

BOEING F4B-4

Monogram

quality hobby kits



KIT PA209

1/72 SCALE

1" = 6'



This classic aircraft of the early 1930's was one of the most maneuverable planes ever built. The combination of all-around performance and ruggedness made this fighter a favorite with both pilots and their mechanics.

Last of a series of biplane fighters produced by the Boeing Aircraft Company, the F4B-4 was used by the Navy from 1932 until as late as 1942. The first F4B-4 was delivered in July, 1932 and became standard U.S. Navy equipment by 1933. In active service until 1938, this fighter was eventually phased out of active duty to assume the role of a training aircraft. In the early forties 23 remaining F4B-4's were converted to radio controlled drones and used as target planes until 1942.

Ninety-two F4B-4's were ordered by the U.S. Navy which, at that time, was the largest order ever placed for VF class aircraft with any single manufacturer. Foreign air services placed numerous orders for the F4B-4 with Boeing, proving the World-wide superiority of this little biplane.

The F4B-4 was a single engine biplane with fabric covered wings and metal skin on the fuselage. The ailerons and tail surfaces were covered with corrugated aluminum. The metal covered head-rest contained a rubber life-raft and other emergency supplies. Powered by a 9 cylinder Pratt and Whitney engine, the F4B-4 had a top speed of 184 m.p.h. At the cruising speed of 160 m. p.h. this plane had a range of over 350 miles and with the addition of a 55 gallon underbelly tank the range was extended to 703 miles. Armament consisted of two .30 caliber machine guns or, one .30 caliber and one .50 caliber machine gun which fired through the propeller. Wing span was 30 feet, length was 20 feet 4.69 inches and height was 9 feet 9 inches.

Of the 92 F4B-4's built only one remains and has been restored to a displayable, though non-flying condition. This last member of the famous "Boeing Bipec" family can now be seen at the National Aviation Museum in Pensacola, Florida.

The model in this kit represents a plane of Fighting Squadron 2 and operated off the aircraft carrier U.S.S. Lexington in the 1930's.

Your Monogram F4B-4 kit features a unique and fool-proof method for precise alignment of the wings and landing gear. The cabane struts and landing struts are molded onto the fuselage halves at the correct angles. This provides automatic and perfect positioning in areas formerly considered difficult in the assembly of biplane models.

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IMPORTANT! READ THIS BEFORE YOU BEGIN . . .

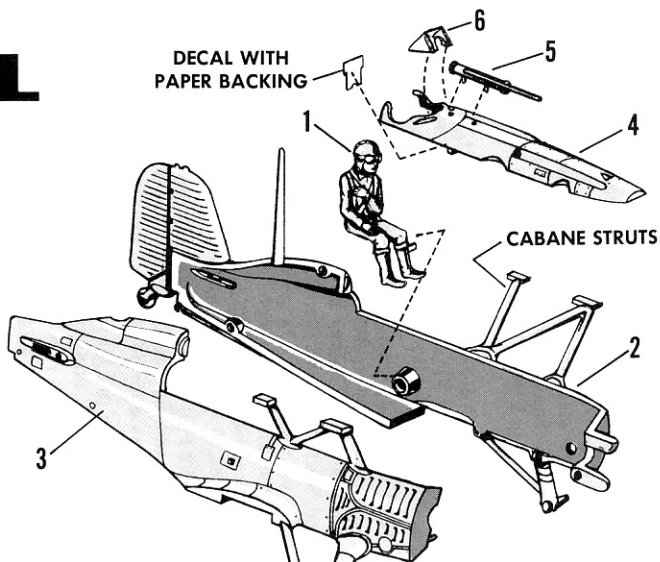
Read all the instructions and study the drawings to become familiar with all the parts. Once you've started the assembly, check the fit of each part by putting it in place without cement. Then remove the part, apply cement and attach it to the model.

Plastic parts are molded with the identifying numbers appearing on the part or on a tab next to the corresponding part. These numbers are referred to in the instructions to make it easier for you to locate the correct part during assembly. Do not detach parts from the trees until you are ready to use them. After cutting or breaking off the required part, trim away any excess bits of plastic. Use a small sharp knife such as an X-acto knife, available at your hobby counter. Keep in mind the importance of not rushing the assembly of your model and

avoid the use of excessive amounts of cement. All plastic cements contain solvents which dissolve plastic in order to form a solid weld between the cemented parts. Too much cement can soften and distort the plastic, spoiling your model's appearance. When applying cement to a small or confined area, use cement on the end of a toothpick instead of the tube nozzle to better regulate the amount being applied.

If you plan to paint your model, refer to the instructions below and the "Finishing Your Model" section for colors and helpful hints on painting. Remember to scrape paint away from areas which will be cemented as cement will not stick to paint.

