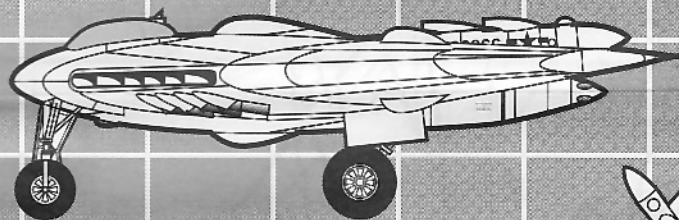
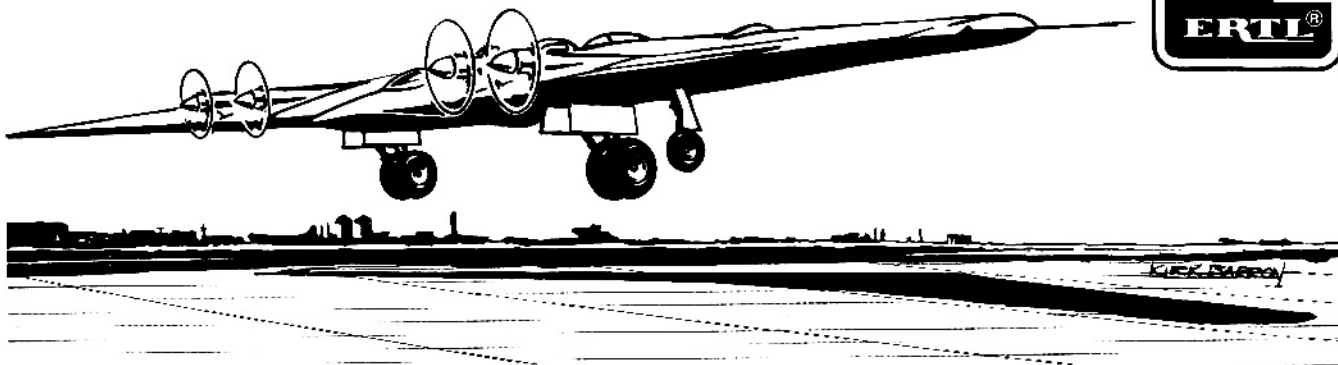


# NORTHROP X/YB-35 FLYING WING



# NORTHROP X/YB-35 FLYING WING FATHER OF THE B-2 STEALTH BOMBER



## Radical. Futuristic. Sleek. Awesome.

Anyone who has ever seen a photo of the Flying Wing, or remembers seeing one in flight in '50's era movies like *Toward the Unknown* or *War of the Worlds*, has probably said this and more about John Northrop's magnificent creation.

The XB-35 was actually the penultimate expression (until the B-2) of Jack Northrop's concept for an aircraft that would be essentially all life and little drag, with all equipment, crew, payload, etc., contained within the shape of a wing. As early as 1929, Northrop produced the first of a series of designs that would culminate in the X/YB-35 and eventually the B-2.

The XB-35, and its competitor the XB-36, were to be the next generation intercontinental bombers, replacing the B-29 and capable of carrying a payload from the U.S. to a target in Europe or Asia and returning. Power was to be provided by four Pratt & Whitney R-4360 engines, each driving four-bladed counter-rotating props. Constant problems with the propeller gear boxes resulted in the counter rotating props being replaced by more simple single four-bladed pusher props. As a result, the X/YB-35s were never to produce the power both expected and needed to provide the speed required. In addition, the lack of vertical flying surfaces (i.e. tail and fuselage) resulted in a longitudinal yaw that prevented it from being a stable bombing platform. Installation of an advance autopilot system considerably reduced this tendency, but it was not enough to warrant production so long after the war had ended and jets became dominant.

Thus only two XB-35s and one YB-35 were built prior to conversion of one into the jet YB-49. Thirteen prototypes were started, however.

Politics also played a major role in the demise of the Flying Wing. The XB-35 was ordered into production to be built by Martin as Northrop supposedly lacked adequate production facilities. Jack Northrop refused to allow this, wanting to build them at Northrop and the order was canceled.

The full story of the political shenanigans would take a book to relate, but they were very real. It is criminal that not one of the thirteen prototypes was allowed to survive. However, the concept lives on in the form of the X/YB-35s immediate predecessors, the N1 M (National Air & Space Museum) and the N9M 1/3rd scale flying demonstrator (Planes of Fame, Chino, CA), as well as the Northrop B-2 Stealth Bomber - itself a major political football. Only today, with the advent of computer-controlled flying surfaces, can the potential for the Flying Wing come close to being met. There is some poetic justice in the fact that the X/YB-35, its jet version the YB-49, and the B-2 all have identical wing spans.

Your AMT kit of the X/YB-35 Flying Wing is built to demanding specifications using original technical data, and allows you to make either of these two landmark aircraft.

We wish to thank the following for their assistance in the design of this kit: American Aviation Historical Society, Gerry Balzer, Alan Griffith, Robert Archer, USAF Museum.

# IMPORTANT

Before you begin to assemble your model kit, study the instructions carefully. This will help you to familiarize yourself with the part locations as you proceed. Prior to cementing parts together, be sure to "TEST FIT" them in order to assure proper alignment and also to check for excess "FLASH" that may occur along parting lines. Use a sharp hobby knife or file to remove flash if necessary.

If you wish to paint your model, various sub-assemblies and components should be painted before any parts are attached. During assembly, you may note that the recommended color is stated after the part name.

This model kit is molded from the finest high-impact styrene plastic. Use only paints and cements which are specifically formulated for styrene. Read all labels and warnings carefully.

Because the cement will only adhere to bare plastic, it is necessary to remove any paint or "plating" from the area to which the cement is to be applied.

## BUILDING TIPS FOR THE ADVANCED MODELER

For the best possible finish, your kit should be painted, even if molded in color. Paint should be applied evenly, in several thin coats rather than one heavy coat. The first coat should not completely cover the surface. Each layer should be allowed to thoroughly dry before the next is applied.

It is important to keep your hands clean when working with your model and wash parts thoroughly before painting to remove any mold release agent that may have been used during manufacture, body oil from your hands, sanding residue, and dust, which is naturally attracted to plastic by static electricity. Use a mild solution of dish washing detergent and water. A tack rag should be used to dry the parts, DO NOT use paper towels or tissues, since they will leave lint on the part.

Parting lines and glue joints should be sanded or filed prior to painting. Because paint has a tendency to draw away from sharp edges, they should be lightly filed. Use filler putty designed for plastic to fill small gaps that may occur between parts and to blend contours. This should be done only after the first, or "primer," coat of paint is applied.

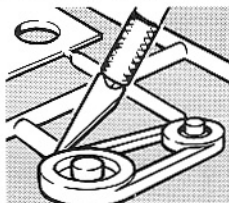
When painting a multi color scheme, the lightest color should be painted first. Use frosted, or "magic," tape to mask off the area you do not want painted. After the second color is dry to the touch, the tape can be removed. Use a very fine brush to touch up edges if necessary. If decals are to be added, do so before adding any gloss coat. A gloss coat will help even out the edges between the two colors as well as set the decals.

**NOTE:** Federal standard colors The military services use standardized colors, each receiving a specific five digit identification number. Grays, for instance, are all 6000, and gloss paints begin with a 1, semi-gloss 2, flats 3. Thus a gray color can be gloss ( 16251 ), semi-gloss ( 26251 ) or flat ( 36251 )

## RECOMMENDED TOOLS

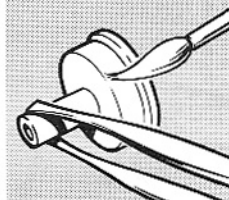
### HOBBY KNIFE

Use a sharp hobby knife to remove parts from the trees. The knife may also be used to remove parting lines and flash.



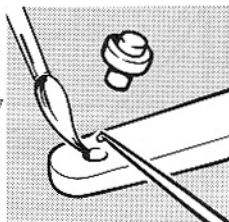
### TWEEZERS

Use tweezers to hold small parts during assembly, painting and when applying cement.



### BRUSH

We recommend the use of liquid polystyrene cement. Apply with a fine brush. Use sparingly or a sloppy job will result.



## READ ALL LABELS AND WARNINGS CAREFULLY

We take great pride in providing the finest model kits available, giving strong attention to detail and craftsmanship. Should you have any difficulty with assembly or missing parts, please call the appropriate number listed below between the hours of 8:00 am to 4:30 pm central time, Monday through Friday.

In the U.S.A. call toll free

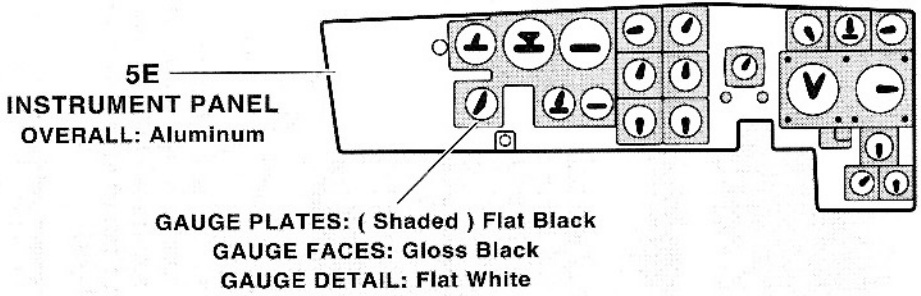
800 - 553 - 4886

Outside of the United States call

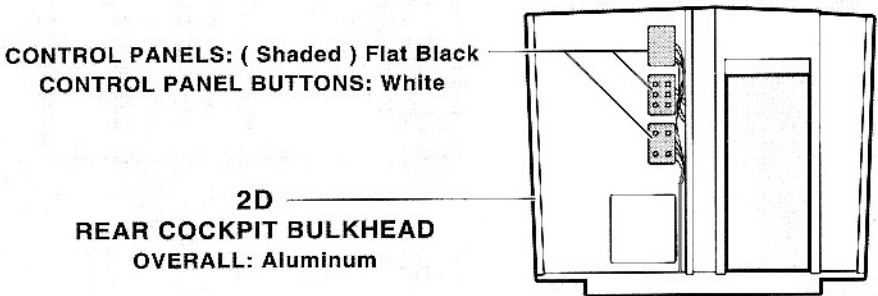
1 - 319 - 875 - 2000

Please visit the ERTL Company for a free tour of the AMT production facilities in Dyersville, Iowa. Tours Daily - Reservations suggested. Call (319) 875 - 5699

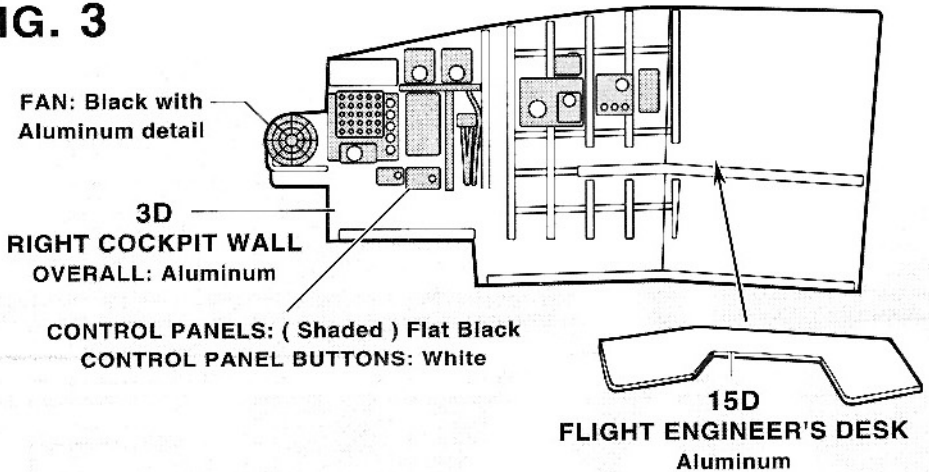
**FIG. 1** NOTE: Proposed production models were to have overall Interior Green interiors ( FS - 34151 ), the actual prototypes were made with Aluminum interiors.



