

British Fighter Ace

Major ANDREW McKEEVER'S BRISTOL F.2.B

RENWAL
PRODUCTS INC.
QUALITY IS LONG REMEMBERED!

BRISTOL F2B — Surely the fighter with greatest longevity of any to see combat in World War I (a modified version continued in service until 1932) the Bristol 'Britfit' was a strong, fast, maneuverable two seat biplane with the advantage of a machine gun "sting" in its tail.

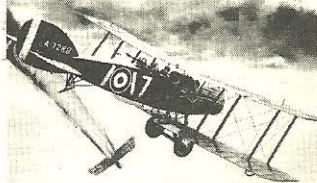
Usually powered by Rolls-Royce Falcons enclosed in a neat cowl, with narrow vertical radiators fitted to the fuselage sides, the fuselage itself was wooden framed and wire braced, sloping down to a horizontal knife edge at the tail. Wire braced wooden wings were connected in the uncovered lower sections to the fuselage by struts.

A dismal operational debut resulting from staying rigidly in formation and relying on observers to deal with the enemy was rapidly improved upon when the F2B's were used aggressively like single seaters, each diving individually upon its prey.

MAJOR ANDREW EDWARD McKEEVER — Cool and assured, Canadian born Edward McKeever transferred from the infantry to the Royal Flying Corps in December 1916. Using his ground soldier marksmanship to best advantage he scored his first victory with one burst into an oncoming Albatros on June 20, 1917. In October of 1917, he was attacked by nine German scouts. Flying twice through the enemy formation he dispatched three of his foes.

It must be remembered that part of McKeever's success was due to his magnificent observer, Sgt. L. F. Powell, who protected the F2B's tail and himself accounted for eight enemy aircraft. On November 30, 1918 McKeever and Powell attacked a formation of two German two seaters and seven scouts knocking down four of them.

The greatest two seater pilot of the war survived its calamities with 30 victories only to succumb, on Christmas day 1919, to injuries received in an auto accident.



BRISTOL F.2.B



MAJOR ANDREW McKEEVER

AERO-SKIN® PROCESS

A Renwal exclusive originally formulated for Renwal's Fabulous Flying Machine assembly kits; now, with the formulation of special permatized inks, Renwal has developed AERO-SKIN to reproduce the authentic color schemes of planes the aces flew during World War I. Research included travel to Europe, England and Canada to actually see the aircraft where still intact, and correspondence with surviving aces, mechanics and eyewitnesses for additional detail information. No effort has been spared to bring you, in full color, every detail of stitching, insignia and markings present on the original airplane.

IMPORTANT: AERO-SKIN Process is new and unique — Read instructions through carefully and completely before starting. PATENT PENDING

GENERAL INSTRUCTIONS

PAINTING: A minimum amount of painting is necessary to decorate the metal surfaces of the plane and other parts such as propeller, tires and struts. Before proceeding with any painting, find, detach and carefully remove all excess plastic from all parts and observe the following general rules when painting.

1. Have a clean cloth at hand to keep your hands free of paint and to wipe off smudges.
2. Use a good grade of plastic enamel, such as Testors or Pactra.
3. Do not paint on cementing surfaces or areas to be covered by AERO-SKIN.
4. Always apply paint in a thin coat.
5. Clean your brush thoroughly with paint thinner before using it for a different color.
6. Allow paint to dry thoroughly before proceeding.

PARTS TO BE PAINTED:


BROWN — Gunner's Cockpit (3); Gunner (except face) (6); Pilot (except face) (7); Propeller (12); Struts (15) (16) (16A) (19); Axle Fairing (18); Tail Skid (21).

FLESH — Gunner's Face (6); Pilot's Face (7).

GREEN — Radiator Cowl (except Radiator Core) (13).

BLACK — Machine Gun Mount (4); Machine Gun (5); Exhaust Pipes (8) (8A); Radiator Core (13).

AERO-SKIN REGISTRATION

 **Fold line** — used to locate against the straight edge of a plastic part. Use a flat straight-edge or ruler and fold excess under. Position plastic against fold and center visually around remaining edges. (Folding may be eliminated if you find it easy to visually center and hold pattern while applying cement to one or two spots.)