1



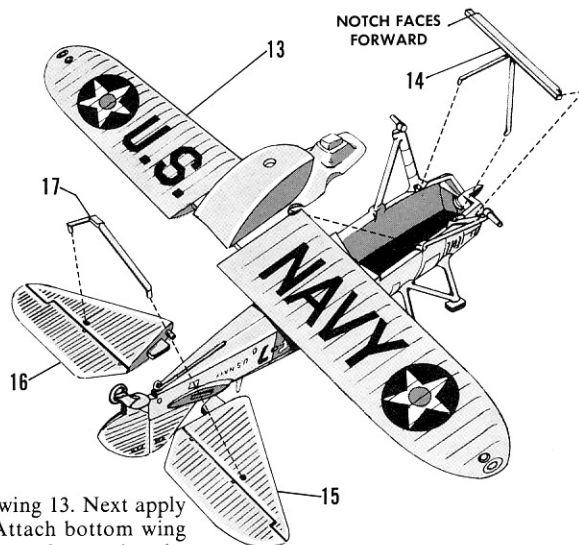
Paint pilot 1, see "Painting" instructions on last page. After paint has dried, cement tab on pilot's leg into socket on left fuselage half 2. Cement right fuselage half 3 to left half.

Cut instrument panel from decal sheet and cement to upper cowl 4. Cement upper cowl to fuselage.

NOTE: Fuselage, landing gear, cabane struts, rudder and tail-wheel may be painted at this point. Underside of pads at top of cabane struts should be painted silver.

Paint and cement gun sight 5 to upper cowl. Cement windshield 6 in place. All fuselage decals should be applied now for ease of attachment.

3



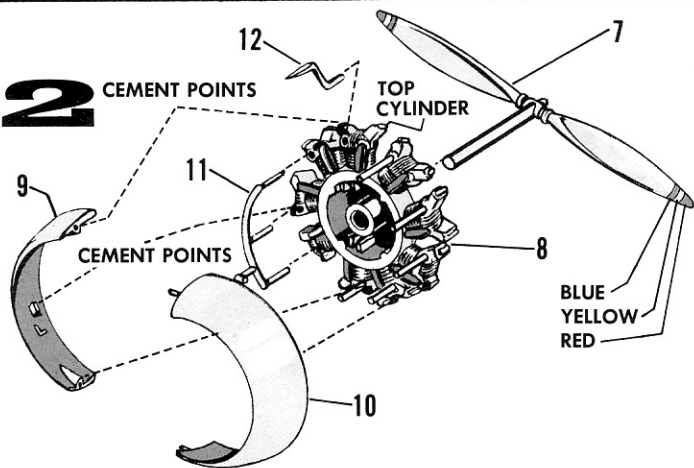
Paint bottom wing 13. Next apply wing decals. Attach bottom wing to fuselage by gently pressing the fuselage sides together at the rear landing gear struts. At the same time slide the bottom wing forward until notches in the leading edge of the wing snap into place on the rear landing gear struts and cement.

Next paint and cement landing gear brace 14 into position with

the notches of the landing gear spreader bar facing forward against the axle stubs.

Paint and cement left and right stabilizers 15 and 16 into place. Next paint and cement stabilizer strut 17 to stabilizer with pins on strut ends inserted into holes in bottom of stabilizers.

2



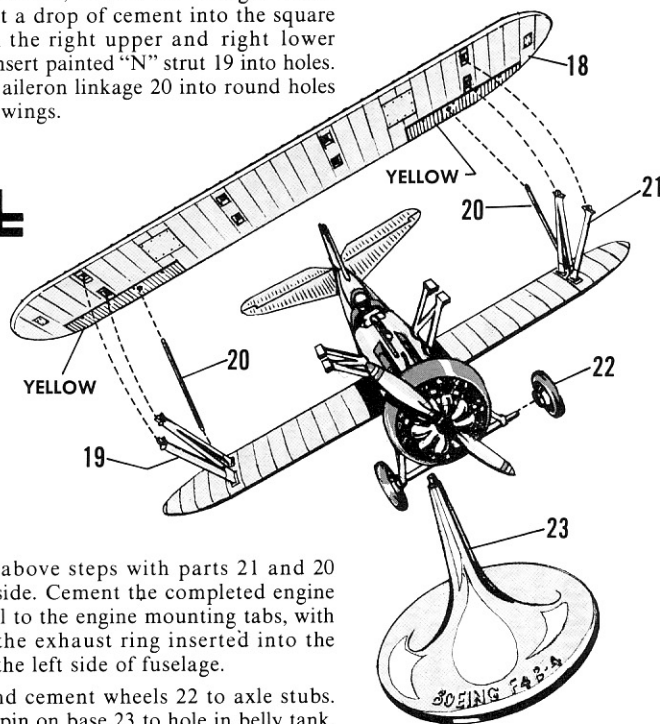
Paint engine and propeller. Slip shaft on propeller 7 through hole in engine 8 and flare end of shaft with the heated blade of an old knife.

Cement left half cowl ring 9 to right half cowl ring 10 and paint. Cement cowl ring to engine, making sure that notched line-up

socket on left half of cowl ring is against notched top cylinder valve cover.

Paint and cement exhaust ring 11 to engine with three pins fitting into holes in the three left side cylinders. Paint and cement exhaust pipe 12 to hole in top cylinder.

4



Paint upper wing 18 and apply decals. Cement wing to cabane struts on fuselage. Paint parts 19, 20 and 21. Using a toothpick, put a drop of cement into the square holes in the right upper and right lower wings. Insert painted "N" strut 19 into holes. Cement aileron linkage 20 into round holes in right wings.