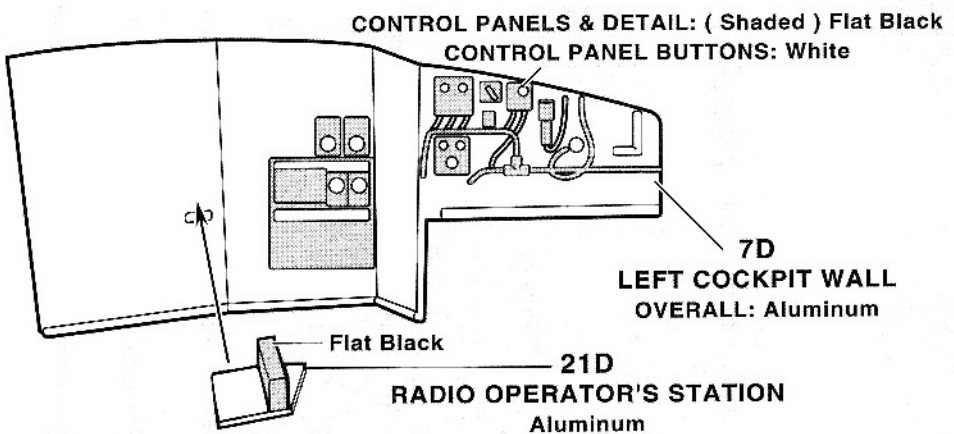
**FIG. 2**



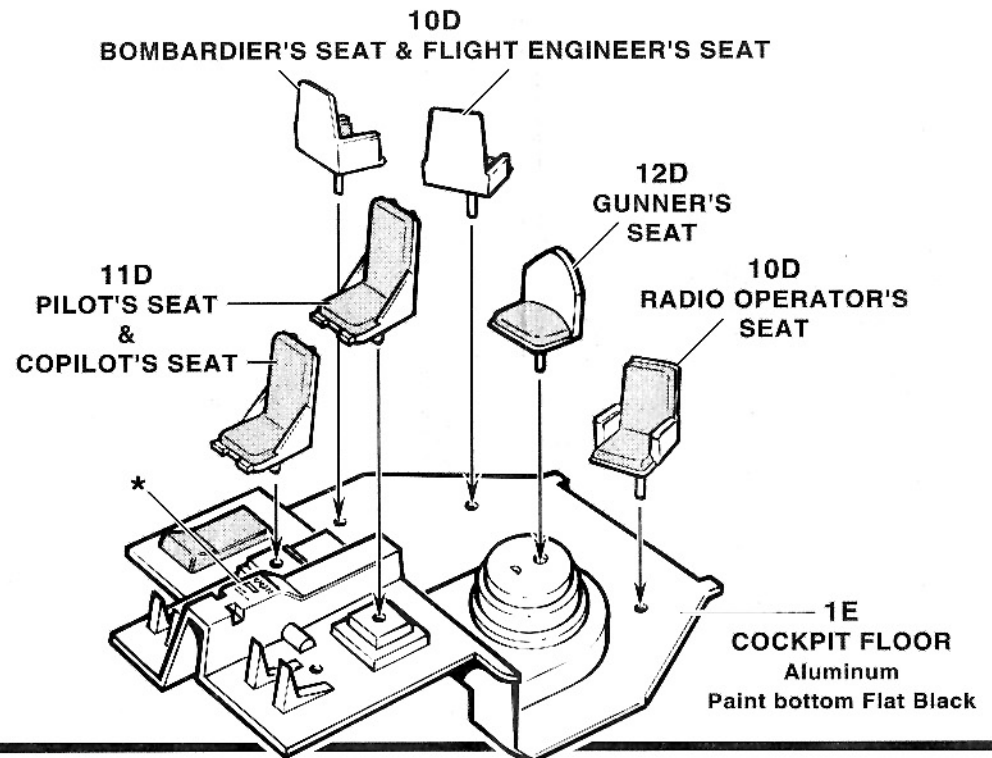
**FIG. 3**



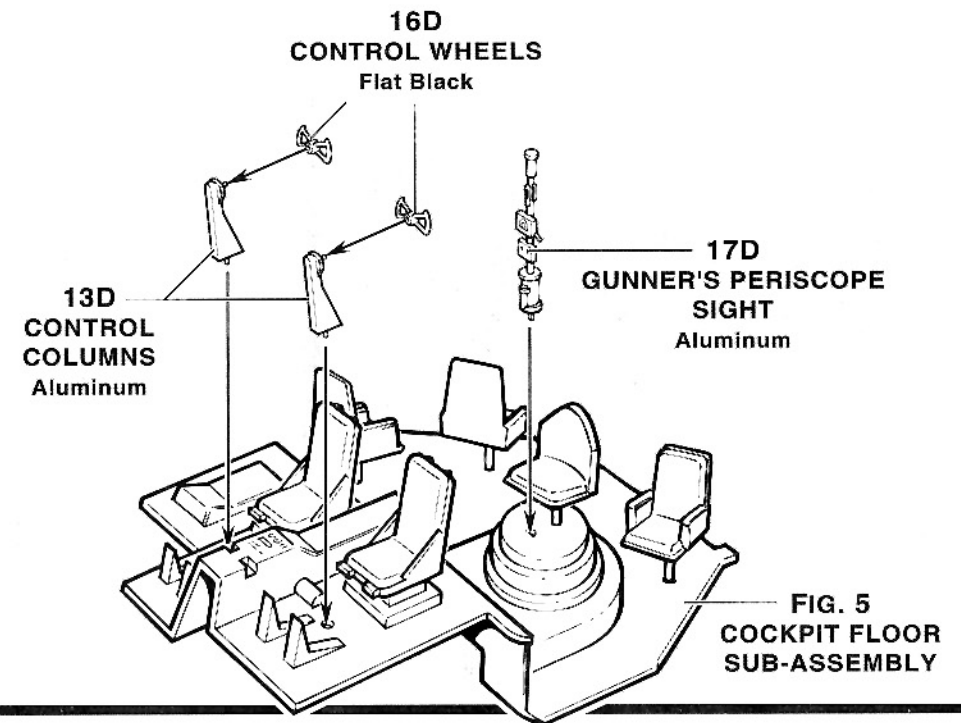
**FIG. 4**



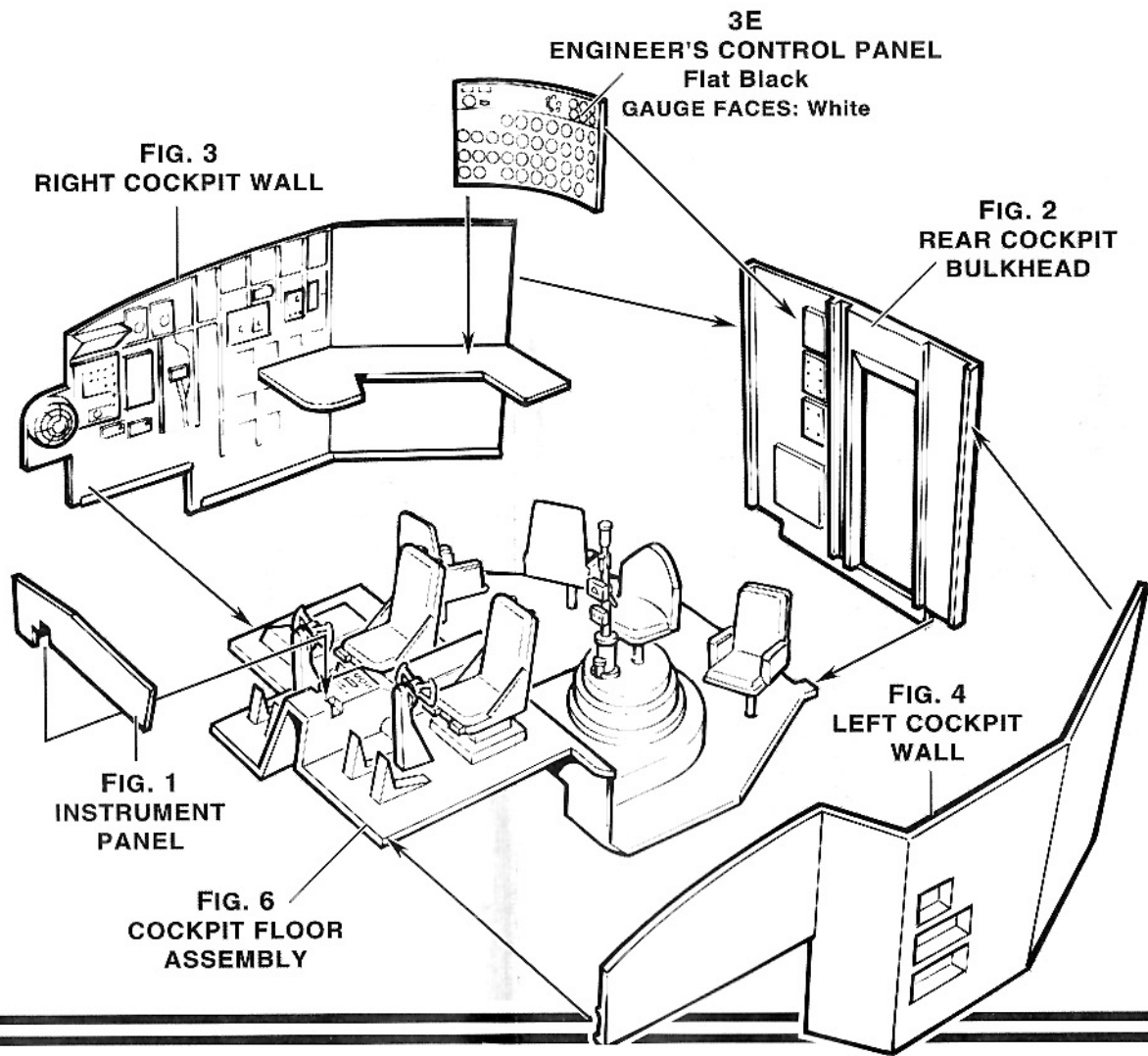
**FIG. 5** NOTE: Paint all SEATS Aluminum with Insignia Red ( Shaded FS - 31136 ) cushions. Center console detail ( \* ) Flat Black with White gauges.