 **Slit line** — Slits are used to enable AERO-SKIN to conform to curves and corners without wrinkling. AERO-SKIN will overlap itself at slits. Slit lines which extend into pattern are blended so as to be

unnoticeable on the finished plane. Make slit with a sharp razor blade or X-acto Knife.



Cut out before applying — Cut away exactly on pattern. These cut-outs are used as exact registration areas fitting to corresponding areas on the plastic part. Wherever possible use a straight-edge to guide your knife blade.



Cut out after applying — Avoid cementing these areas which are used to help positioning. Remove after AERO-SKIN is fused to plastic.

AERO-SKIN APPLICATION

AERO-SKIN APPLICATION is simple and clean. The material bonds to the plastic because the liquid cement slightly dissolves the plastic which flows into the pores of the AERO-SKIN. This process allows double layers of AERO-SKIN to be applied and even permits plastic parts to be cemented to parts already covered. To get the feel of applying AERO-SKIN, take a scrap piece of plastic and cut a piece of excess AERO-SKIN paper. Apply as instructed below.

1. Identify the plastic part, make sure paint is thoroughly cured and that all excess plastic is removed.

2. Follow the sequence given under special instructions and cut out each pattern as needed, leaving roughly $\frac{1}{8}$ " of white space around printed pattern.

3. Fold and/or cut registration devices and slits.

4. Position AERO-SKIN pattern to corresponding plastic part. When properly positioned, the pattern will overlap the plastic by approximately $\frac{1}{16}$ " around all edges except those

areas cut out for registration. These cut-out edges should line up exactly with corresponding areas on plastic parts as indicated in special instructions.

5. Hold pattern in position and apply liquid cement to several spots. When these spots are secure, check position of pattern to make sure it has not shifted. (If necessary to reposition, rewet the cemented spots and you will be able to shift and even remove the AERO-SKIN.) Working from the center toward outer edges, lightly brush solvent to small areas, pressing AERO-SKIN firmly to plastic with thumb and

AERO-SKIN APPLICATION CONT'D.

fingers until entire surface is covered. AERO-SKIN should be firmly cemented to edges by folding overlap down at right-angle to edges. You can eliminate wrinkling and bunching by making slits in the overlapping AERO-SKIN at corners and curves. Now open the locating holes, if any, by puncturing AERO-SKIN with a sharply pointed tool such as a pin, needle or toothpick and remove AERO-SKIN from locating notches with sharp pointed blade. Allow cement to dry thoroughly by proceeding to another plastic part. **CAUTION:** Use minimum amount of liquid cement especially on Wings. Excess cement will soften and attack plastic which may result in warpage.

6. Remove  areas by cutting with sharp blade.

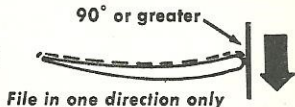
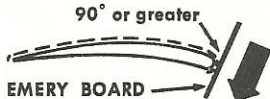
7. To remove excess AERO-SKIN, use an emery board (such as used for filing finger nails) or a fine sharp file. Hold emery board or file at an angle 90° or greater to the covered surface

and stroke lightly in one direction only, away from covered surface. Use *minimum pressure* to avoid cutting away plastic. (See detail "A.") The excess AERO-SKIN will come away in a continuous strip between slits. Examine covering, particularly along edges and secure any loose or ragged AERO-SKIN by applying liquid cement and smooth down and around edges with finger. Now apply AERO-SKIN to the second surface if the plastic part is to be covered on both sides. Never cover the second surface of any part until the first surface covered has been trimmed.

8. Wheel Hubs — Slit to center point. Position pattern by inserting pin through center of pattern and then place the pin point on the center of plastic Hub. Secure pattern at one edge of slit and work circularly around Hub. The other edge of slit will overlap starting edge and result in a smooth flat covering.