Repeat above steps with parts 21 and 20 for left side. Cement the completed engine and cowl to the engine mounting tabs, with pin on the exhaust ring inserted into the hole in the left side of fuselage.

Paint and cement wheels 22 to axle stubs. Cement pin on base 23 to hole in belly tank.

FINISHING YOUR MODEL

PAINTING

A realistic and attractive model can be completed without painting. However, if you wish to paint additional details, suggestions are given here.

It is best to paint the parts as suggested in each step of the instructions. Only ENAMEL or PAINT FOR PLASTICS should be used. All colors used on this model should be semi-gloss unless otherwise specified. A small pointed brush is best for painting small parts. Larger areas are best covered with a soft brush about $\frac{1}{4}$ inch wide. Allow sufficient time for paint to dry thoroughly before handling parts. Scrape away paint from areas which will be cemented because cement will not hold to painted surfaces.

Light Grey — Fuselage, 'N' struts, cabane struts, aileron linkage, landing gear, antenna, belly tank, wheels and engine face plate, stabilizer struts.

Black — Engine, tires, exhaust ring, exhaust pipe, headrest, gun sight, edging around cockpit and wing walks.

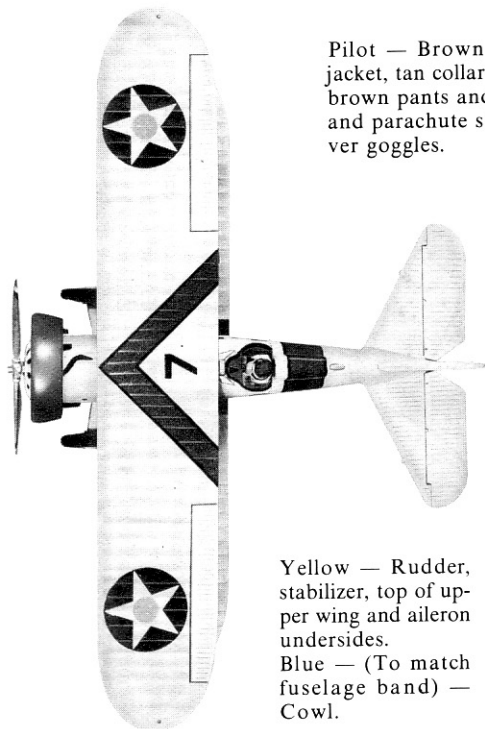
DECALS

Refer to the photos for proper decal locations. To apply decals, select the item you wish to apply and cut it from the sheet. For a neat job work with one subject at a time and trim it close to the color outline. Dip the decal in water for a few moments until it slides easily on the paper backing. Next, slide the decal into correct position. After the decal is in correct position, press out trapped air bubbles and blot with a soft cloth. Before they are completely dry, decals should be pressed firmly against surface contours, such as rivets and lines.

The fuselage band has small center lines which should be centered on the bottom of the fuselage when applying this decal.



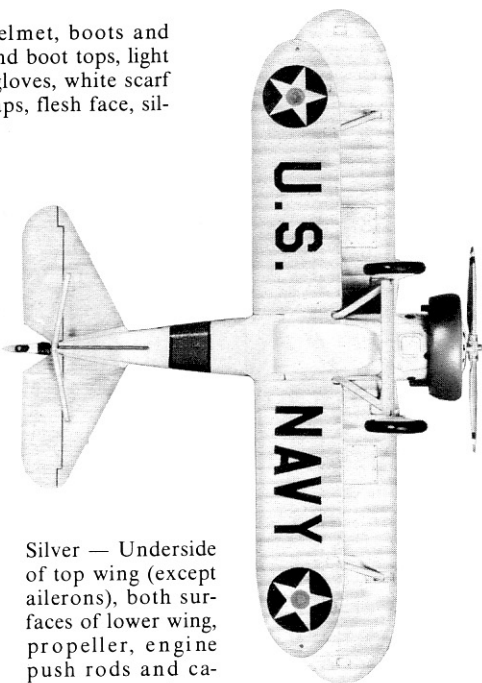
Dark Grey — Arrestor hook.



Pilot — Brown helmet, boots and jacket, tan collar and boot tops, light brown pants and gloves, white scarf and parachute straps, flesh face, silver goggles.

Yellow — Rudder, stabilizer, top of upper wing and aileron undersides.

Blue — (To match fuselage band) — Cowl.



Silver — Underside of top wing (except ailerons), both surfaces of lower wing, propeller, engine push rods and cabane strut pads.

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F4B-4 8915



U.S.
NAVY



F4B-4

U.S. NAVY

PA209

8915 F4B-4

GOSHAWK F11C-2

Monogram

quality hobby kits



KIT PA210

1/72 SCALE
1" = 6'

Originally developed for the U.S. Army, the Curtiss biplanes served a long and active career with the U.S. Navy and Marines. In addition, a considerable quantity were produced for export. The Curtiss Hawk was one of the few peace-time fighters produced in the thirties to see action. These were mainly border incidents and small-scale wars abroad. A few obsolete models also saw action at the outbreak of World War Two in China and Thailand.