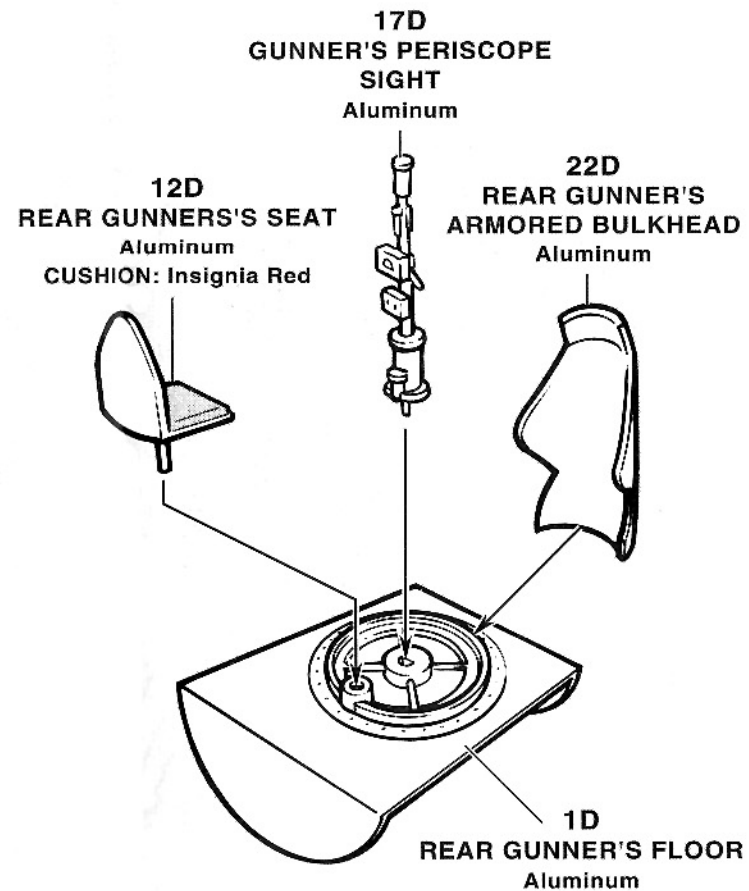
**FIG. 6**



**FIG. 7**

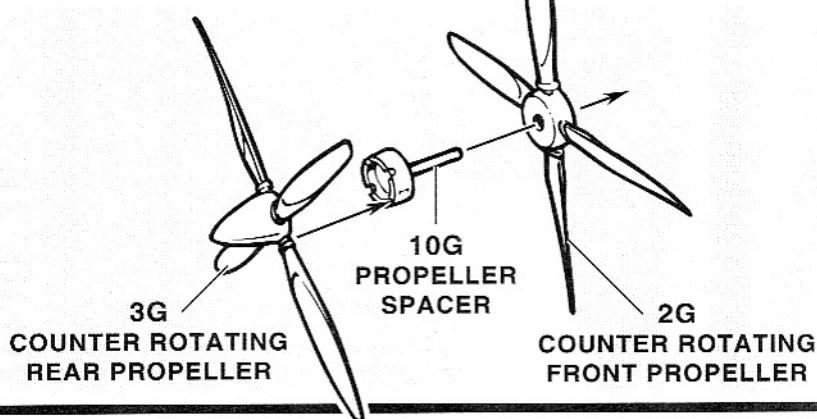


**FIG. 8**

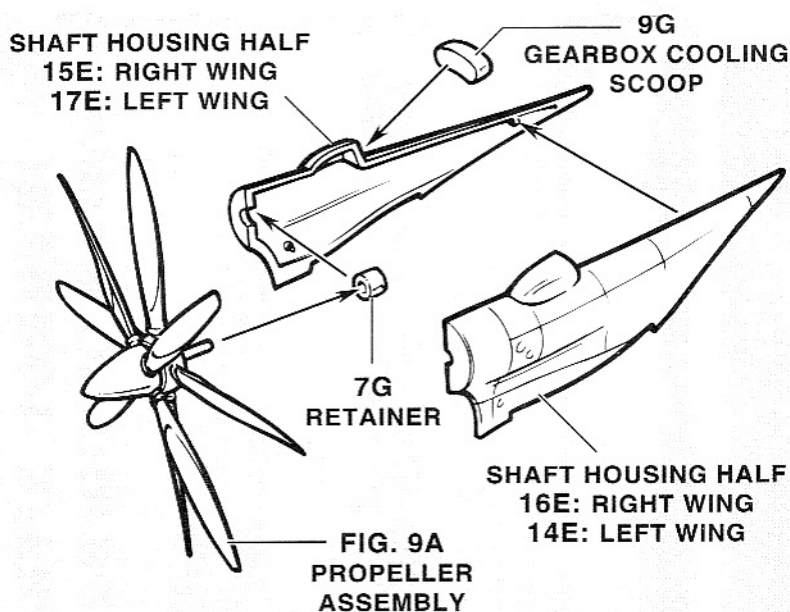


# **XB-35**

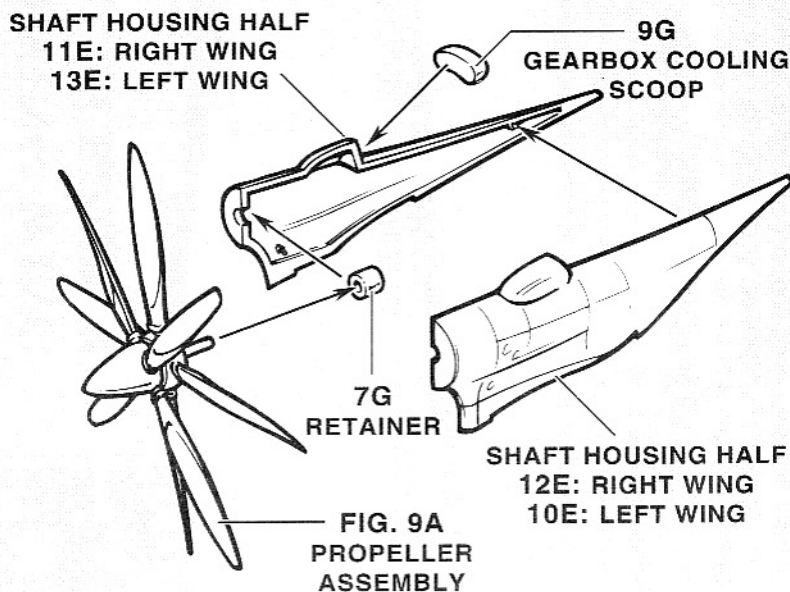
## **FIG. 9A** NOTE: ASSEMBLE 4



## **FIG. 10A: INBOARD**

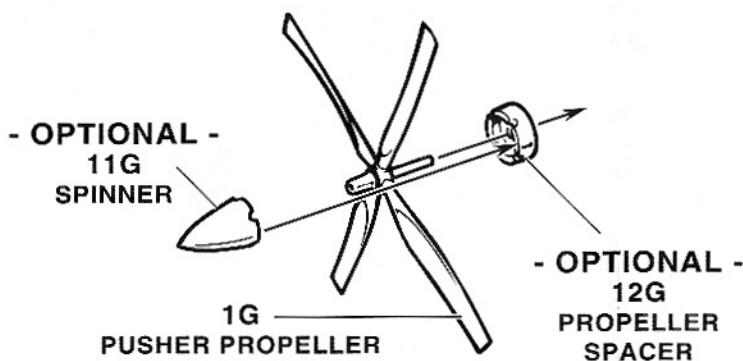


## **FIG. 11A: OUTBOARD**

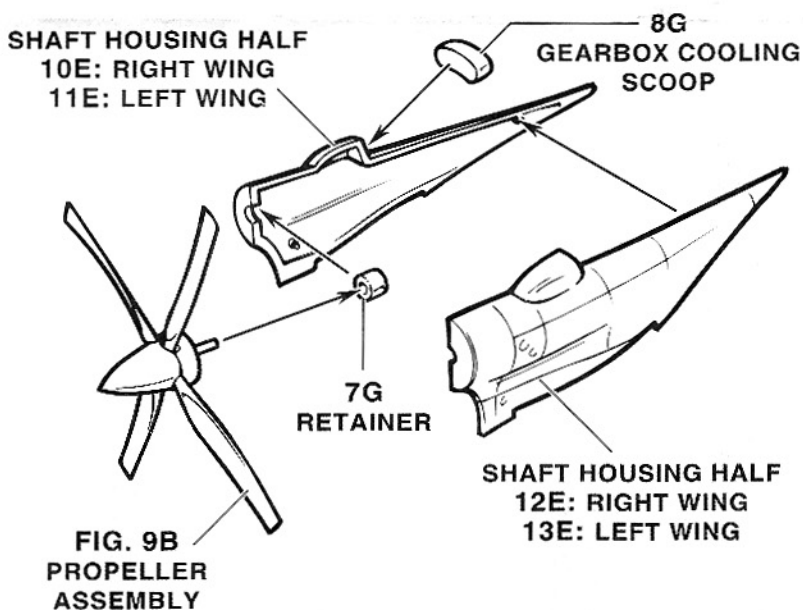


# YB-35

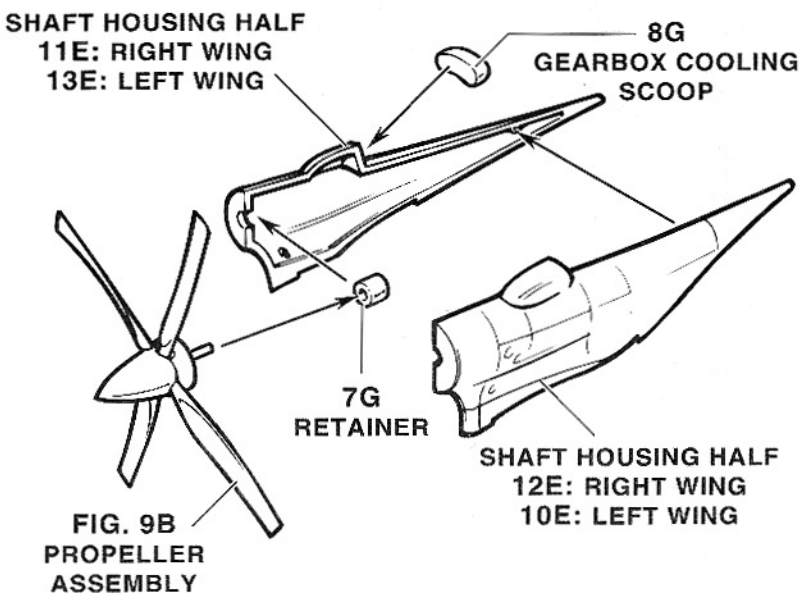
## FIG. 9B NOTE: ASSEMBLE 4



## FIG. 10B: INBOARD

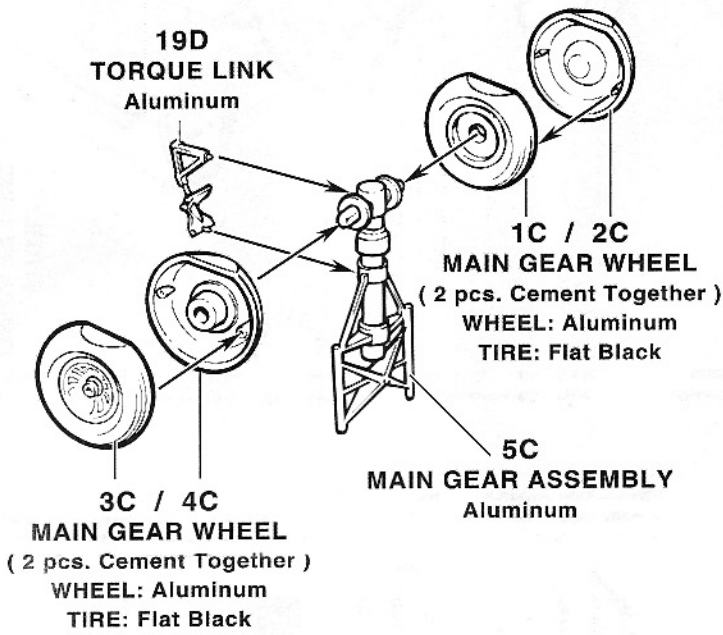


## FIG. 11B: OUTBOARD

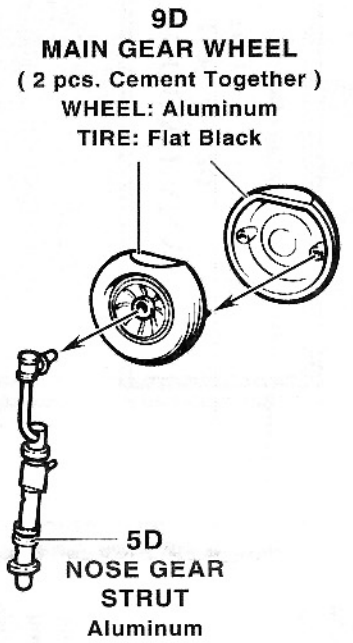




**FIG. 12** NOTE: ASSEMBLE 2

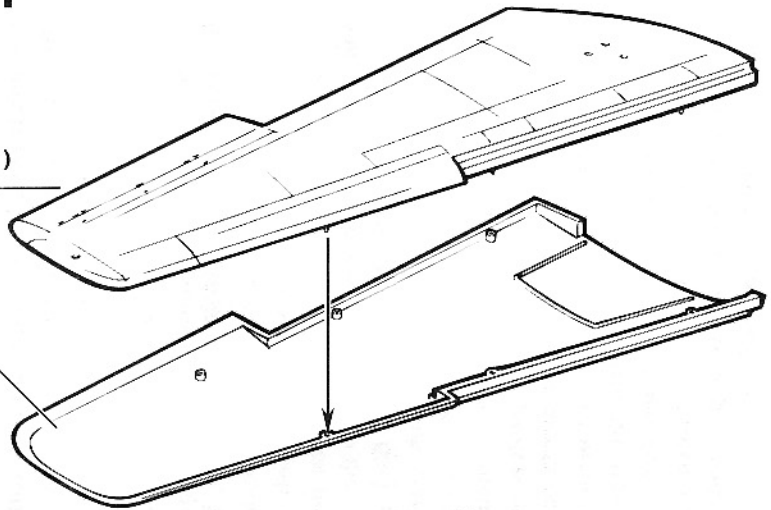


**FIG. 13**



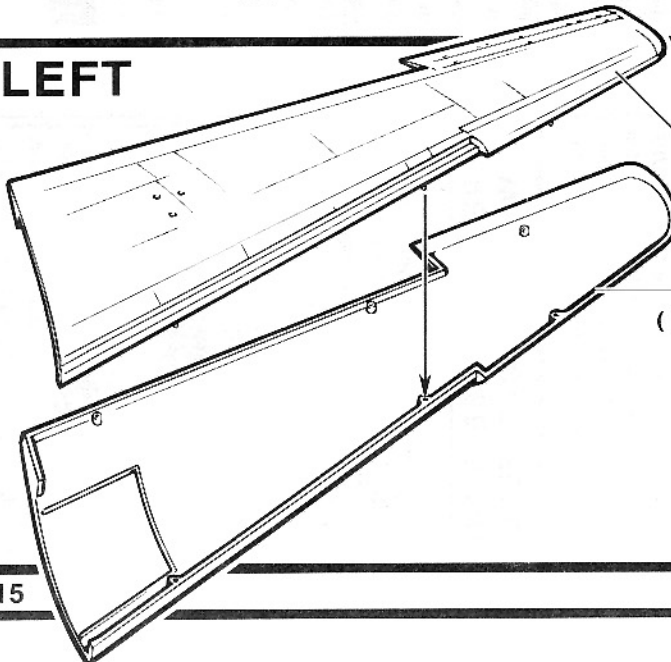
**FIG. 14: RIGHT**

RIGHT WING  
( 2 pcs. Cement Together )  
1B: Upper  
&  
3B: Lower



**FIG. 15: LEFT**

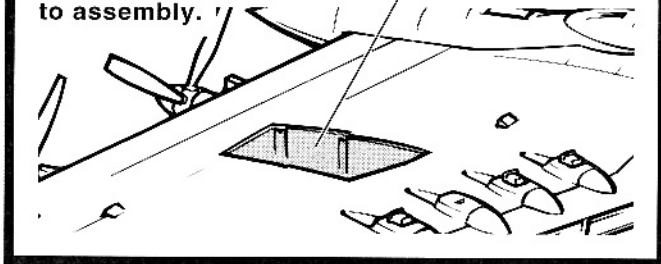
2B: Upper  
&  
4B: Lower  
LEFT WING  
