

## HISTORY

Ordered by the Navy on December 16th 1948, the *Douglas Skyray*, a cross between a tailless sweptwing and a pure 'Delta' was to be their first supersonic fighter. The first prototype flew in January 1951 with the aged Allison J35-A-17 engine, due to the temporary unavailability of the Westinghouse J40. The 2nd *Skyray* prototype with the J40 set the world speed record at 753 mph. on October 3, 1953. Due to J40 procurement problems, the 420 production *F4D-1s* were fitted with the Pratt & Whitney J570-P2s, with afterburners and from the end of 1954 were assigned to Navy squadrons, while the Marines did not receive theirs until 1958. Navy pilots who nicknamed the *XF4D 'FORD'* after F4D, found the craft extremely exciting and easy to fly. Aside from the speed record, the *F4D-1* set the climb to height record in 1958, reaching 40,000 ft. in a mere 61 seconds, and 49,215 ft. in 2 minutes 36 seconds, a level few fighters of the fifties could even reach.

## SPECIFICATIONS

Engine	1 P & W J57-P-2
Length	45 ft. 8 in.
Width	45 ft. 8 in.
Height	13 in.
Max. Speed	695 MPH
Max. Weight	25,000 lbs.
Armament	4 x 20 mm cannon 4,000 lbs. of Bombs

## REFERENCES

### NAVY AIR COLORS Vol. 2 1945-1985

Thomas E. Doll Berkley R. Jackson

William A. Riley (Squadron/Signal)

### FIGHTERS OF THE FIFTIES

BILL GUNSTON (Specialty Press)

## BEFORE STARTING

1. Study the illustrations and sequence of assembly before beginning.
2. Decide how much detail you wish to add to your model and whether or not you intend to modify or "convert" the basic model in anyway. Study carefully, all available reference material before beginning to ensure an authentic model.
3. Due to the amount of parts in this kit, do not detach the parts from the runner of the parts tree until you need them. This helps avoid confusion and lost parts.
4. When cementing the parts together, check the way one part fits with another. This assures a neat job with no surprises.
5. Always remember when working with plastic model cement and paint to keep your work area well ventilated. The fumes from plastic modeling products can be harmful if inhaled.

## PREPARATION OF PARTS

1. Never tear parts off the runner (parts tree). Use a **Testor Hobby Knife**, or a **Model Master Micro Shear Sprue Cutter No. 50628C**, or a small wire cutters to remove the parts from the tree.
2. It is possible some parts may require a little attention with a file or sandpaper to ensure a proper fit and neat appearance. Hobby files, or **Model Mater Sanding Films No. 8812** appropriate for model building are available in most good hobby shops.
3. If you desire you may fill any seams (where parts go together) or imperfections with **Testor Contour Putty No. 3511** for Plastic Models which is also available at good hobby shops.

## PAINTING

You can obtain an excellent finish on your model using **Testor** finish preparation products and paints. Detailed descriptions of paint types and colors are included throughout the pages that follow. Good brushes are essential for proper detailing. **Testor Model Master** brushes are recommended, and available at good hobby stores. Be sure you have the entire selection for all your modeling needs. Always clean them in **Testor Brush Cleaner No. 1156**, wash in soap and water, and store with bristles upward when not in use. Wash plastic parts before detaching them from the parts tree. Warm water and liquid dishwashing detergent will remove the oils left from the manufacturing process. Let the parts dry and avoid excessive handling. Immediately before painting, wipe the parts with a "tac rag" (available at automotive parts stores) to remove dust and lint. Most small parts are best painted while still attached to the parts tree. You can also detach them and hold with tweezers or "magic" tape while painting. Paint in one direction only. If your paint is the correct thickness, brush strokes will disappear as the color dries. If the paint seems too thick, thin with **Testor Airbrush Thinner No. 8824** or **No. 8825C**. Wheels may be detached from the parts tree and fit onto toothpicks for painting. Just hold the paintbrush against the edge of the wheel and rotate the toothpick and wheel to obtain a neat finish. Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember cement will not hold strongly to painted surfaces. Use your **Testor Hobby Knife** to carefully remove paint from all surfaces to be cemented. After you have assembled the model you can touch up areas where cement might have marred the finish.

