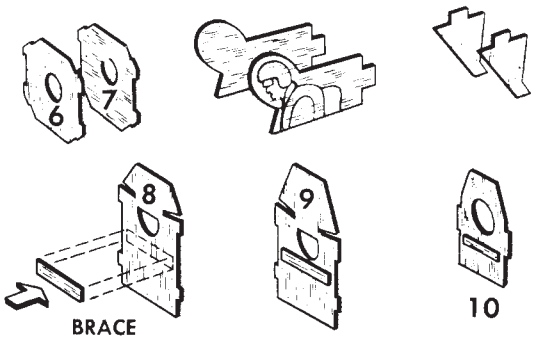




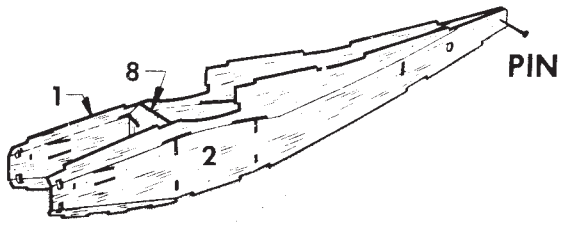
Here's HOW TO MAKE YOUR MODEL RIGHT!



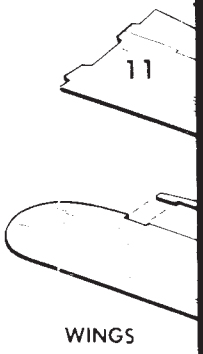
1 Turn 1, 2, 3, 4, and 5 upside down. Rub regular model airplane cement into underside of creases as shown.



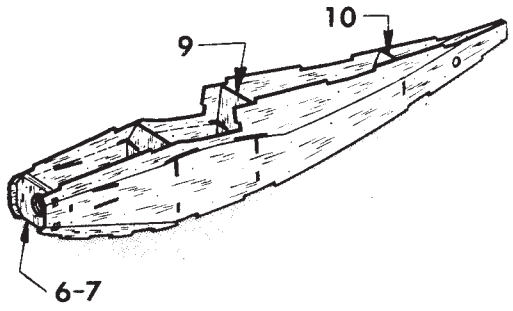
2 Carefully cement together the various parts pictured above.



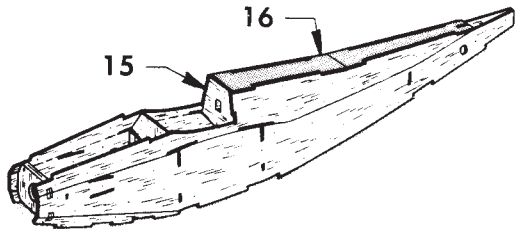
3 Cement former 8 between the fuselage sides. Very accurately cement rear of fuselage together.



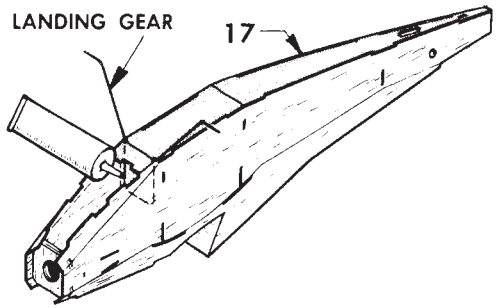
4 Join the win



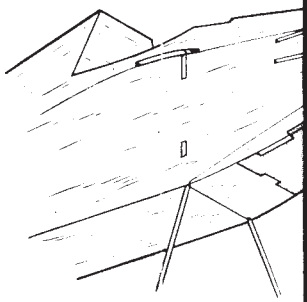
5 Cement in place formers 6-7, 9, and 10.



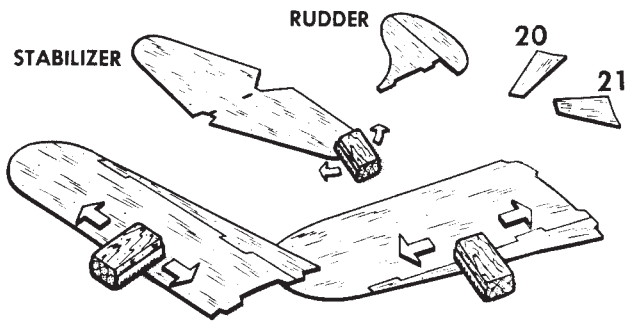
6 Add former 15. Set 16 in place, and cement while in position. Wipe off excess cement until shine is gone.



