

HISTORY

The Douglas DC-3 is perhaps the most famous and successful aircraft of all time. From 1936 to 1940 the DC-3 became the principal U.S. airliner, flying over 90% of U.S. passenger miles in 1939. Later, during World War II and designated C-47, the aircraft flew in all theaters of war, with many nations. Though no longer considered a first rate transport, the airplane continues to serve in civilian and some military roles throughout the world.

The DC-3 revolutionized the airline industry. Larger than the Boeing Model 247, its competitor at the time, the DC-3 provided physical comfort for passengers never before realized. A number of the aircraft were fitted with sleeping accomodations on transcontinental flights. The craft was cost efficient, fares became within reach of the average person and the airlines became a major transportation form in the world.

Our model can be built as either an Eastern Air Lines DC-3 or an Air Force SC-47D of Air Rescue Service Detachment 6 from Hamilton Field, California in the 1948 time period. The Eastern Air Lines DC-3 depicted as our model now hangs in the Smithsonian Air and Space Museum in Washington, D.C.

SPECIFICATIONS

Wing Span Length Empty Weight Power Plants 95' 64' 6" 16,800 lbs.

2 Pratt & Whitney 14 cylinder twin row radials of

1,200 hp 2,000 miles

Maximum Range 2 Normal Range 1 Accommodations c

1,200 miles crew of 3 and up to 28

Cargo Load Cruise Speed passengers 7,500 lbs. 167 mph @ 10,000'

BEFORE STARTING

- 1. Study the illustrations and sequence of assembly before beginning.
- 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 any way. Study carefully all available reference material before beginning to ensure an authentic model.
- Due to the amount of parts in this kit, do not detach the parts from the runners (sprue) until you need them. This helps avoid confusion and lost parts.
- When cementing the parts together, check the way in which one part fits together with another. This ensures a neat job.
- Always remember, when working with plastic model cement and paint, make sure your work is well-ventilated. The fumes from plastic modeling products can be harmful if inhaled.

PREPARATION OF PARTS

- Never tear parts off the runners(sprue).
 Use a Testor Hobby Knife, nail clippers, or small wire cutters.
- 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 and Testor Hobby Sandpaper appropriate for model-building are available in most good hobby shops.
- If you desire, you may fill any seams (where parts go together) or imperfections with Testor Contour Putty for Plastic Models which is also available at good hobby shops.

Reference Sources

Aircraft in Profile, Vol. 4, #96 (Doubleday)

The Plane That Changed the World, D.J. Ingles (Aero Publications)

Fifty Glorious Years, Arthur Pearcy (Aeolus Publishing)

PAINTING

You can obtain an excellent finish on your model using Testor enamels. Detailed descriptions of type of paint and color 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 keep your brushes clean and soft by cleaning in Testor thinner, washing in soap and water, and storing flat or with bristles up when not in use.

Wash plastic parts before detaching them from the sprue. Warm water and liquid detergent remove the oils left form the manufacturing process. Let the parts dry and avoid excessive handling. Immediately before painting, wipe the parts with a "tac rag" (available at automotive centers) to remove dust and lint.

Most small parts are best painted while still attached to the sprue or they may be detached and held with tweezers or "magic" type transparent tape. Paint in one direction only. If your paint is the correct consistency, brush strokes will disappear as the color dries. If the paint seems too thick, thin it with Testor Paint Thinner. Wheels may be detached from the sprue and fit onto toothpicks or matchsticks for painting. Then just hold the paintbrush against the edge of the wheel and rotate the wheel to obtain a neat clean finish.

Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember cement will not stick to painted surfaces. Using your Testor Hobby Knife, carefully remove paint from all surfaces to be cemented. After you have assembled your model you may touch up areas where cement has marred the finish.

When your model is completed, apply a coat of Testor Glosscote #1261 to the entire model. This will give it an authentic, gloss finish and protect the surface of the model.

Note: Any parts not called out in Preliminary Painting should be painted in overall body color of either civilian (CIV) version — Chrome Silver — or military version (MIL). The Preliminary Painting paragraphs identify colors for either military or civilian when there is a difference in color. Otherwise a single color is called out for both.

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 00 brush, to the surfaces to be joined while holding the parts in place. Do **not** use large amounts of cement.

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

CABIN INTERIOR

Preliminary Painting

Pilot boots, control panel, 8, control wheels, 6: FS 37038 Flat Black

Pilot uniform, 4:

(CIV) FS 37038 Flat Black (MIL) FS 34087 Olive Drab

Face and hands, 4:

FS 36270 with some 1104 Red added to make a flesh.