DETAIL "A"

Aero-Skin indicated
by dotted line



SPECIAL INSTRUCTIONS

SEQUENCE FOR APPLYING AERO-SKIN

1. **Underside of Top Wing** — Cut out four strut locations and use cut-outs to align with grooves in Wing. Pierce four locating holes for Cabane Struts.
2. **Underside of Bottom Wing.**
3. **Top-side of Top Wing.**
4. **Top-side of Bottom Wing** — Slit four cross marks at center of Wing. Cut out four strut locations and use cut-outs to align with grooves in Wing.

5. **Fuselage Halves**—Align pattern using Engine cut-out and front edge of pattern for registration. The straight line of the color pattern must coincide with the corner formed by the side and bottom of the Fuselage. Pierce locating holes and clean out locating pockets for Bottom Wing Landing Gear Struts and Cabane Struts.

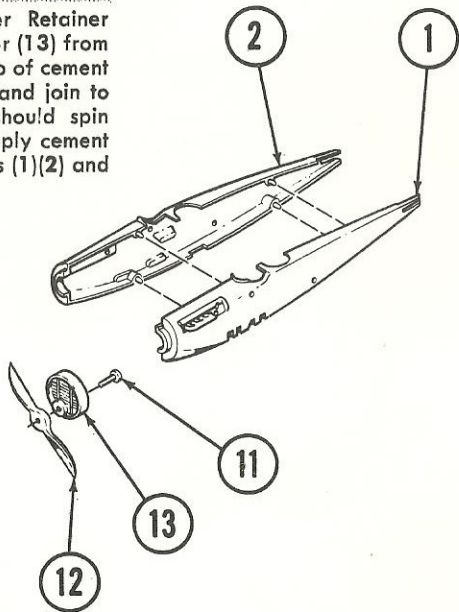
6. **Stabilizer** — Align  areas with cut-outs in plastic.
7. **Rudder** — Align with cut-out edges.
8. **Hubs.**

ASSEMBLY INSTRUCTIONS

1. Test the fit of all parts before cementing and remove excess paint and AERO-SKIN from cementing surfaces.
2. Apply liquid cement *sparingly* to contact areas on both plastic surfaces to be joined — For Best Results — allow cement to air-dry 30 to 45 seconds before joining parts.
3. If required, cement can be applied after parts are in position. Avoid getting liquid cement on painted areas.
4. **IMPORTANT:** We urge you to read and follow the cautionary instructions printed on the side panels of the bottle of plastic cement included in this kit.

A

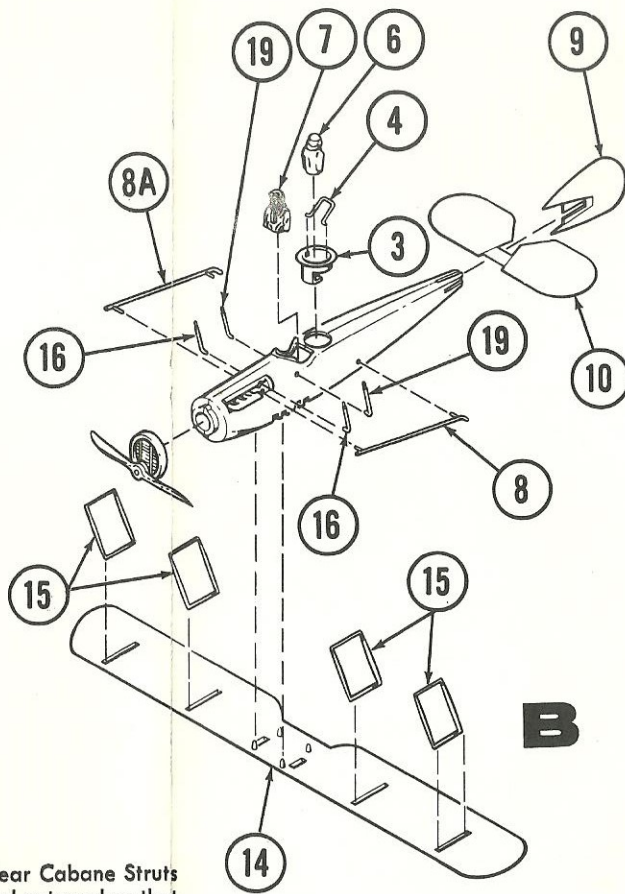
Insert shaft of Propeller Retainer (11) through hole in Radiator (13) from the rear. Apply a small drop of cement into hole in Propeller (12) and join to Retainer shaft. Propeller should spin freely. Set aside to dry. Apply cement to edges of Fuselage Halves (1)(2) and join.

