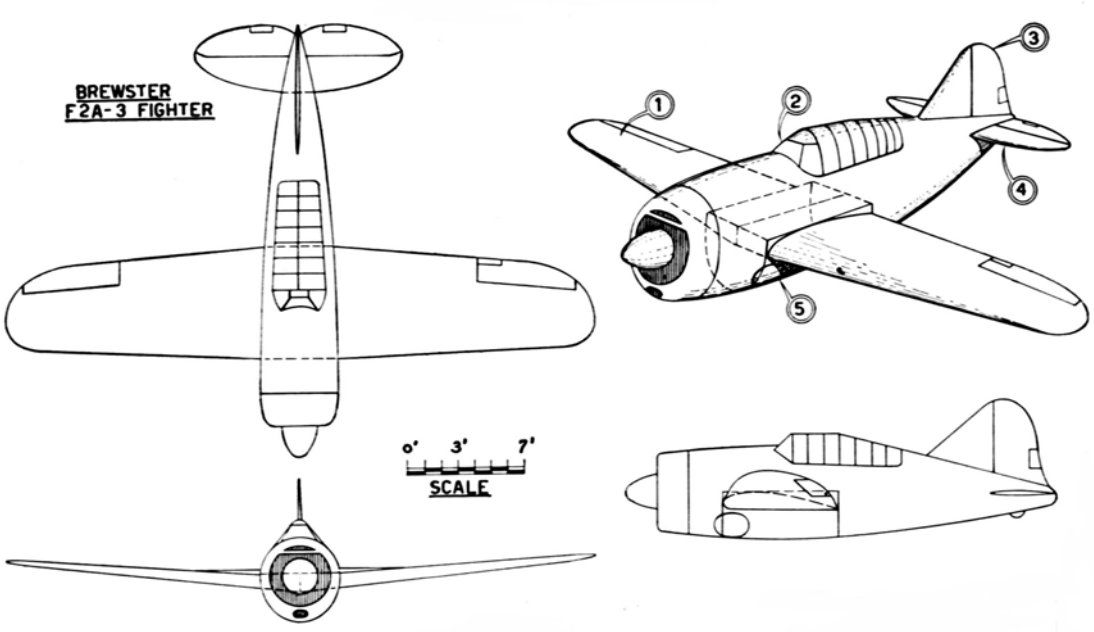
Modeling Planes for Uncle Sam

Construct this solid scale model of the Brewster F2A-3 pursuit and help train our sky fighters

By Nick Limber

THE response of the nation's model builders to the Government's request for identification models has indeed been overwhelming. Throughout the country, in conjunction with school authorities, modelers new and old have gathered to turn out replicas of the world's fighting planes at a dizzy pace.

To those builders who have already constructed the first of the identification models may we of MODEL AIRPLANE NEWS say "congratulations,"—keep up the good work. To those builders who have not yet had complete information regarding this nationwide activity undertaken for Uncle Sam might we repeat a few essential details.



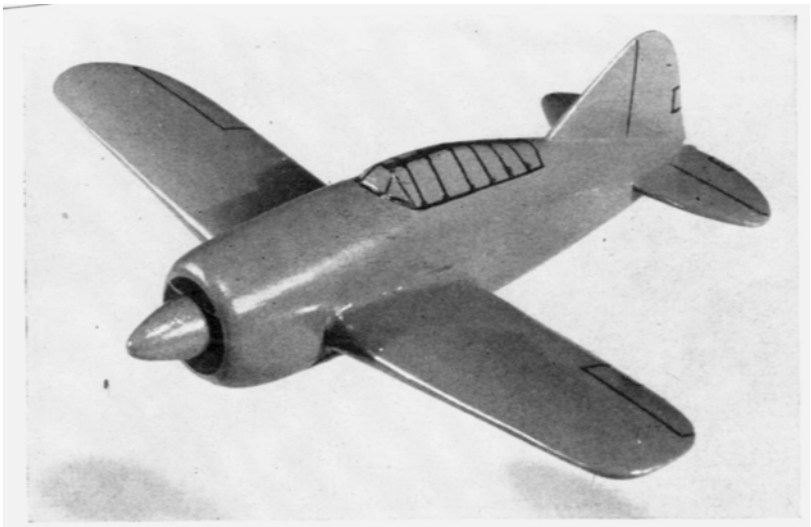
In order to train the thousands of aircraft spotters, gunners and other technicians of the Air Force in properly identifying aircraft in flight, range finding, gunnery and various other duties encountered in aircraft combat, the Government has issued an appeal for 300,000 scale models of various fighting aircraft. These models must meet certain

specifications of the Bureau of Aeronautics if they are to benefit our armed forces.