( 2 pcs. Cement Together )



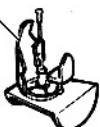
# FIG. 16

## NOTE

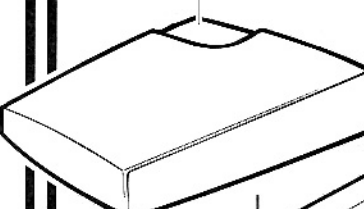
Paint the inside of the LOWER CENTER WING Aluminum and paint the interior of the main gear wheel wells Green Zinc Chromate prior to assembly.



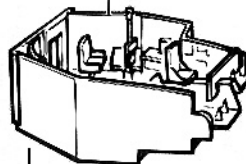
### FIG. 8 REAR GUNNER'S FLOOR ASSEMBLY



### 15C RIGHT WING SPAR



### FIG. 7 COCKPIT ASSEMBLY



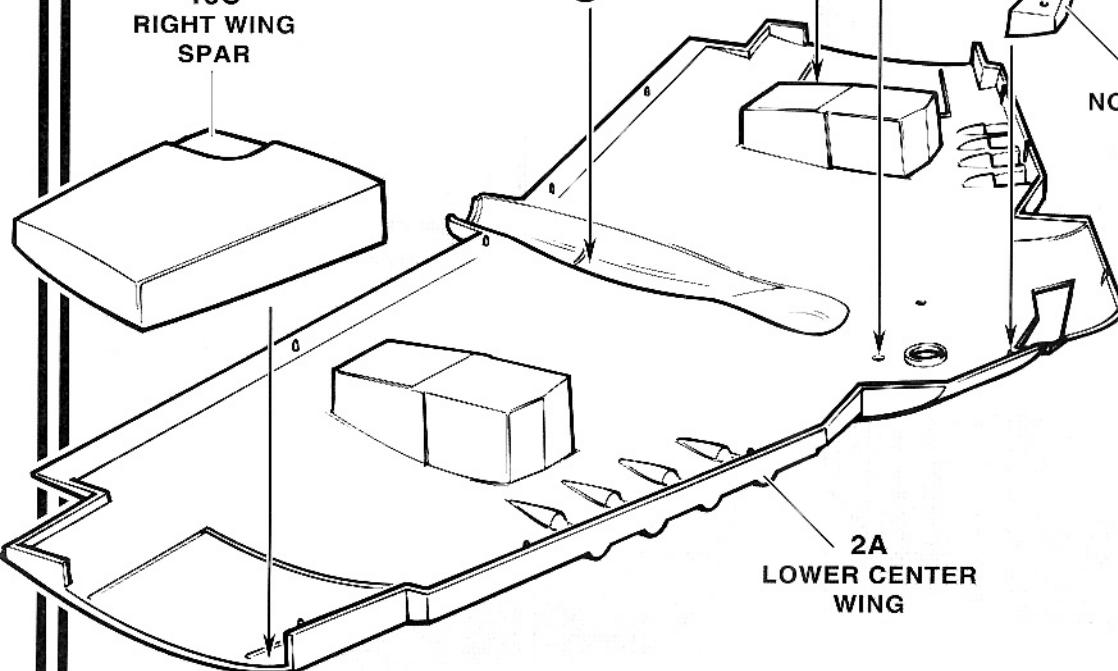
### 14C LEFT WING SPAR



### 24D NOSE WHEEL WELL



### 2A LOWER CENTER WING



**FIG. 17**

**NOTE**

Paint the inside of the UPPER CENTER WING  
Aluminum.

**1A**  
UPPER CENTER  
WING

**4E**  
OVERHEAD  
CONSOLE  
Flat Black  
DETAIL: White

**2E**  
THROTTLE  
CONTROLS  
Flat Black

**FIG. 7**  
LOWER CENTER  
WING ASSEMBLY

**IMPORTANT**  
For proper balance we  
recommend pressing approx.  
15 grams of Modelers Clay to  
the area around the COCKPIT  
ASSEMBLY.