The Curtiss Goshawk is one of the most admired planes flown by the Navy in the early 1930's, which, considering that only twenty-seven aircraft flew under the F11C-2 Goshawk designation, is quite remarkable.

Twenty eight production model F11C-2's were ordered in October, 1932. One plane was held back for conversion to a new prototype and the other twenty seven were delivered to U.S. Navy Squadron VF-1B aboard the carrier U.S.S. Saratoga in February, 1933. Their careers as F11C-2's was relatively short. In March, 1934 they were redesignated BFC-2's (bomber-fighters). Eleven aircraft were transferred to the U.S.S. Enterprise in 1938 as the newly formed Bombing Six. However, it is doubtful that these BFC-2's ever flew off the deck of that carrier. They were replaced by Northrop BT-1's the same time as the Enterprise was commissioned. Except for that short five month period only one squadron flew this aircraft. This was the famous "High Hat" unit VF-1B, who flew the F11C-2 from February, 1933 until February, 1938.

Your Monogram F11C-2 Goshawk Kit wears the markings of the High Hats section two leader Lt. Thomas S. Combs, stationed aboard the carrier U.S.S. Saratoga in July 1933.

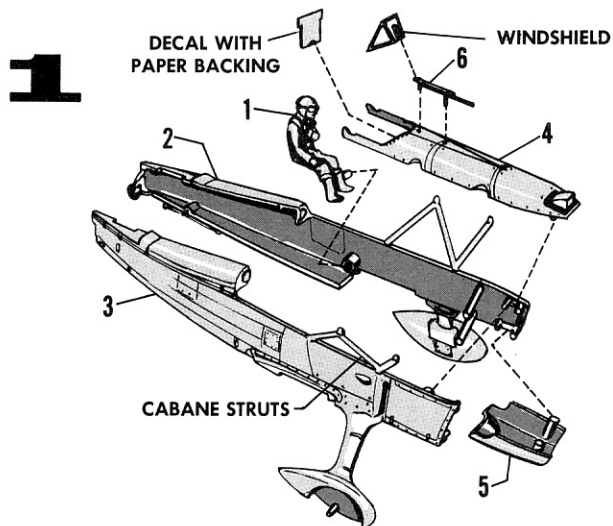
The F11C-2 Goshawk was a relatively small airplane by today's standards having a 31.5 foot wing span and a length of 22 feet 5 inches. Powered by a nine cylinder 700 h.p. Wright Cyclone engine, the top speed was 198 m.p.h. with a service ceiling of 24,000 feet. Armament consisted of two synchronized Browning .30 caliber machine guns and one 500 pound bomb that could be carried in place of the streamlined belly tank.

This Monogram kit features a unique and fool-proof method for precise alignment of the wings and landing gear. The cabane struts and landing struts are molded onto the fuselage halves at the correct angles. This provides automatic and perfect positioning in areas formerly considered difficult in the assembly of biplane models.

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Read all the instructions and study the drawings to become familiar with all the parts. Once you've started the assembly, check the fit of each part by putting it in place without cement. Then remove the part, apply cement and attach it to the model.

Plastic parts are molded with the identifying numbers appearing on the part or on a tab next to the corresponding part. These numbers are referred to in the instructions to make it easier for you to locate the correct part during assembly. Do not detach parts from the trees until you are ready to use them. After cutting or breaking off the required part, trim away any excess bits of plastic. Use a small sharp knife such as an X-acto knife, available at your hobby counter. Keep in mind the importance of not rushing the assembly of your model and

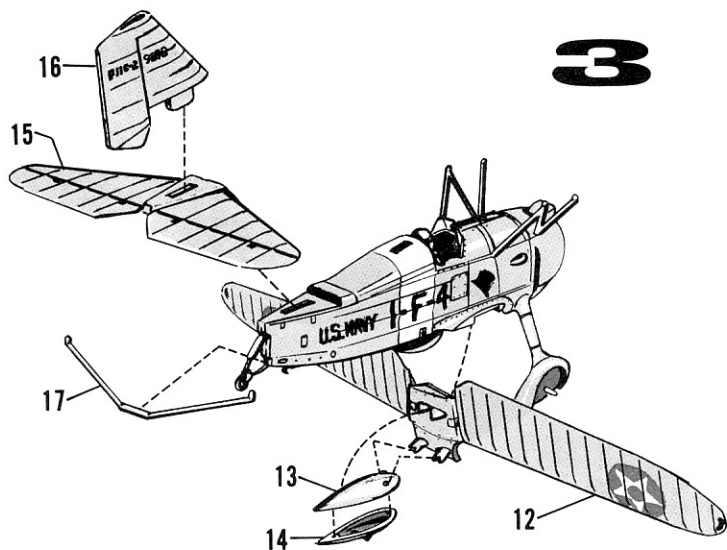


Paint pilot 1, see "Painting" instructions on last page. After paint has dried, cement tab on pilot's leg into socket on left fuselage half 2. Cement right fuselage half 3 to left half.