Namely, they must be to uniform scale, one inch representing six feet; constructed of white pine, ash, gum, poplar or similar wood (balsa is too soft) and finished with dull black lacquer.

To supplement the official drawings and data issued by the Bureau of Aeronautics of the Navy Department, Model Airplane News is publishing drawings and construction data of these models for those who have not been able to obtain official plans and data.

Last month (May issue) plans and instructions for



The completed model ready to start its instruction career with our fighting forces

constructing the Curtiss P-40E were featured.

In this June issue appears an equally famous fighter – the Brewster F2A-3 or “Buffalo” as it is familiarly known. Start by carving the fuselage from a block 1” x 1 ¼” x 4 ¼”. Trace or scribe the top and side views of the body on the wood block. Cut away the excess from the outlines and smooth the surfaces with sandpaper. Using a pocketknife, spoke-shave, or rasp shape the fuselage in accordance with templates A, B, and C. Sandpaper is again used to finish the surface.

The wing is cut from a block of wood measuring 3/16" x 1 1/4" x 6". 'Trace the plan form of the wing to the block as with the fuselage. With a jigsaw or similar instrument cut along the outside of the outline. When the excess wood has been trimmed, sandpaper the surface down to the line. With

a hard pencil, scribe the front view of the wing and proceed to taper each panel. Note that the center section of the wing is left flat so that it will fit snugly to the fuselage. No fillet is carved into the root section. The block assumes the shape of the corresponding section of fuselage in both front and rear views.

Before assembling the wing and fuselage, set the proper dihedral angle. To accomplish this, first cut the wing along the centerline. The root of each panel is then bevelled and the ends placed together. A quick drying cement holds the panels at the correct angle. The dihedral gauge should be used in checking the angle. Trim the upper surface of the center section to get a flat surface prior to cementing the wing to the fuselage. Movable surfaces such as ailerons and aileron tab should be indicated by a thin groove in the surface of the wing. Refer to the final assemble diagram when cementing the wing to the fuselage.

Next construct the belly block, which is the small block fitting into the fuselage beneath the wing. A block 3/4" x 1 1/8" x 3/8" is used. When constructing this portion of the model, care must be taken to cut a Vee surface at the top of the block so that it forms a flush fit with the bottom surface of the wing after the correct dihedral angle has been set. When this is accomplished, cement the belly block into position.

The tail surfaces are made of 1/16" stock 1" x 3 3/4". Note that the upper and lower surfaces of the elevator center section is left flat so that it forms a flush fit with the fuselage. After forming the tail surfaces, indicate movable portions as with the ailerons. Now cement the tail assembly to the fuselage.

From a piece of 3/8" dowel, form the spinner and then cement it to the fuselage. Prior to doing this however, indicate cowling openings as illustrated in the front view of the assembly drawing. This may be done in much the same manner used to indicate movable surfaces, i.e. use a thin groove to indicate the outlines of the cowl openings. Now cement the exposed portion of the tail wheel in place, shown in the side view.

The model is now ready for finishing. Apply several coats of clear lacquer, sand-papering thoroughly after each coat has hardened. The final coat of dull black lacquer is then applied to the model. This is a Government specified finish with which you must comply if your model is to be accepted.

We repeat: when your model is completed take it to the manual training teacher of a junior or senior high school in your neighborhood. He will see to it that the model is properly packed or instruct you in the correct procedure. The model will then be sent through the proper channels to the Bureau of Aeronautics of the U.S. Navy in Washington, D.C. Under no conditions are you to ship the model directly to the Bureau yourself nor are you to write the Navy Department referring to matters pertaining to the identification model. Your local high school manual training teacher or MODEL AIRPLANE NEWS will act as clearing house for any information desired. Please cooperate by not making contact with the Navy.

Take a slap at the Jap by turning out as many of these models as you possibly can!