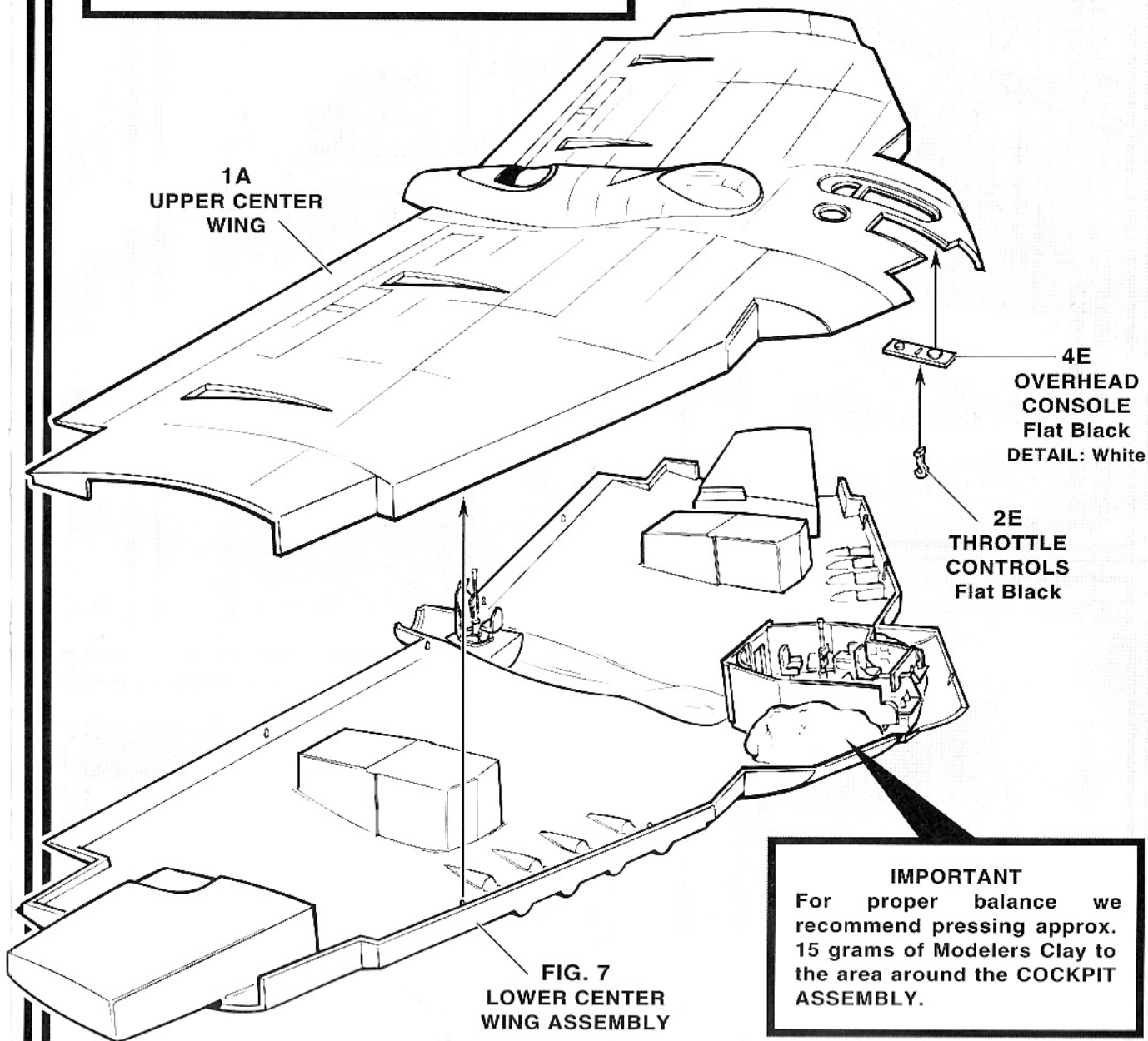
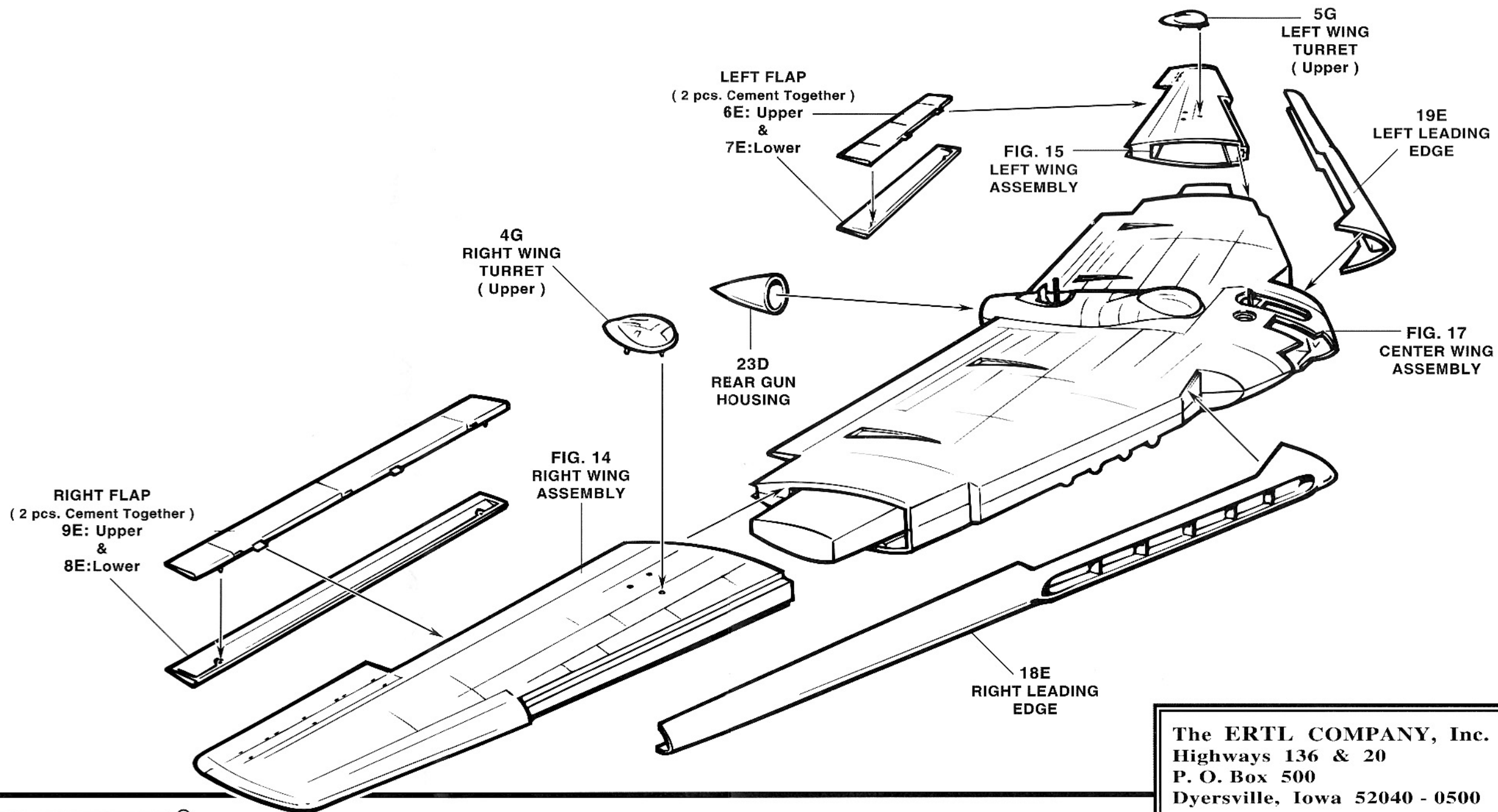


FIG. 18

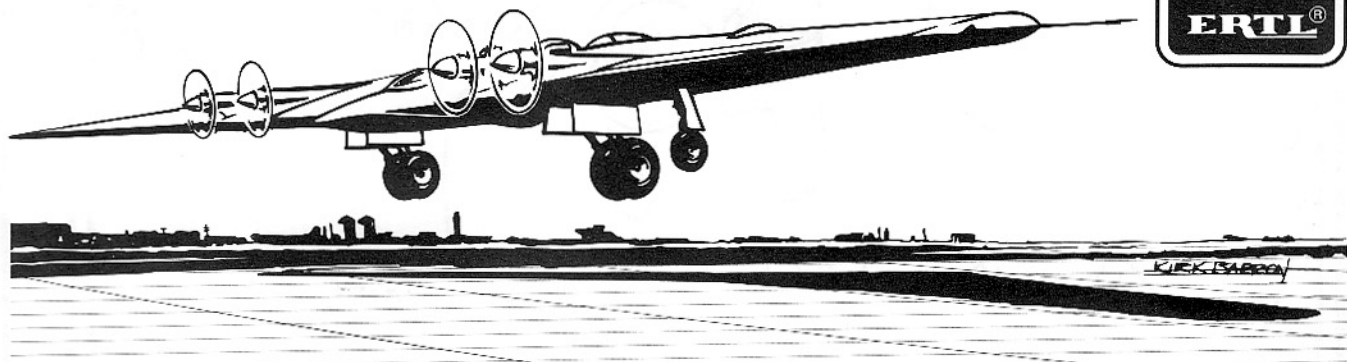


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ASSEMBLY CONTINUES ON SHEET 2 of 2

# NORTHROP X/YB-35 FLYING WING FATHER OF THE B-2 STEALTH BOMBER



## SPECIFICATIONS:

<b>WINGSPAN:</b>	172ft.
<b>LENGTH:</b>	53ft. 1in.
<b>HEIGHT:</b>	20ft. 1in.
<b>POWER PLANTS:</b>	
XB-35	Four Pratt & Whitney R-4360 Wasp Majors driving four pairs of four-bladed counter-rotating pusher props.
YB-35	Four Pratt & Whitney R-4360 Wasp Majors driving four four-bladed pusher props.
<b>WEIGHT:</b>	
Empty	89, 560lb.
Gross	180, 000lb.
Maximum	209, 000lb.
<b>BOMB PAYLOAD:</b>	
Proposed	51, 200lb. (approx.)
<b>ARMAMENT:</b>	
Proposed	Turrets with .50cal. machine guns. One Turret upper and lower outboard wing with two guns each, one upper and lower center line turret with four guns each, and a tail stringer with four guns.
<b>SPEED:</b>	
Top	391mph. @ 35,000rpm.
Cruising	183mph.
<b>RANGE:</b>	
	8150mi. @ 183mph. with 16,000lb. payload
	720mi. @ 240mph. with 51,070lb. payload
<b>Service Ceiling:</b>	40, 000ft.
<b>PRODUCTION:</b>	
XB-35	two
YB-35	one