**B**

Snap ears on Machine Gun Mount (4) into holes in sides of Gunner's Cockpit (3) then cement Cockpit into Fuselage as shown. Apply cement to Cockpit Seat and drop Gunner (6) into position facing rearward. Now cement Pilot (7) to seat in forward cut-out of Fuselage. Cement Left & Right Exhaust Pipes (8)(8A) to Fuselage then cement Radiator assembly to Fuselage. Insert connecting strap on Stabilizer (10) into horizontal slots at rear of Fuselage, slide Stabilizer

into position and cement. Similarly join Rudder (9) to vertical slots at rear of Fuselage. Apply cement to locating pockets on Fuselage and assemble Bottom Wing (14) to Fuselage and hold until cement sets.

Cement pins on two Front and two Rear Cabane Struts (16)(19) into holes in Fuselage angled outward so that they measure $\frac{1}{16}$ " between centers. Identify the leading edge of an Interplane Strut (15) and cement Strut into groove in Bottom Wing so that it rests against forward wall of groove. Hold in place vertically until cement sets. Repeat procedure for three remaining Interplane Struts.

**C**

When struts are self-supporting place Top Wing (17) upside down on table with leading edge toward you. Apply cement to four grooves and four locating holes. Now turn the Fuselage assembly upside down and carefully lower it so that the struts enter grooves and pins on Cabane Struts enter holes. Hold Cabane Struts in place and proceed to locate Interplane Struts one at a time. Make sure that Wings are parallel and struts are fully seated then hold together until cement sets.

CAUTION: ALL CEMENT SHOULD BE COMPLETELY DRY BEFORE PROCEEDING

We have provided small swatches of AEROSKIN to enable you to cover the crossband of the Interplane Struts. Select the swatch which matches the Wing coloration, cut it to size and merely cement in place over crossband. Turn the plane bottom-side up and cement the Landing Gear Struts (16A) in place. While cement is still tacky spread struts enough to insert axle stubs of Axle Fairing (18) into holes. Apply a drop of cement to hold Fairing in place and hold struts together until cement sets making sure they are symmetrical. Cement Hubs (22) to Wheels (20) then cement Wheels to Axle Stubs with Hubs facing outward. Cement Tail Skid (21) in place. Invert model and cement Machine Gun (5) to Mount.