**PATIENCE** is key to obtaining neat and professional results. If you have problems at any stage of assembly, give it a break, and resume the assembly at a later time.

**REMEMBER:** It is only plastic! Modeling is meant to be a pleasurable and relaxing experience, not a negative one. You also have to look at mistakes not as failures, but rather as learning experiences.

### ASSEMBLY TIPS

Tweezers will be useful in assembling the many small parts in this kit. The type used by postage stamp collectors is recommended.

Liquid cement, **Testor #3502** is recommended for construction since it can produce the neatest, quickest, and strongest glue joints.

Apply small amounts of cement, using the tip of a **Model Master #2** brush, to the surfaces to be joined while holding the parts in place. **DO NOT** use large amounts of cement, it may run and ruin detail on parts.

### INTRODUCTION

The F4D-1 Skyray, with its wonderfully modified Delta Wing, many have likened to the giant sea Manta-Rays, makes a very unique display. This easy to assemble kit comes with detailed Landing Gear, and is molded in 18 gray parts, 1 clear, and a colorful decal of VF(AW)-3.

**NOTE:** In order for this model to rest properly on its tricycle landing gear, weight must be added inside the nose before assembling fuselage halves together. Lead split shot as used in fishing is recommended. Lead weights should be held in place with modeling clay or epoxy ... **do not use plastic cement!!** It may distort fuselage halves.

## 1 FUSELAGE

### Preliminary Painting

Paint interior of cockpit **#1149 Flat Black**

#### Assembly

1. See **Note** above for addition of nose weight.
2. Cement **seat** onto brackets on **lower fuselage half** as shown in illustration.
3. Apply cement to alignment holes, and around top edge of **bottom fuselage half**, press **upper fuselage half** into place being careful to align all edges evenly.
4. Carefully apply cement to edge of **canopy** and place firmly over cockpit. **SEE NOTE!**

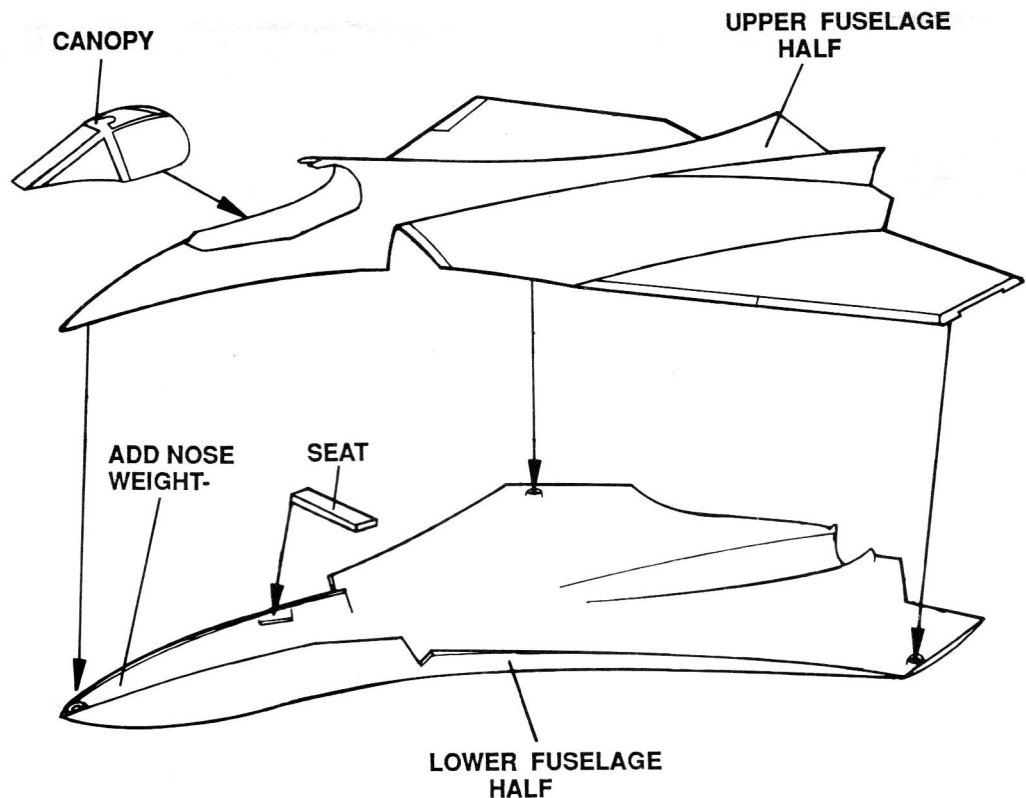
The **Testor Model Master Paint System** is specially designed to be used on plastic models. The **Preliminary Painting** instructions on this sheet indicate which **Model Master** colors to use as indicated by name and Federal Standard (FS) number, if applicable. These colors are called out by **bold italic type**. Wherever **Model Master** colors are not applicable the required Testor color will be called out by number and name in **regular bold type**.