**FIG. 19**

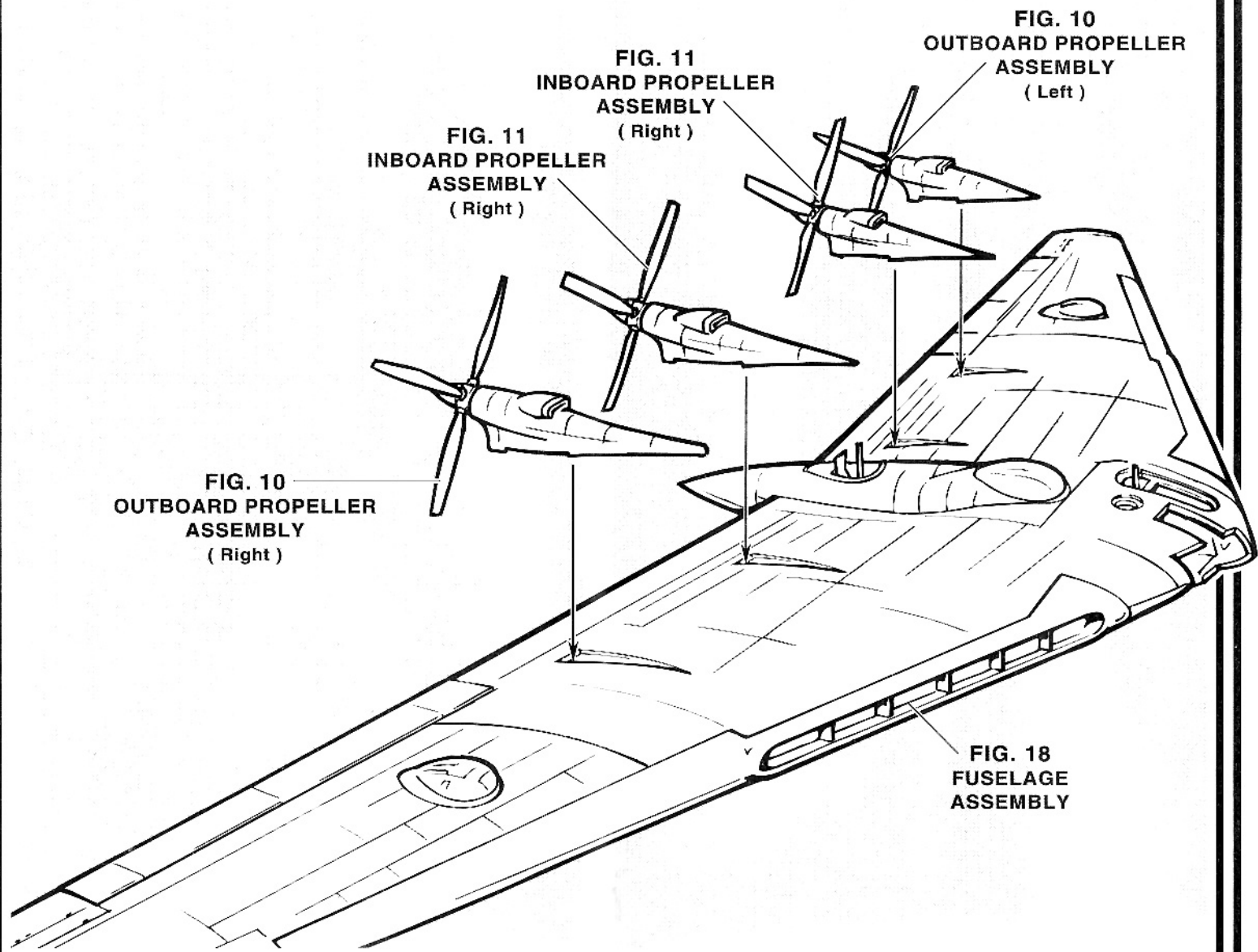
**FIG. 11**  
**INBOARD PROPELLER**  
**ASSEMBLY**  
( Right )

**FIG. 10**  
**OUTBOARD PROPELLER**  
**ASSEMBLY**  
( Left )

**FIG. 11**  
**INBOARD PROPELLER**  
**ASSEMBLY**  
( Right )

**FIG. 10**  
**OUTBOARD PROPELLER**  
**ASSEMBLY**  
( Right )

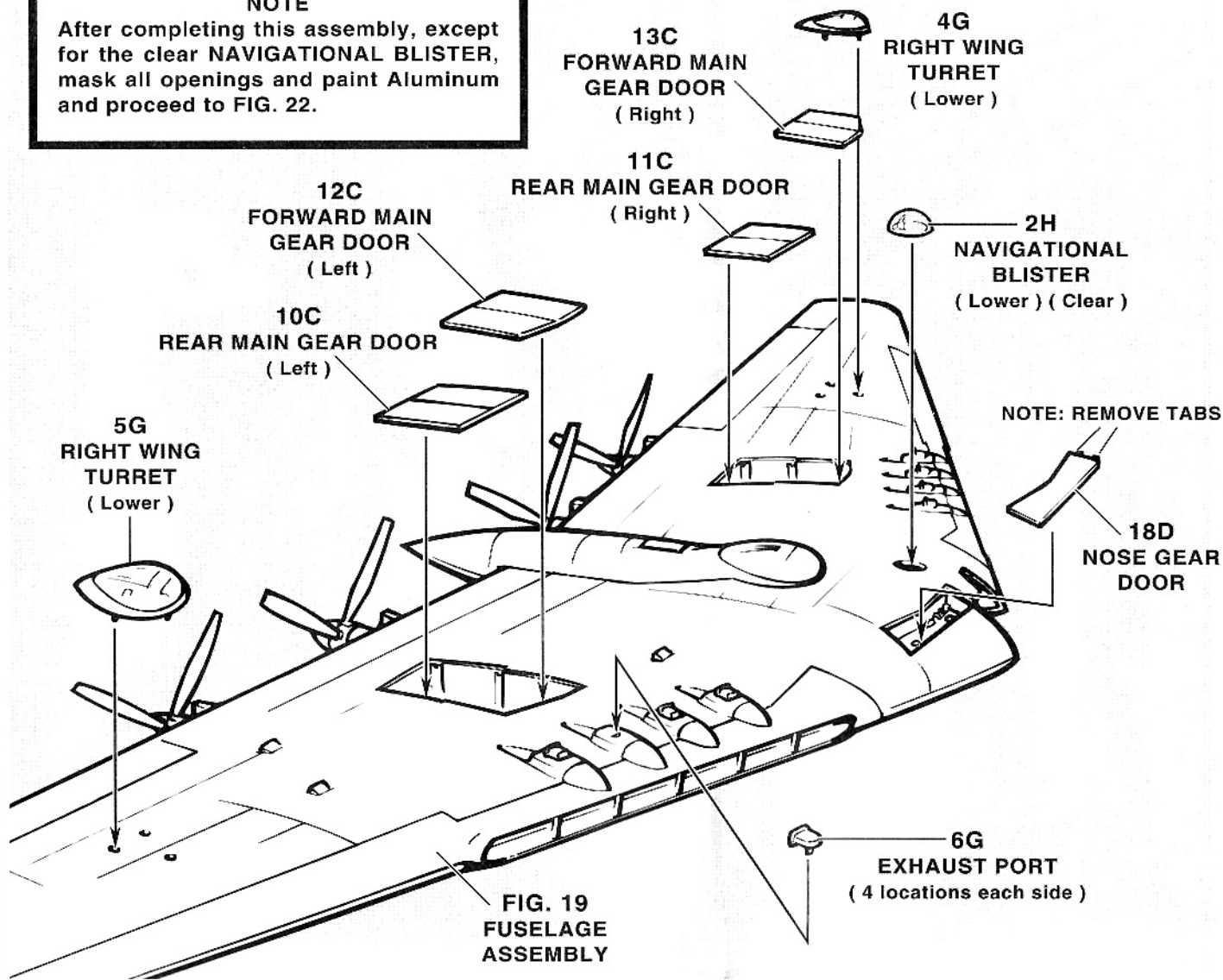
**FIG. 18**  
**FUSELAGE**  
**ASSEMBLY**



# FIG. 20: LANDING GEAR UP

## NOTE

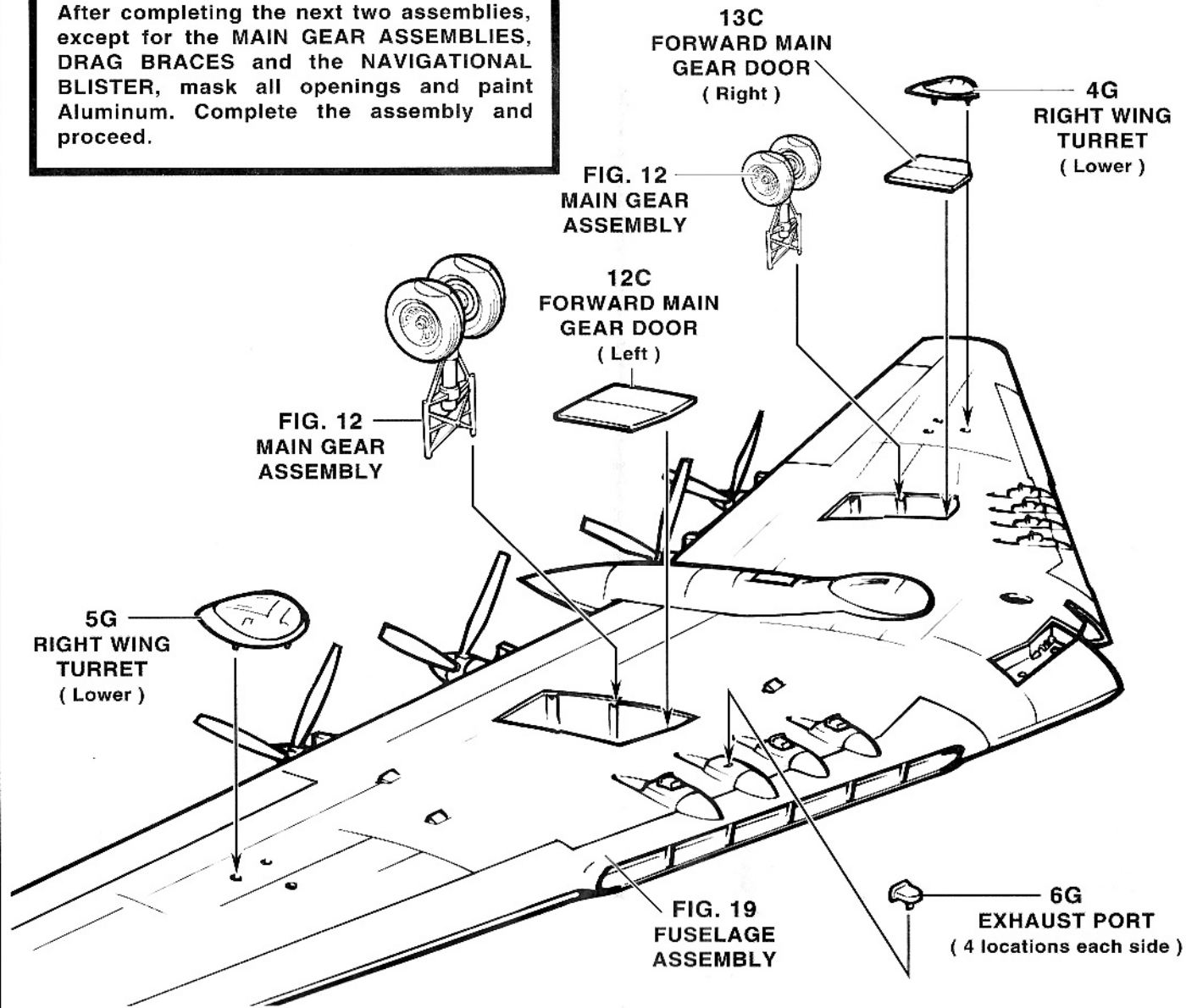
After completing this assembly, except for the clear NAVIGATIONAL BLISTER, mask all openings and paint Aluminum and proceed to FIG. 22.