Cut instrument panel decal sheet and cement to upper cowl 4. Cement upper cowl and lower cowl 5 to fuselage.

NOTE: Fuselage, landing gear, cabane struts and tailwheel may be painted at this point.

Paint and cement gunsight 6 to upper cowl. Cement windshield in place. All fuselage decals should be applied now for ease of attachment.

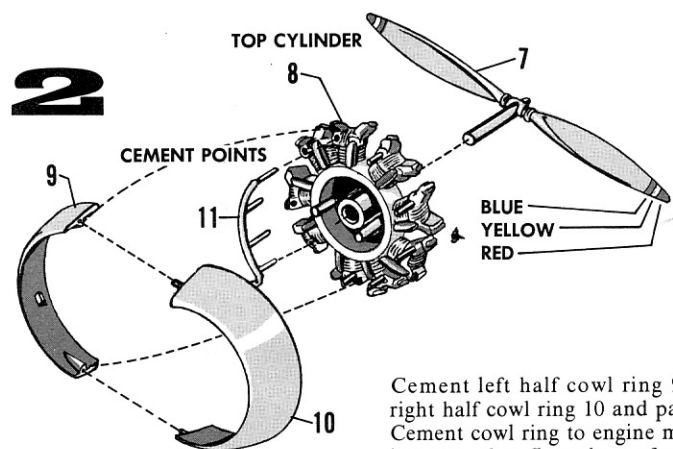


Paint lower wing 12. Next apply wing decals and cement to fuselage. Cement belly tank top 13 to belly tank bottom 14. Paint and cement to pins on lower wing.

Paint and cement stabilizer 15 in place making sure slot in fuselage and stabilizer are lined up. Next paint and cement rudder 16 into slot in stabilizer. Paint and cement stabilizer strut 17 to stabilizer with pins on strut ends inserted into holes in bottom of stabilizer.

avoid the use of excessive amounts of cement. All plastic cements contain solvents which dissolve plastic in order to form a solid weld between the cemented parts. Too much cement can soften and distort the plastic, spoiling your models appearance. When applying cement to a small or confined area, use cement on the end of a toothpick instead of the tube nozzle to better regulate the amount being applied.

If you plan to paint your model, refer to the instructions below and the "Finishing Your Model" section for colors and helpful hints on painting. Remember to scrape paint away from areas which will be cemented as cement will not stick to paint.



Paint engine and propeller. Slip shaft of propeller 7 through hole in engine 8 and flare end of shaft with the heated blade of an old knife.

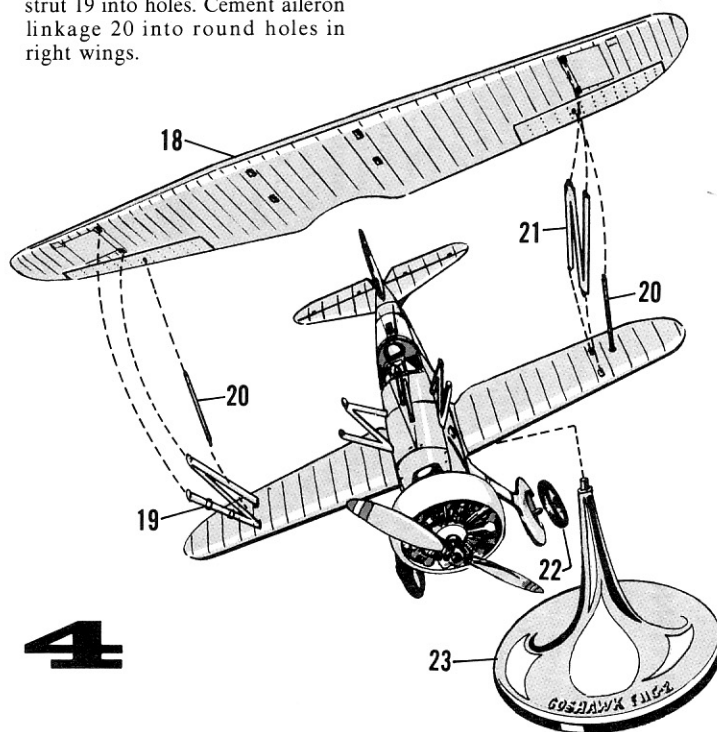
Cement left half cowl ring 9 to right half cowl ring 10 and paint. Cement cowl ring to engine making sure that flat edges of cowl ring line-up sockets are against notched cylinder valve covers.

Paint and cement exhaust 11 to engine with four pins fitting into holes in the top and three left side cylinders. Set engine aside.

Paint upper wing 18 and apply decals. Cement wing to cabane struts on fuselage. Paint parts 19, 20 and 21. Using a toothpick, put a drop of cement into the square holes in the right upper and right lower wings. Insert painted "N" strut 19 into holes. Cement aileron linkage 20 into round holes in right wings.

Repeat above steps with parts 21 and 20 for left side. Cement the completed engine and cowl between lower pins in fuselage front.

Paint and cement wheels 22 to pins on landing gear. Cement pin on base 23 to hole in belly tank.