Be Sure to Provide Suspension Hole in Navy Models

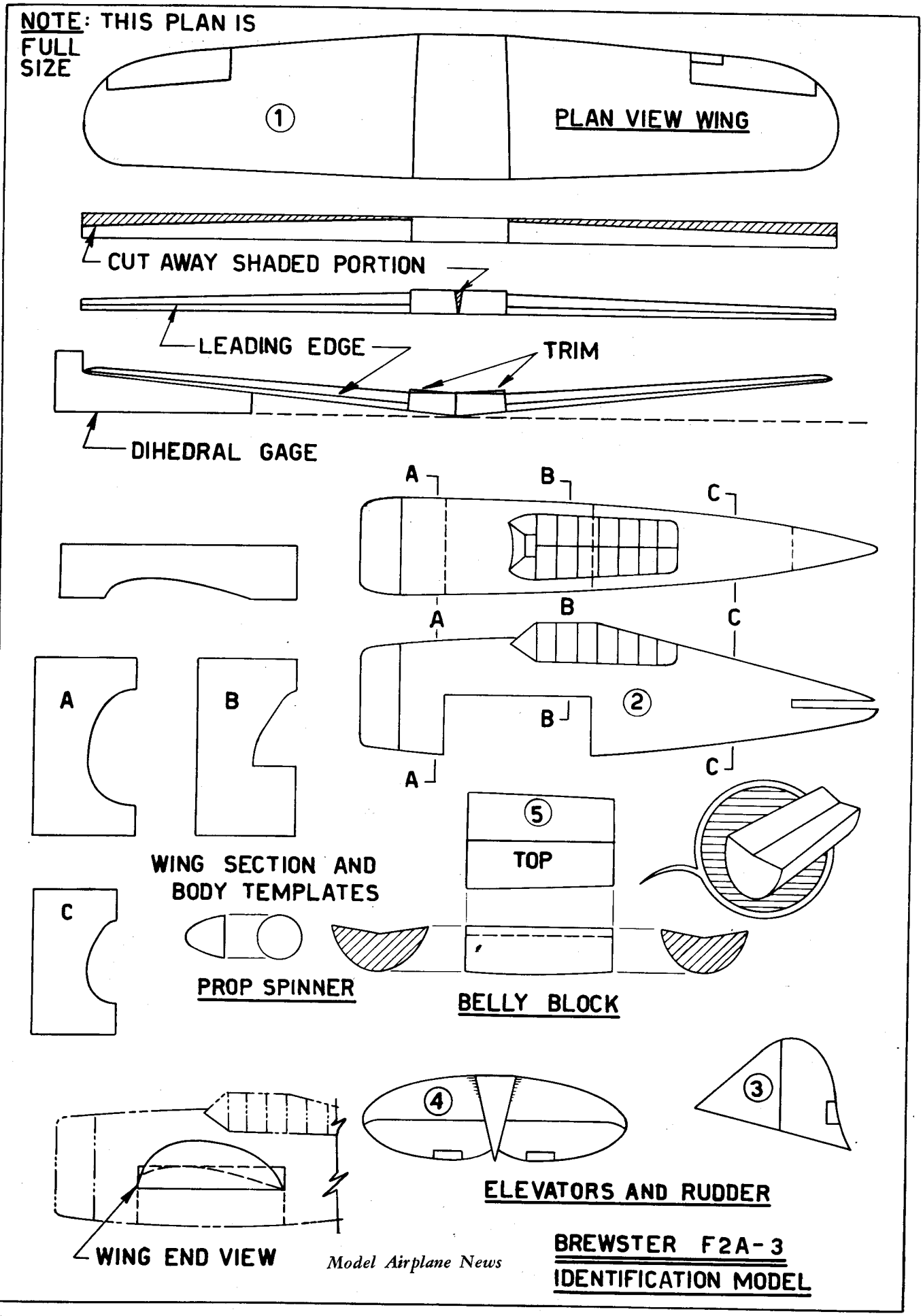
One point that has been overlooked has been the suspension hole passing through the model's center of gravity. This is to be used for suspending the model when used in the classroom, to represent full scale ships in flight.

To determine the correct position of the hole tie a thread to a point then stick the pin in the top of the fuselage and suspend the model by the thread. If the model balances horizontally this is the correct position of the hole; if not, try one point after another until the correct point has been determined.

Then drill a 1/16" hole down vertically through the center of the fuselage at this point. Counterbore a 1/32" hole up from the bottom, thus enlarging the 1/16" hole at its lower end, forming a recess for the knot at the end of the string which will suspend it. The knot will prevent the string from pulling through.

Perform this operation after the model has been painted. If necessary touch up bare places with paint after the hole is drilled.

VICTORY


NOTE: THIS PLAN IS FULL SIZE
1
PLAN VIEW WING
CUT AWAY SHADED PORTION
LEADING EDGE
TRIM
DIHEDRAL GAGE
A
B
C
2
WING SECTION AND BODY TEMPLATES
5
TOP
PROP SPINNER
BELLY BLOCK
4
3
ELEVATORS AND RUDDER
WING END VIEW
Model Airplane News
BREWSTER F2A-3
IDENTIFICATION MODEL