# FIG. 21A: LANDING GEAR DOWN

## NOTE

After completing the next two assemblies, except for the MAIN GEAR ASSEMBLIES, DRAG BRACES and the NAVIGATIONAL BLISTER, mask all openings and paint Aluminum. Complete the assembly and proceed.

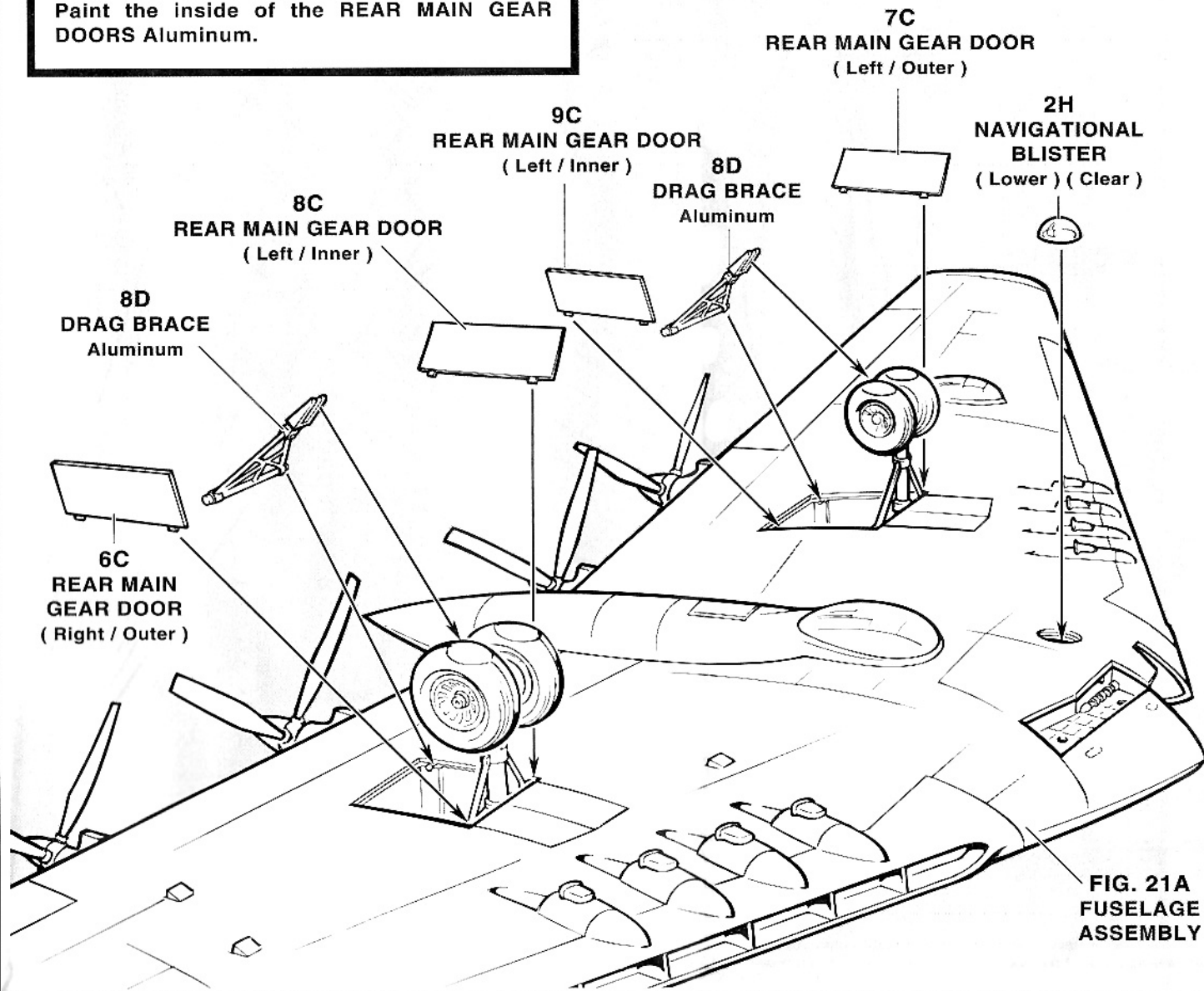




# FIG. 21B

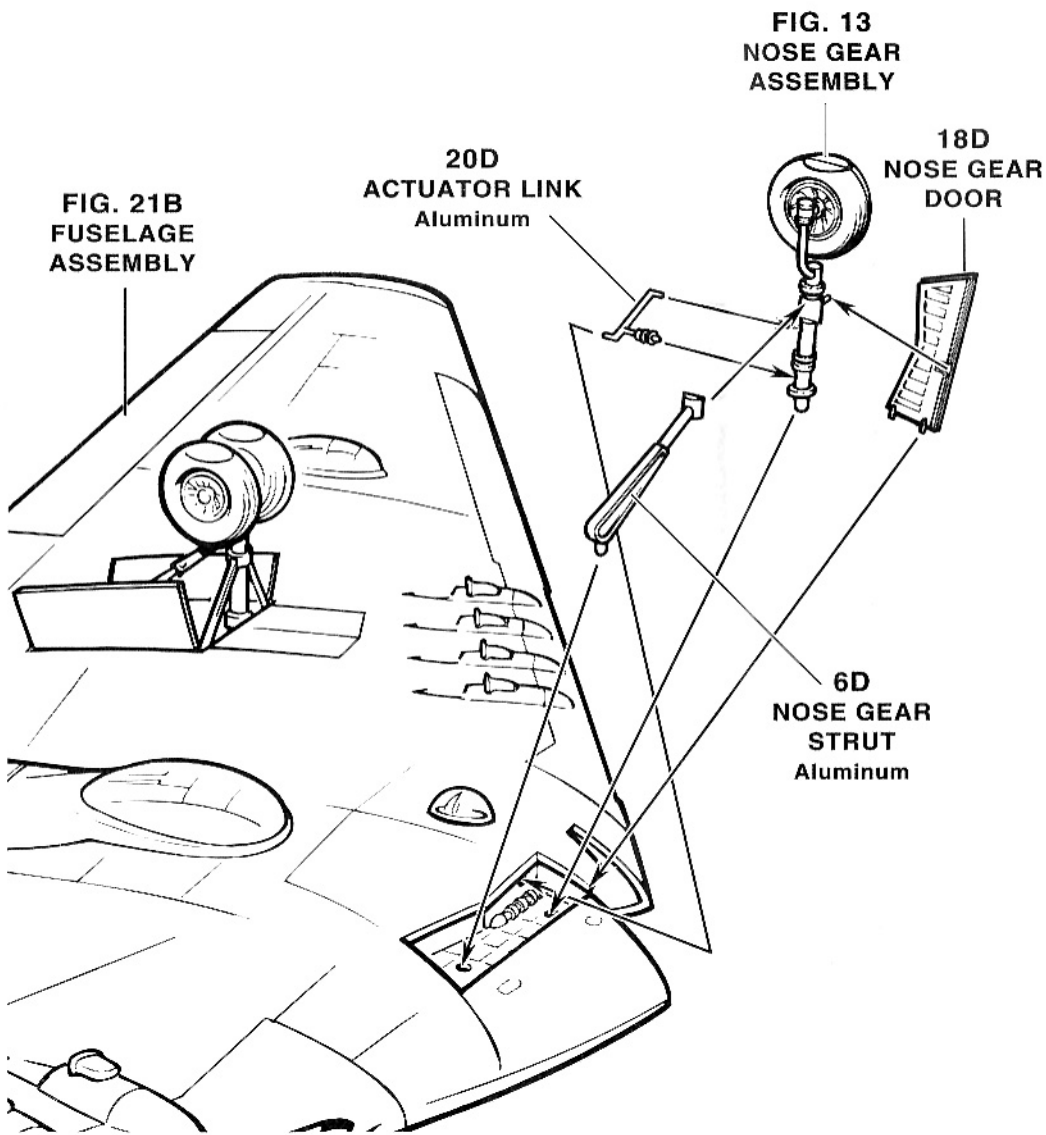
## NOTE

Paint the inside of the REAR MAIN GEAR DOORS Aluminum.



**FIG. 21A**  
**FUSELAGE**  
**ASSEMBLY**

**FIG. 21C**



**FIG. 22**

14D  
GUNSIGHT PRISMS  
Silver

3H  
NAVIGATIONAL BLISTER  
( Upper ) ( Clear )

6H  
PILOT'S  
CANOPY  
( Clear )

1H  
REAR GUNNER'S  
CANOPY  
( Clear / see note )