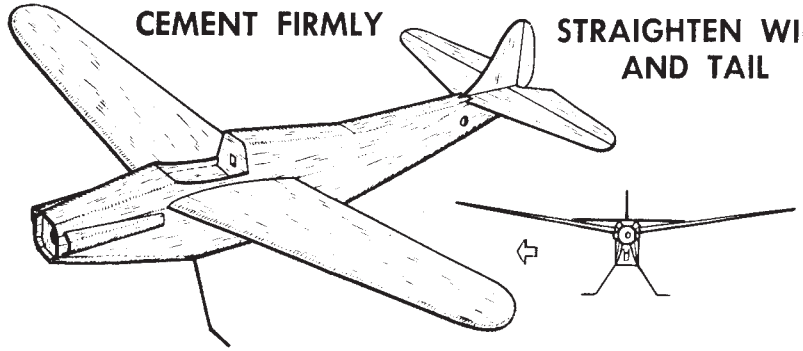
7 Join landing gear firmly to former 8. Cement 17 in place.



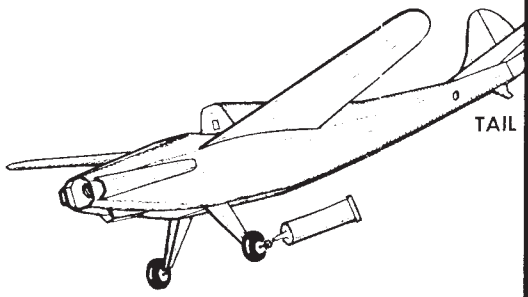
8 Cement 18 in pla



12 Sand wings, tail, and fairings 20 and 21. Round off square edges except where parts join.



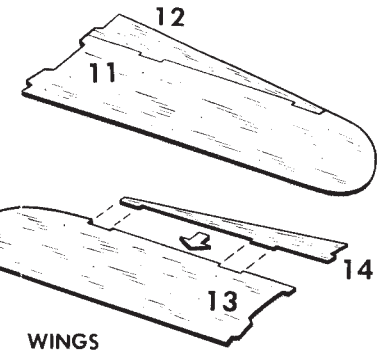
13 Join wings solidly to fuselage. Add tail, and look at model from front and rear for correct line-up. Straighten before cement dries.



14 Add wheels, fairings 20 and 21, and tailskid. Put drop of cement on ends of axles without touching wheels

CHICAGO ILLINOIS

HT!

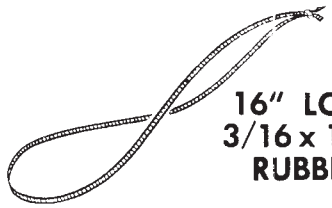


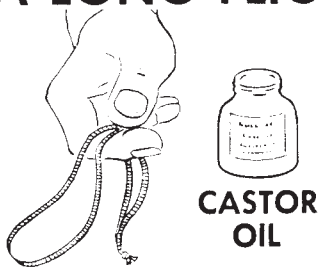
4 Join the wing parts as shown.

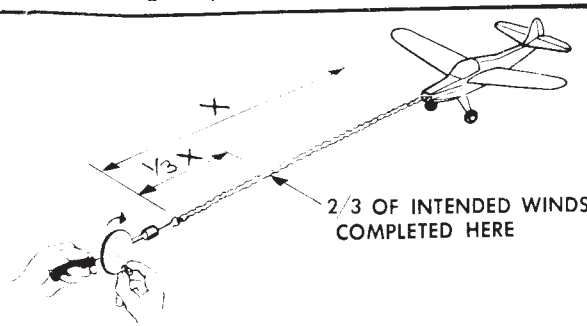
4 Should model stall and dip (first climb, then dive), bend tail down a bit at a time until the glide is smooth and flat.

5 If model turns, bend rudder for opposite turn in order to get straight flights. Wind motor 100 turns, and make several test flights. Make corrections for better flights by bending tail as in steps 3 and 4.

HOW TO GET EXTRA LONG FLIGHTS!



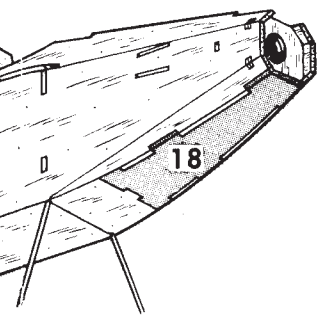




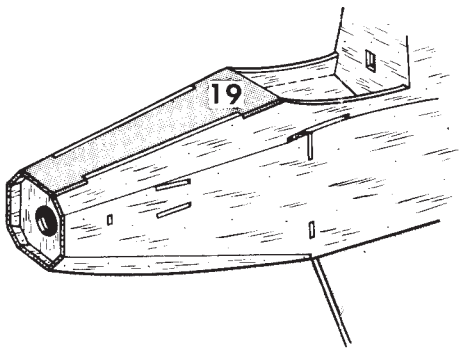
6 For a longer, more powerful motor, see your dealer for rubber 3/16 x 1/30 x 32". Tie the ends with a square knot. Rub castor oil into the motor so it can take many more turns without breaking. Don't get castor oil on the knot or it will come undone, and you'll have to rub dust into it to get the knot to hold.