Floor, 1, control columns, 5, 7, bulkheads, 9, 10, 11:

FS 36270 Neutral Gray

Seats, 2, 3:

FS 34102 Medium Green

Assembly

- Assemble fuselge bulkheads, 9, 10, 11, to cabin floor. Now cement seats, 2 and 3, to floor.
- Cement control wheels, 6, to control columns, 5 and 7. Now cement control columns to floor.
- Cement control panel, 8, to floor. Now cement pilot figures to seats.

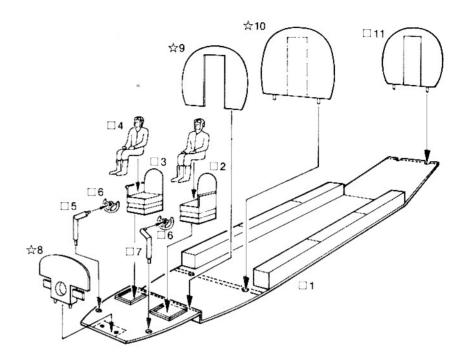




Photo: William T. Laridne

2 FUSELAGE

Preliminary Painting

Inside of fuselage, 12 and 22; inside of doors, 20, 20A, 21:

FS 36270 Neutral Gray

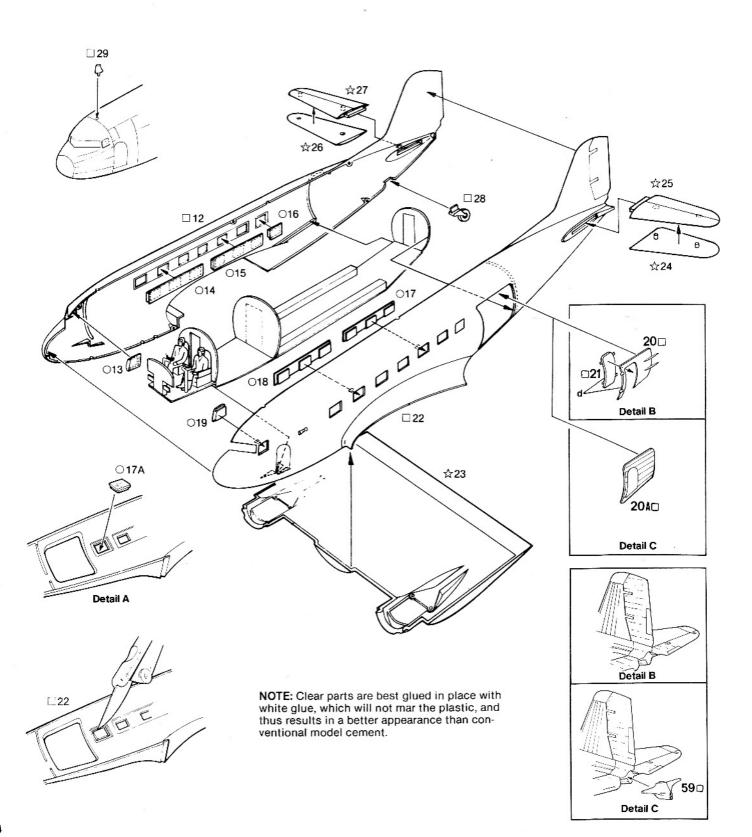
Tailwheel, 28:

fork; FS 17178 Chrome Silver tire; FS 37038 Flat Black

Assembly

- If building a civilian DC-3 (Eastern Air Lines) cut window opening in left fuselage half, 22, away as shown in Detail A.
- Cement windows into place, 13, 14, 15, 16, 17, 18, 19 as shown. Window 17A is used for Eastern Air Lines civilian version only.
- Cement inner cabin assembly to right fuselage half, 12. Now cement left fuselage half, 22, to right fuselage half, 12, being

- careful to guide interior into 22.
- Cement lower wing center section, 23, to fuselage. Cement left lower stabilizer, 24, to left upper stabilizer, 25. Now cement the stabilizer to the fuselage. Do the same with right stabilizer, 26, and 27.
- 5. Now cement tailwheel, 28 and 27.
- See Detail B and Detail C. If building a civilian DC-3 follow Detail C. If a military C-47 follow Detail B. Cement parts as shown.
- 7. Now cement antenna, 29, into place.