4

FINISHING YOUR MODEL

PAINTING

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Light Grey — Fuselage, cabane struts, "N" struts, aileron linkage, landing gear, wheels, belly tank, stabilizer strut.

White — Engine cowl.

Pilot — Brown helmet, boots and jacket, tan collar and boot tops, light brown pants and gloves, white scarf and parachute straps, flesh face, silver goggles.

Silver — Underside of top wing, both sides of lower wing, fabric section of fuselage sides and bottom, propeller, push rods.

Yellow — top of upper wing.

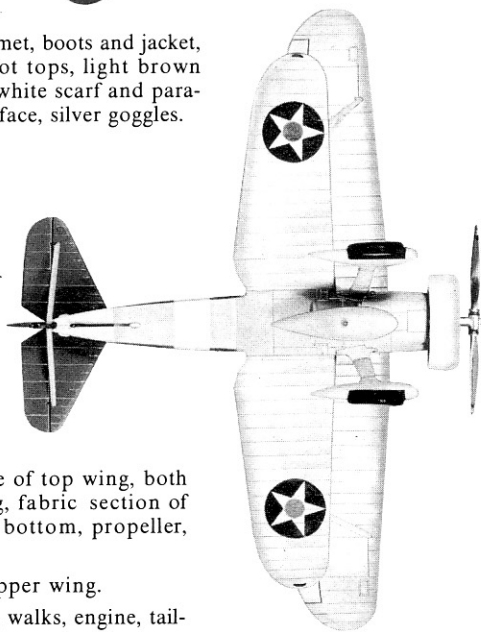
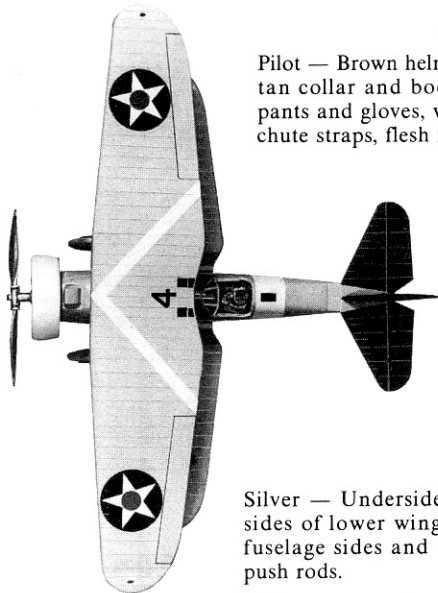
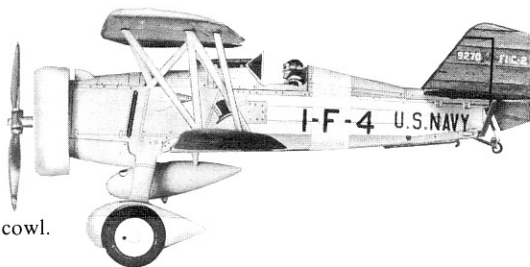
Black — Tires, wing walks, engine, tail-wheel and arrestor hook.

Red — Rudder and stabilizer.

DECALS

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The fuselage band has small center lines which should be centered on the top of the fuselage when applying this decal.



I-F-4



I-F-4



U.S. NAVY



U.S. NAVY



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PA210 CURTISS GOSHAWK FIIC-2

HAWK P-6E

Monogram

quality hobby kits



KIT PA208



1/72 SCALE
1" = 6'

Of all the biplanes built for the army, probably none is more famous than the P-6E Hawk. Manufactured by the Curtiss Aeroplane and Motor Company in Buffalo and Garden City, New York the P-6E served as firstline equipment for the U.S. Army Air Service and the later Army Air Corps. The Hawk series was in production for 10 years, starting with the P-1 and ending with the P-6. An amazing feat, considering the rapid advancements made in flying machines in the 13 year period of 1918-1931. Eventually the P-6E Hawk, the Boeing P-12 and other famous examples of the biplane era were dropped from the military roster to make room for the monoplane.

The P-6E was the culmination of a series of aircraft that boasted the heritage of the famous Schneider Trophy Cup Winning Curtiss racing planes. Many features of these winning aircraft went into the design of the P-1, including the compact water-cooled V-12 engine.

The P-1 design led to the P-2, P-3 on up to the P-6E of which 43 were ordered for delivery in late 1931 and early 1932. They differed considerably from the earlier Hawks, with improved control areas, machine guns mounted at the fuselage sides instead of on top of it for better pilot visibility, less weight and better all-around performance. The addition of the 700 h.p. Conqueror engine increased the top speed from 157 m.p.h. to over 198 m.p.h. and gave the P-6E a rate of climb of 2,400 feet per minute. Service ceiling was 24,700 feet with an absolute ceiling of 25,800 feet. The P-6E had a range of 285 miles and when fitted with an under belly tank, range was increased to 527 miles. Wingspan of the P-6E was 31.5 feet and overall length was 23 feet. The armament of the Curtiss Hawk, by today's standards, was weak but adequate for its day. The two synchronized Browning .30 caliber machine guns were standard although many experiments for increasing fire power were attempted by the Army Air Corps.