### APPLYING DECALS

1. After carefully masking clear areas, spray entire model with **Testor Glosscote #1261**. Decals adhere best to a smooth surface and the shinier the surface is the smoother it is. Allow the **Glosscote** to dry before going further.
2. Select the decals you plan to use and cut them from the decal sheet with scissors or a **Testor Hobby Knife**.
3. Working with only one decal at a time, dip the decal in clear water for no more than five seconds. Remove it from the water and place on a dry paper towel for about one minute.

4. When the decal slides easily on the backing paper slide it to edge of, and onto, the surface of the model with a soft **Testor Model Master** paint brush or tweezers. **Remember:** the decals are very thin and can be easily ripped. Work slowly and carefully.
5. Once the decal is in the desired position apply a small amount of **Testor Decal Set #8804**. This will help the decal conform to any irregularities in the surface of the model. Allow the decal to dry undisturbed. Should you desire to purposely move it before it has dried, apply a little **Decal Set** to a soft brush and push the decal slowly into desired position.
6. When the decals are completely dry (usually overnight), apply a coat of **Testor Glosscote**, to the entire model. This will give it an authentic gloss finish and will protect the surface of the model. Now carefully remove masking from canopy and/or windows and other clear areas.

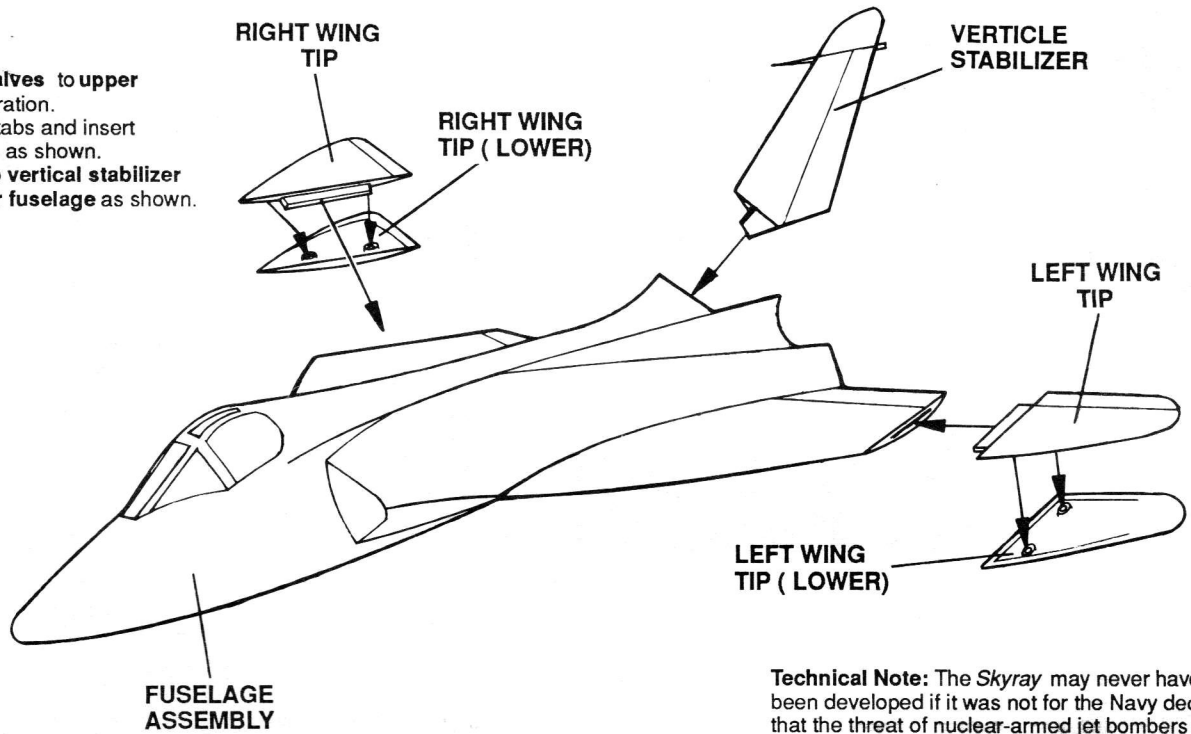
**NOTE:** Clear Parts are best glued in place with white glue. It will not mar the plastic and thus results in a better appearance than conventional model cement.