Learn to wind with a drill, with a hook firmly tightened in place for winding. Stretch the motor 3 to 5 times its length, and wind while coming back in gradually. You should have about ⅔ of your intended number of turns by the time you have come back in about ⅓ of the distance.

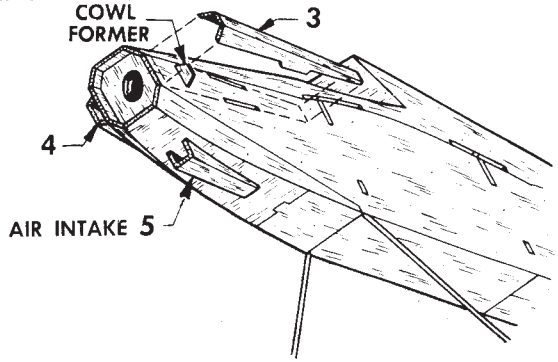
Practice winding for maximum turns and power. It's best to practice with the motor outside the plane, hooked on a nail, in case it should break. You should be able to get from 750 to 1000 turns. In good, calm flying weather, and with your plane adjusted to fly smoothly, this amount of turns should enable you to get long flights of 20 to 30 seconds duration. Good luck!



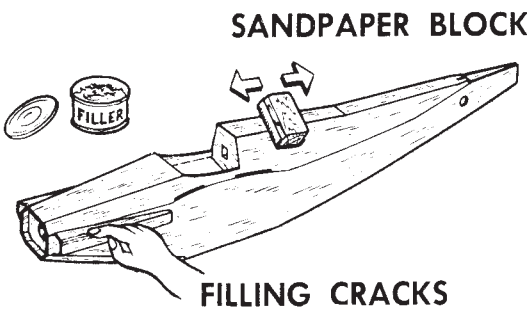
Cement 18 in place.



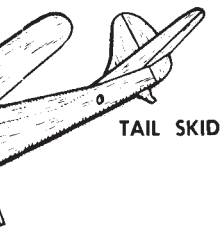
9 Cement 19 in place.



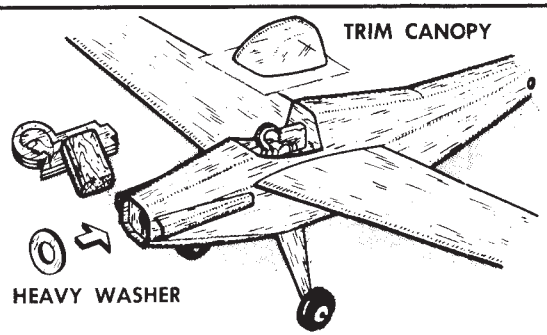
10 Add cowl formers, cowls 3 and 4, and air intake 5.



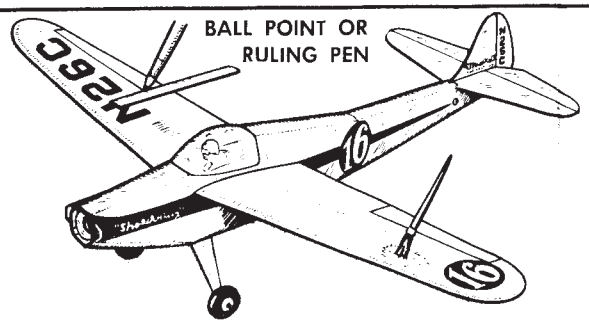
11 Fill cracks with DURATITE SURFACING PUTTY or PACTRA PLASTIC BALSA. Sand smooth with 4 0 sandpaper and round off square edges.



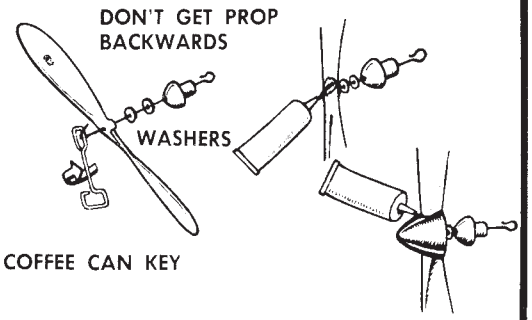
d 21, and
t on ends
wheels.



15 Round off edges of pilot, and trim excess from canopy. Cement pilot, canopy, and balance washer in place.



16 Model may be clear doped one thin coat and sanded smooth. Add trim lines and decals. Keep model light for long flights. If beauty is more important, apply 2 thin coats color dope before lines and decals.



17 Assemble propeller parts as shown. Bend and cement shaft to prop, then add spinner.