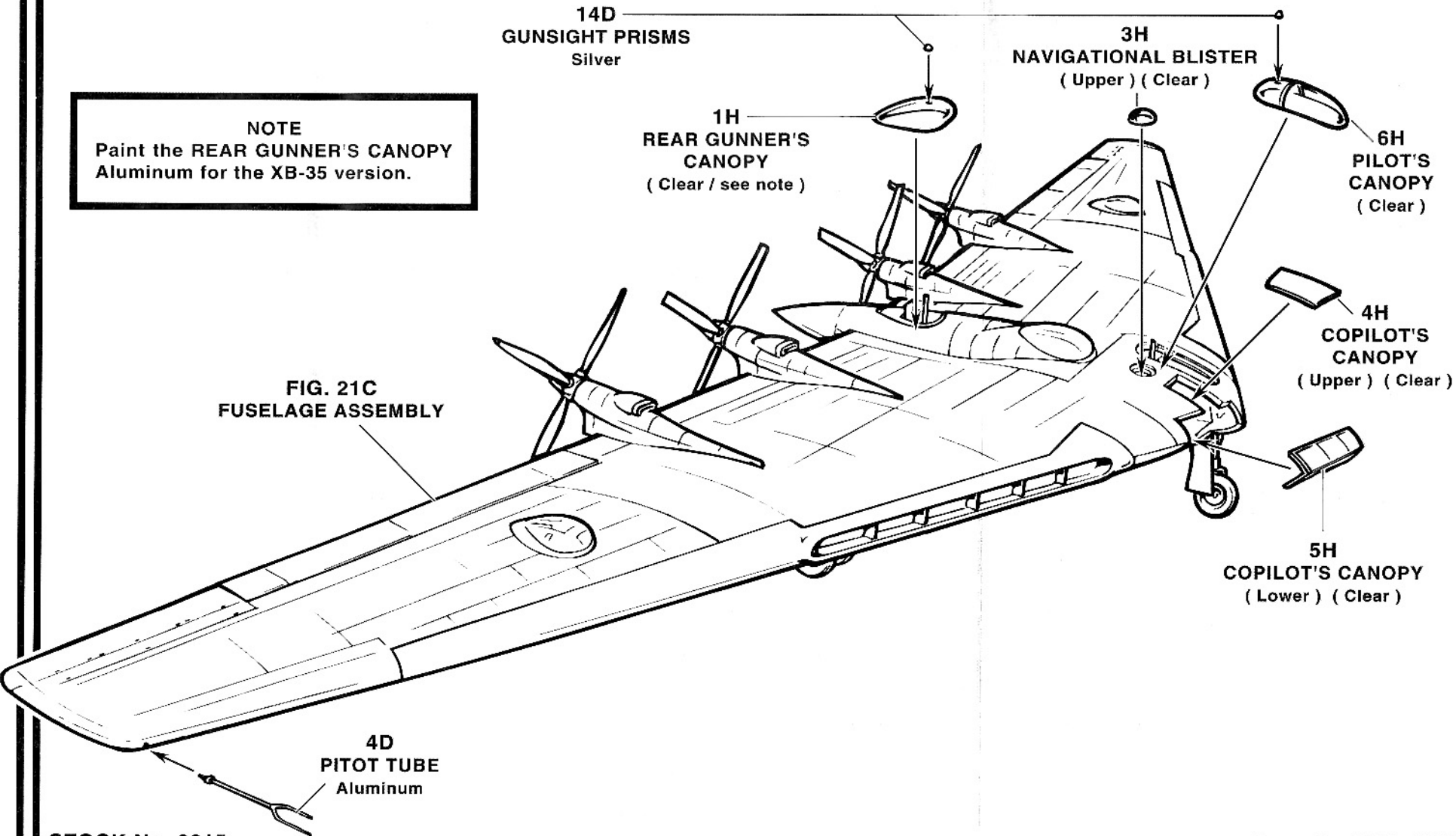
4H  
COPILOT'S  
CANOPY  
( Upper ) ( Clear )

5H  
COPILOT'S CANOPY  
( Lower ) ( Clear )

FIG. 21C  
FUSELAGE ASSEMBLY

4D  
PITOT TUBE  
Aluminum

**NOTE**  
Paint the REAR GUNNER'S CANOPY  
Aluminum for the XB-35 version.

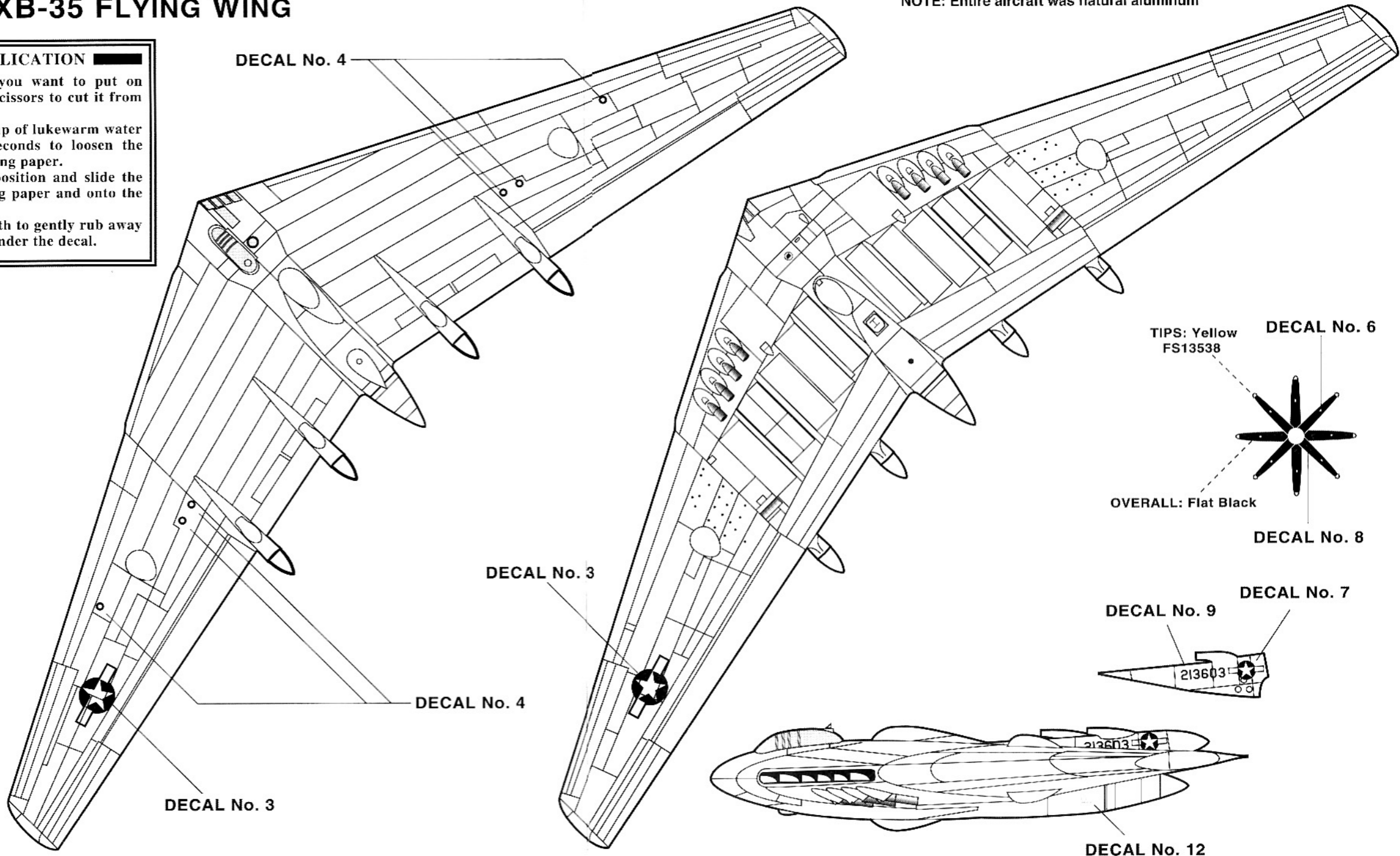


# NORTHROP XB-35 FLYING WING

NOTE: Entire aircraft was natural aluminum

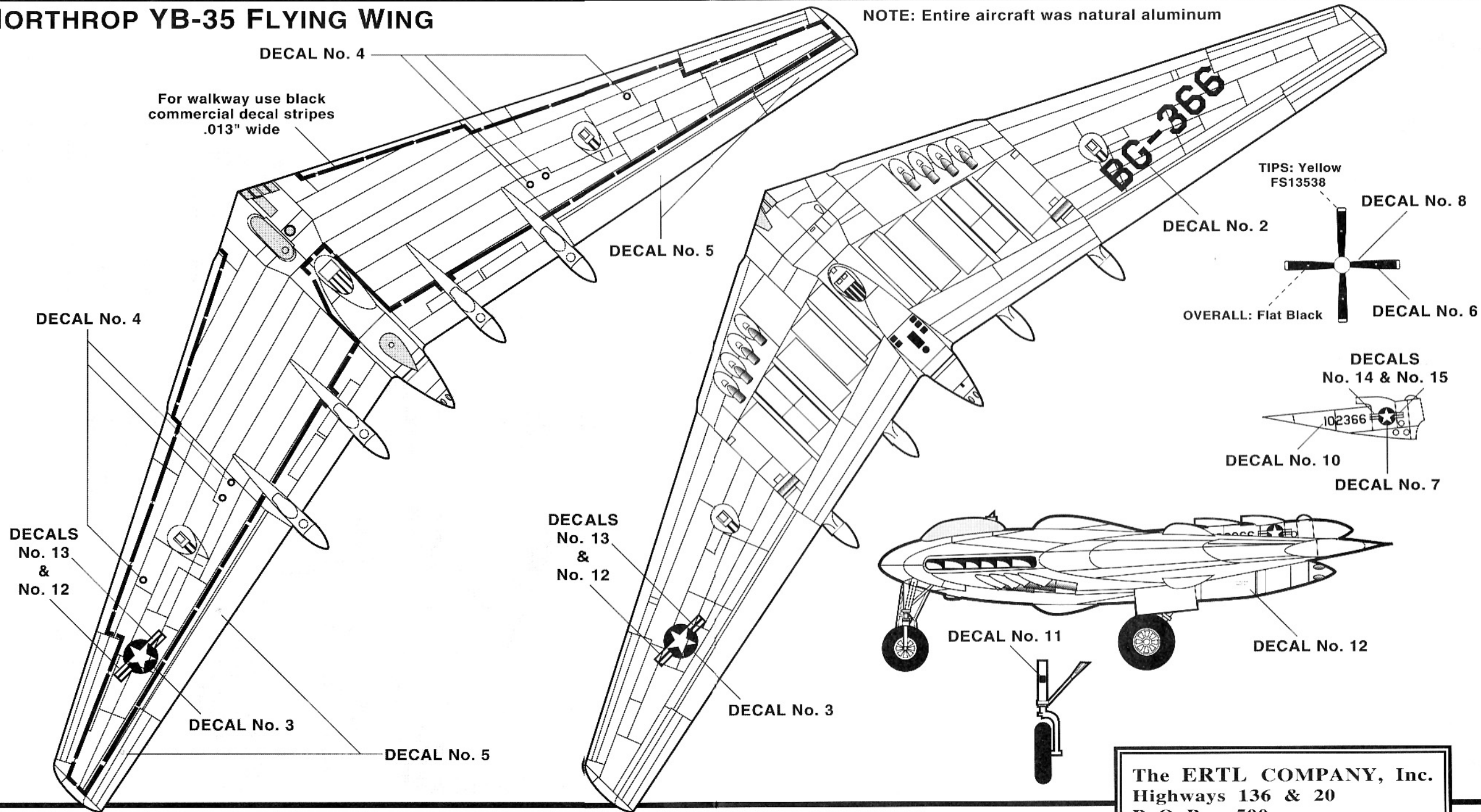
## DECAL APPLICATION

- Choose the decals you want to put on your kit and use a scissors to cut it from the decal sheet.
- Dip the decal in a cup of lukewarm water for about fifteen seconds to loosen the decal from the backing paper.
- Place the decal in position and slide the decal off the backing paper and onto the model.
- Use a soft, damp cloth to gently rub away any water bubbles under the decal.



# NORTHROP YB-35 FLYING WING

NOTE: Entire aircraft was natural aluminum



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2

X/YB-35 FLYING WING 8615-9530

# BG-366

3

11

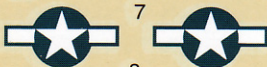


5



12

1



7

8

6



10

9



## 213603 213603

12



13



14



15

# 102366 102366