NOTE: SEE NEXT PAGE FOR DISPLAY INSTRUCTIONS

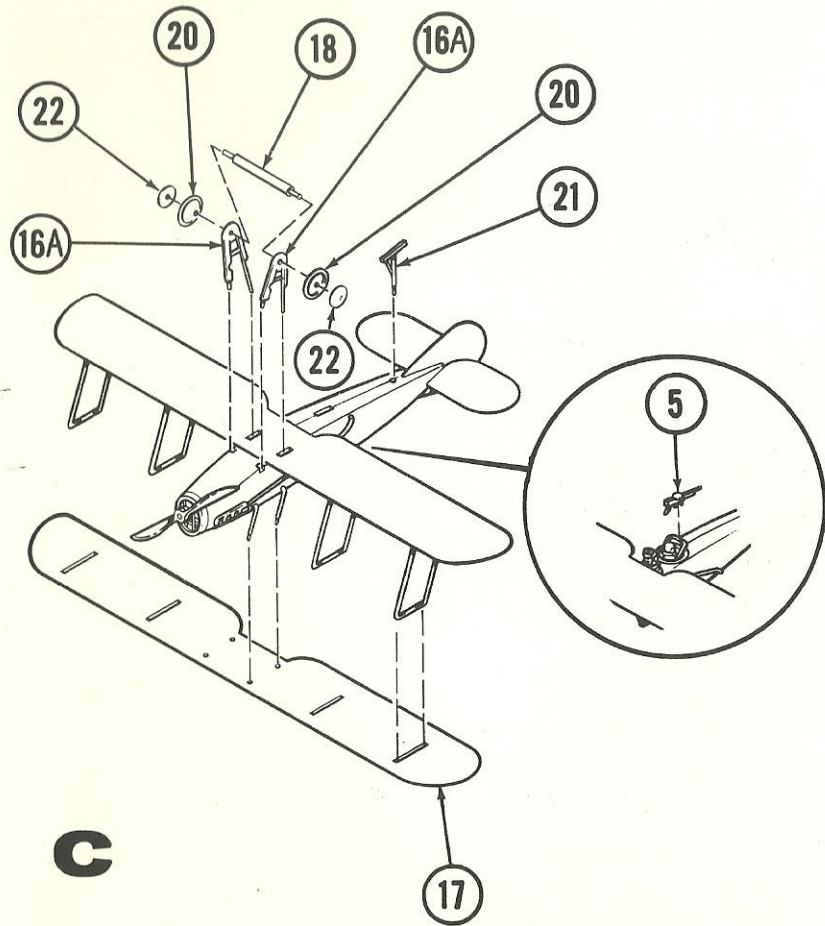
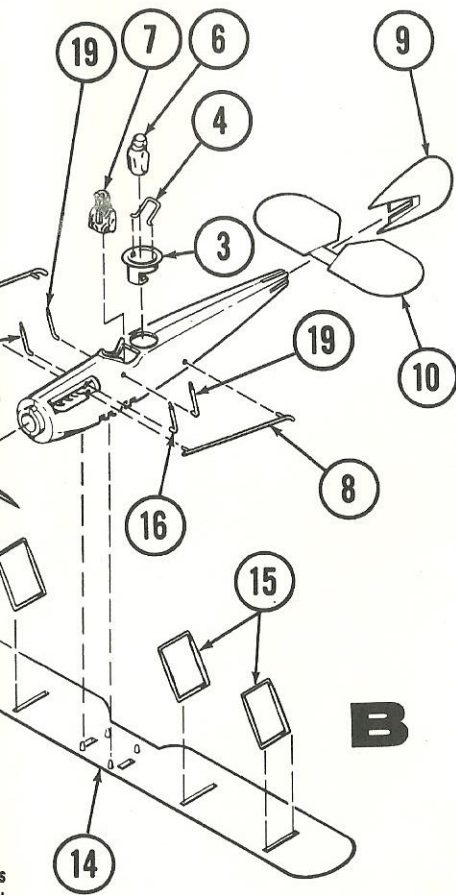
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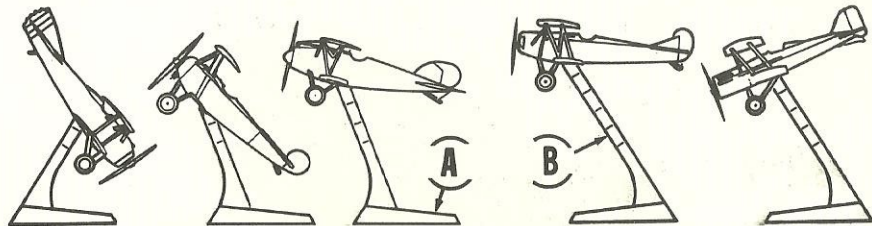
NOTE: SEE NEXT PAGE FOR DISPLAY INSTRUCTIONS



DISPLAYING YOUR MODEL

A unique Display Stand has been designed for your beautiful model.

1. It is transparent so it will not detract from the plane.
2. It is adjustable in height — merely break it at the score marks provided or anywhere else by scoring with file or knife.
3. It can be mounted on the wall (nail hole provided) or set on flat surface.
4. The plane can be displayed at various degrees of diving, climbing, or level flight by reversing the Arm in the Base; by reversing the plane on the Arm; by tilting the plane on the Arm.