## 2 WINGS

### Assembly

1. Cement **lower wingtip halves** to **upper halves** as shown in illustration.
2. Apply cement to **wingtip tabs** and insert **wings** into **fuselage slots** as shown.
3. Carefully apply cement to **vertical stabilizer tab**, and insert into **upper fuselage** as shown.



**Technical Note:** The *Skyray* may never have been developed if it was not for the Navy deciding that the threat of nuclear-armed jet bombers was so great, that it issued the first ever requirement for a carrier-based Interceptor, to be able to shoot down a bomber at 40,000 ft within five minutes.

## 3 LANDING GEAR

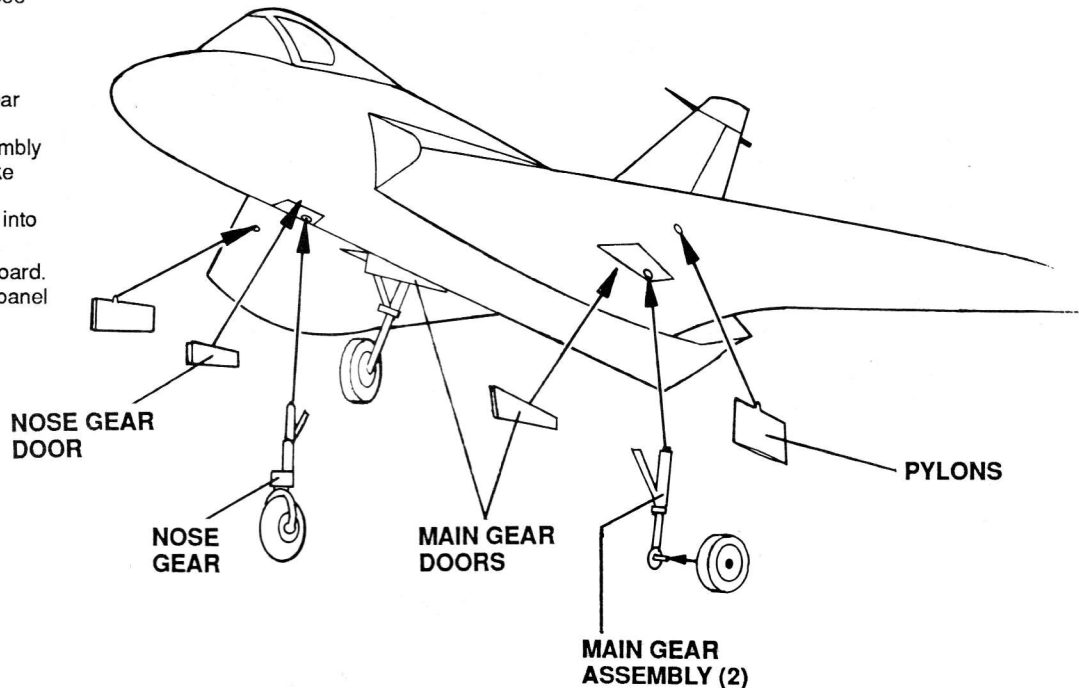
### Preliminary Painting

Paint tires flat black, wheel hubs **Testor #1146 Silver**. Landing Gear and Doors should be painted **Testor #1145 White**. Paint edges of doors with **Testor # 1103 Red**. SEE box photo.

You should paint exterior of plane and let dry completely before attaching landing gear. See Paint Scheme & Insignia on pg. 4