Your Monogram Curtiss P-6E Hawk kit has the markings of the 17th Pursuit Squadron with the distinctive diving Snow Owl insignia. This squadron was stationed at Selfridge Field, Michigan in the early thirties.

The model in this kit features a unique and fool-proof method for precise alignment of the wings and landing gear. The cabane struts and landing struts are molded onto the fuselage halves at the correct angles. This provides automatic and perfect positioning in areas formerly considered difficult in the assembly of biplane models.

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00208-020

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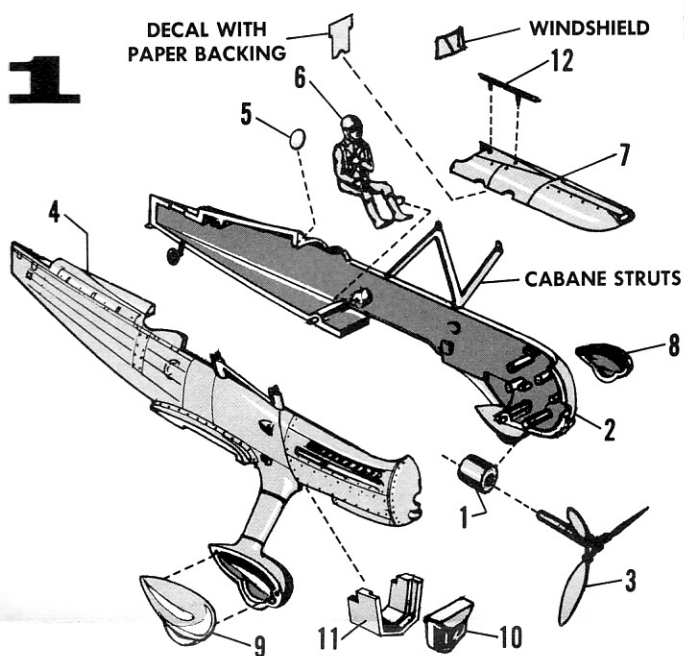
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Cement propeller bearing 1 between locating pins in nose of left fuselage half 2. Paint propeller 3, see "Painting" instructions on last page. After paint has dried, insert propeller shaft through bearing and flare end with the heated blade of an old knife.

Cement right fuselage half 4 to left half. Next paint headrest pad 5, when dry, cement pad to the headrest fairing. Paint pilot 6 and allow to dry. Cement tab on pilot's leg to socket on left side of fuselage.

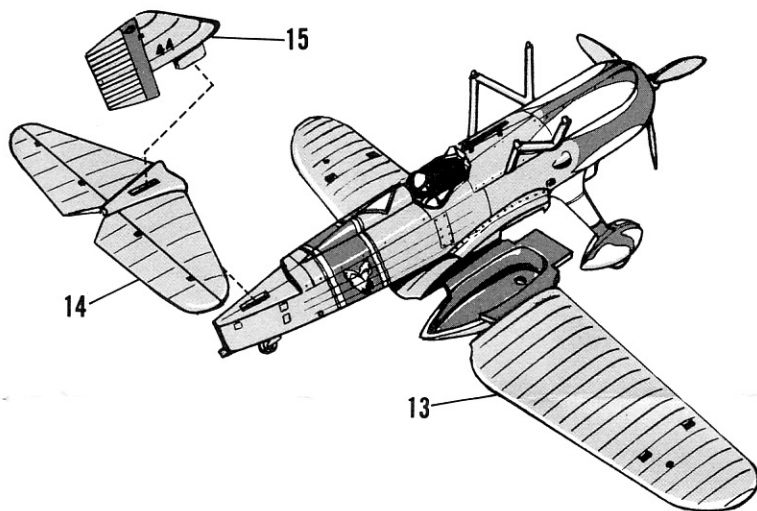
Carefully cut instrument panel from decal sheet and cement to tab on upper cowl 7. Cement upper cowl to fuselage, fitting front end into place first.

Cement wheel pants 8 and 9 to landing gear. Next cement radiator front 10 to radiator back 11. Cement complete radiator to fuselage.

NOTE: Fuselage, landing gear, cabane struts and tailwheel may be painted at this point.

Paint and cement gunsight 12 to upper cowl. Cement windshield in place. All fuselage decals should now be applied for ease of attachment.

2



Lower wing 13, stabilizer 14 and rudder 15 may now be painted. When dry, lower wing and rudder, decals should be applied before continuing.