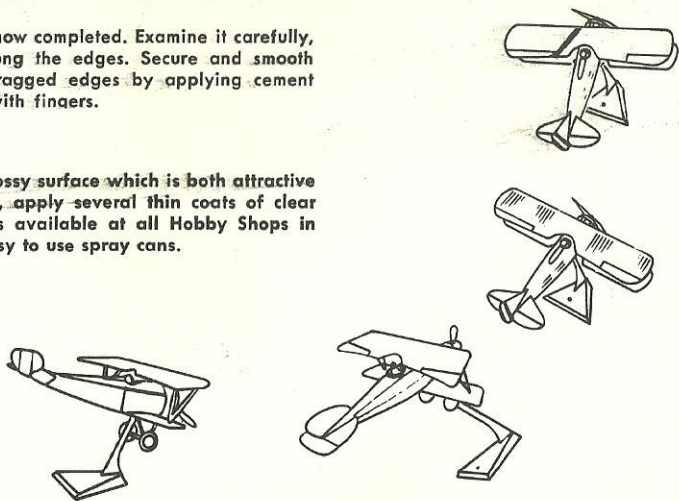
Test fit the Base (A), Arm (B) and plane to determine height of Arm and flight attitude of the plane. Score and break Arm to required length. Set Arm in Base and apply cement to slot from underside of Base. Apply cement to inside edges of rectangular hole in plane and mount plane.

For mounting on wall, use a thin, headed nail at least 1" long, such as are supplied with picture hooks, etc. Avoid hitting the plastic with hammer or overtightening nail head against plastic as it will crack.

Your model is now completed. Examine it carefully, particularly along the edges. Secure and smooth any loose or ragged edges by applying cement and pressing with fingers.

MAKE A COLLECTION OF THESE AUTHENTICALLY DECORATED PLANES AND DISPLAY THEM IN "FLIGHT FORMATION," IN "AERIAL DOG-FIGHT" SCENES AND ANY OTHER DIORAMA WHICH SUGGESTS ITSELF TO YOU —

To obtain a glossy surface which is both attractive and protective, apply several thin coats of clear dope, which is available at all Hobby Shops in convenient, easy to use spray cans.

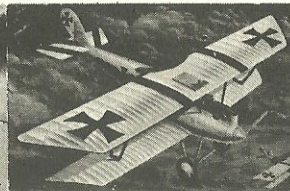


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PRODUCTS INC.
QUALITY IS LONG REMEMBERED!

AVAILABLE for your collection of
PLANES THE ACES FLEW — featuring
AERO-SKIN® fabric



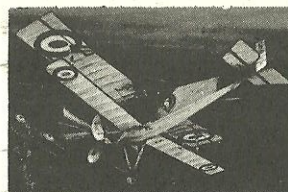
McKeever's BRISTOL F.2.B.



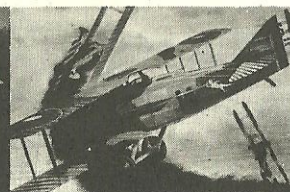
Lenz's PFALZ D. III



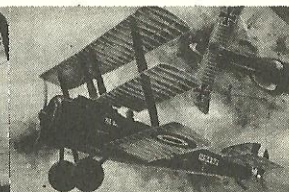
Hanstein's ALBATROS D. V



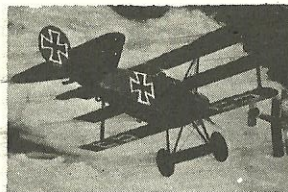
Nungesser's NIEUPORT 17



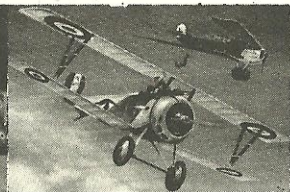
Putnam's SPAD XIII



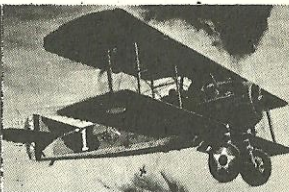
Collishaw's SOPWITH TRIPLANE



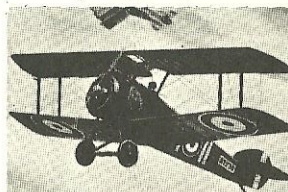
Richthofen's FOKKER DR. I



Guynemer's NIEUPORT 17



Rickenbacker's SPAD XIII



Brown's SOPWITH CAMEL



Springs' S.E.5a



Gabriel's FOKKER D. VII