### Assembly

1. Cement **Main Gear wheels** to landing gear struts.
2. Carefully cement **Front Nose Gear** assembly into locating hole under the cockpit. Make sure support arm is towards the rear
3. Cement **Main Landing Gear** assemblies into locating holes under the wings, with strut arms facing forward and tires facing outboard.
4. Carefully cement **landing gear doors** to panel lines as shown in illustrations.
5. Cement pylons into locating holes as indicated on the underside of the wings.

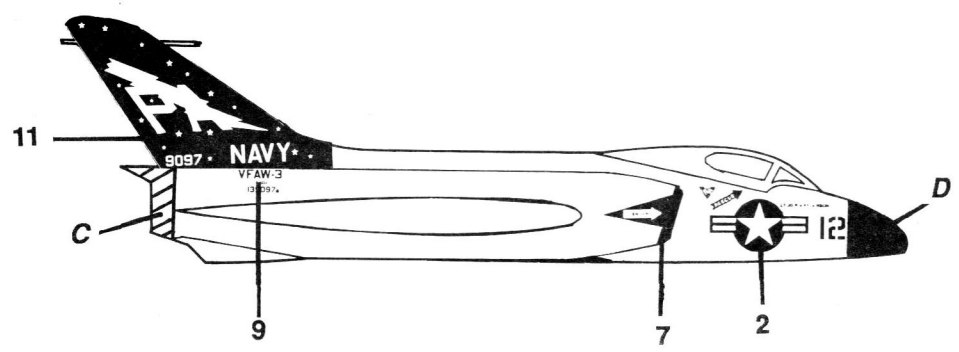
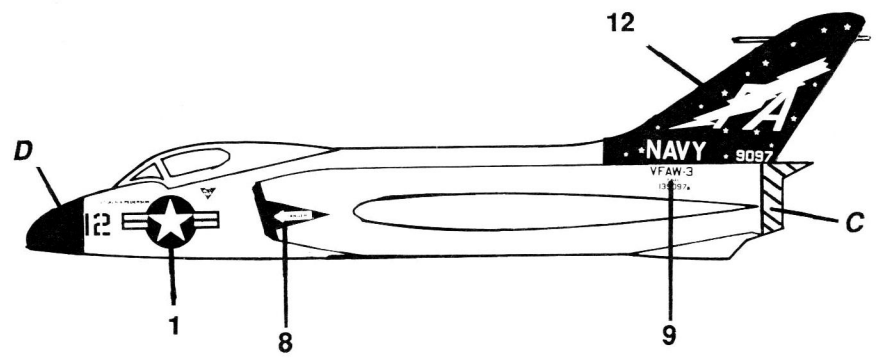


### PAINT SCHEME & INSIGNIA

Markings are of VF (A W)-3 Squadron

**NOTE:** Numbers indicate decal elements.  
Letters indicate colors.

See **APPLYING DECALS**  
on pg. 2.



### COLOR KEY

- Testor  
 A. #1145 White  
 B. #1146 Silver  
 C. #1180 Steel  
 D. #1149 Flat Black

### MODEL MASTER

- E. FS 16440 Gloss Gull Gray  
 F. FS 15402 Dark Sea Blue  
 (Decal Touchup)