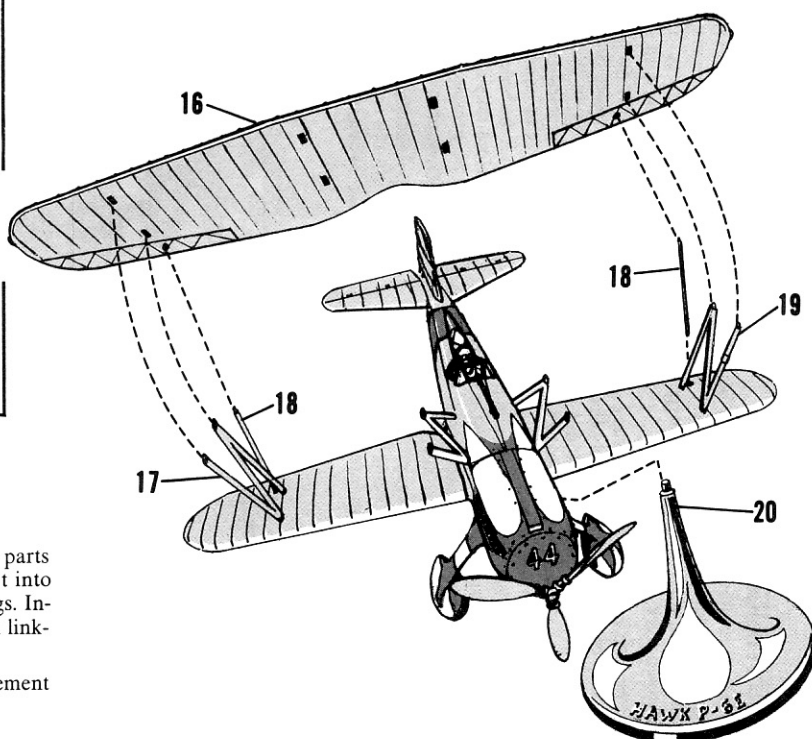
Cement stabilizer to rear of fuselage, making sure that the slots in the stabilizer and fuselage, are lined up. Next cement the tab on the rudder into the stabilizer slot.

3

Paint upper wing 16 and when dry, apply decals.

Cement upper wing to cabane struts on fuselage. Paint parts 17, 18 and 19. Using a toothpick, put a drop of cement into the square holes in the right upper and right lower wings. Insert the painted "N" strut 17 into holes. Cement aileron linkage 18 into round holes in right wings.

Repeat above steps with parts 19 and 18 for left side. Cement pin on base 20 into hole in the under-belly fuel tank.



FINISHING YOUR MODEL

PAINTING

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Olive drab — Fuselage, cabane struts, "N" struts, aileron linkage and tail-wheel assembly.

Silver — Propeller.

Pilot — Brown helmet, boots and jacket, tan collar and boot tops, light brown pants and gloves, white scarf and parachute straps, flesh face, silver goggles.

Yellow — Rudder, stabilizer, upper and lower wings.

White — Wheel pants and top of landing gear struts.

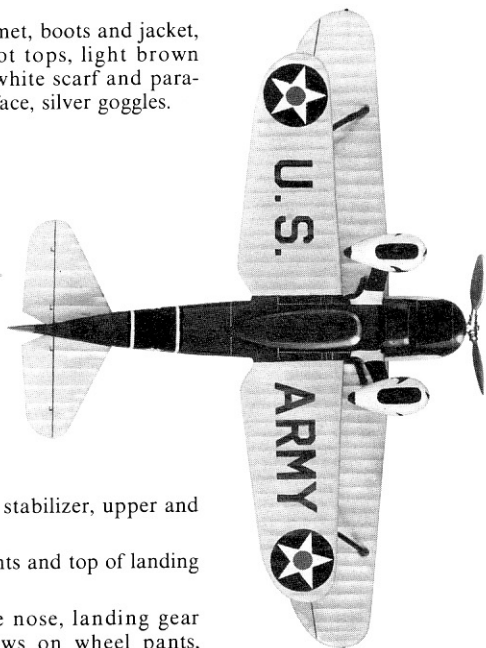
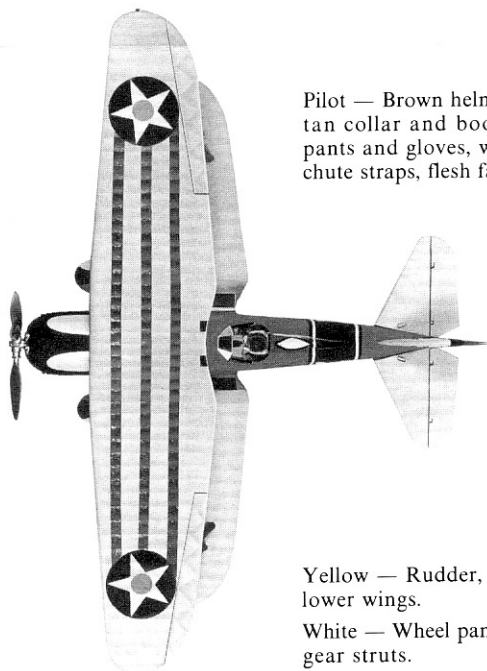
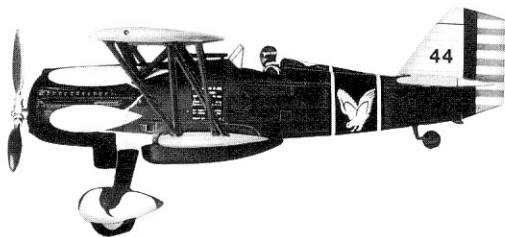
Black — Airplane nose, landing gear struts, wheels, claws on wheel pants, gun sight, headrest, cockpit edging.

Red — Upper wing stripes.

DECALS

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U.S. ARMY



R L



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44



PA208 CURTISS HAWK P-6E