LANDING GEAR/WING PANELS

Preliminary Painting

Wheel hubs, landing gear struts: FS 17178 Chrome Silver Wheel well walls:

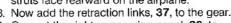
FS 36270 Neutral Gray

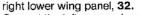
Tires:

FS 37038 Flat Black

Assembly

- 1. Cement wheel halves, 34 and 35, together. Make 2. Now snap tires/hubs into the main gear struts, 36. Be careful to not break the strut.
- 2. Cement the main strut units, 36, into the nacelles. Note the tangs on the back of the struts face rearward on the airplane.
- 3. Now add the retraction links, 37, to the gear. 4. Cement the right upper wing panel, 33, to



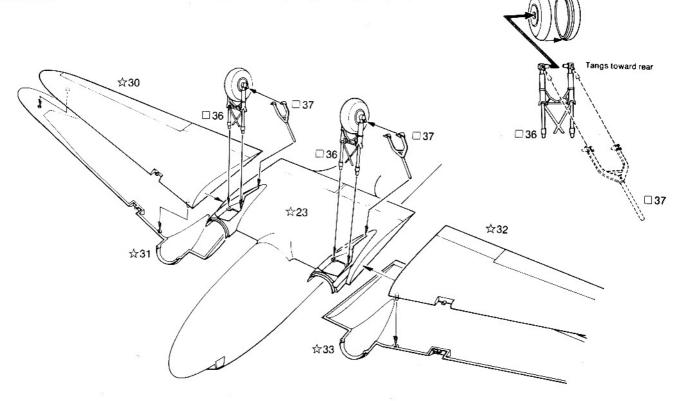


☆34

5. Cement the left upper wing panel, 31, to left lower wing panel, 30.

☆35

6. Now cement the left and right wing panels to the fuselage and center section as shown.



ENGINE NACELLES

Preliminary Painting

Propellers, 38; inside of cowlings, 42, 43, 45, 47; exhaust stacks, 46;

FS 17178 Chrome Silver

Engine crankcase:

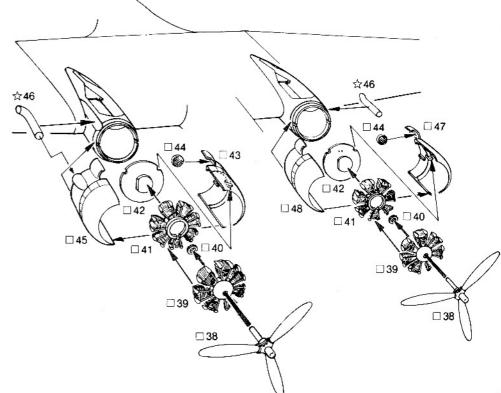
FS 36270 Neutral Gray

Engine cylinders, 39, and 41; oil cooler inlet, 44:

F\$ 37038 Flat Black

Assembly

- 1. Slip propeller shaft, 38, through front engine row, 39. Now cement propeller retainer, 40, to shaft. Do this twice. Cement rear row of engine, 41, to front row, 39.
- 2. Cement firewall, 42, wing/nacelle unit.
- 3. Cement oil cooler inlets, 44, to cowling halves. 43. and 47.
- 4. Cement engine units 41/39 to firewalls, 42.
- 5. Now cement engine cowling halves, 43 and 45, and 47 and 48, to wing/nacelle unit as
- 6. Cement exhaust stacks, 46, to nacelles as shown.



5 FINAL DETAILS

Preliminary Painting

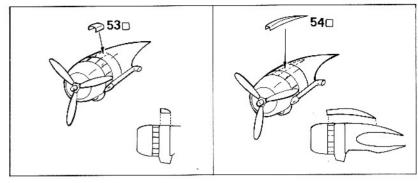
ADF loop antenna, **62: FS 37038 Flat Black**Tail fairing navigation lights, **59:**

FS 33538 Insignia Yellow Landing light background on wing, 50, and 51:

FS 17178 Chrome Silver

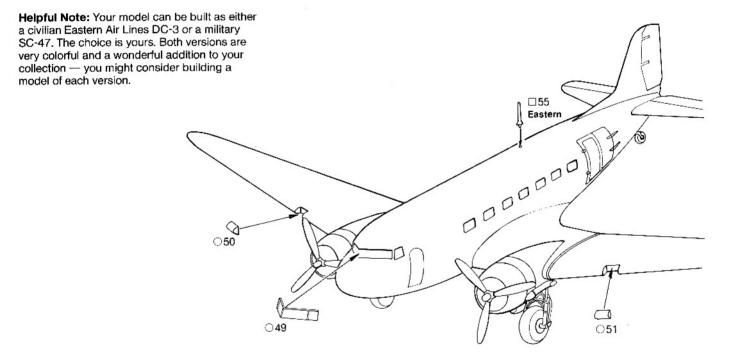
Assembly

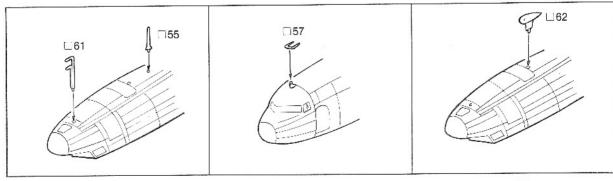
- If building the Eastern DC-3 cement carburetor airscoop, 53, to each of the cowlings as shown in **Detail D**. If building the C-47 military airplane use airscoop, 54, as shown in **Detail E**.
- Add pitot tubes, 61. Antenna, 55 is used on C-47 belly but not on DC-3. See Detail F.
- 3. Add glide slope antenna, 57. See Detail G.
- Add ADF loop antenna, 62, for C-47. See Detail H.
- 5. Add antenna, 5, to fuselage top of DC-3.
- 6. Cement landing lights, 50, and 51, to wings.
- 7. Cement windscreen, 49, into place.



Detail D

Detail E





Detail F

Detail G

Detail H

FINISHING NOTES (Eastern)

Overall color is natural metal which can be duplicated with #1146 Silver bottle paint or #1246 Silver spray. The leading edges of the wings and tail surfaces have #1149 Flat Black de-icer boots. Decals should be positioned as shown in drawings and photos on box. For the nose cone decal the modeler will have to mark off the Dark Blue area and paint it in before applying the red and white border decal. The Dark Blue color can be matched by using Testor Model Master paint #1717 Dark Sea Blue FS 15042. The white Eastern Air Lines decal should be applied directly to the Blue area (see box photos). For ease of assembly, the passenger windows have been printed in clear over the fuselage stripe. The experienced modeler may want to cut these out with a sharp hobby knife after the stripes are in position.

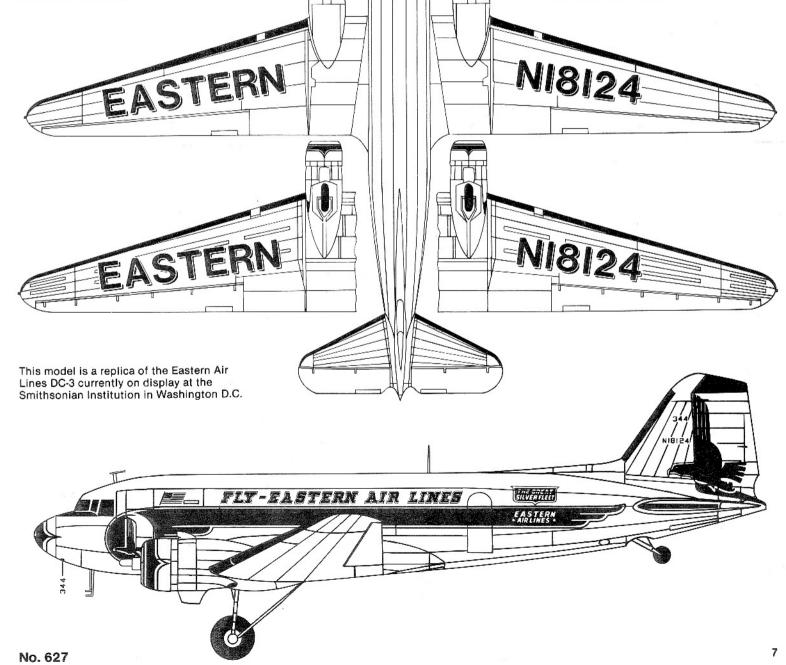
DC-3 Eastern Air Lines

APPLYING DECALS

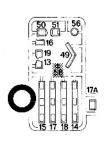
- After carefully masking canopy and other clear areas, spray entire model with Testor Glosscote #1261. Decals adhere best to a smooth surface and the shinier the finish, the smoother it is. Allow the Glosscote to dry thoroughly before going further.
- Select the decals you plan to use, and cut each of them out from the decal sheet with small scissors or Testor Hobby Knife.
- Working with only one decal at a time, dip the decal in clear water for no more than five seconds, then remove it from

decal

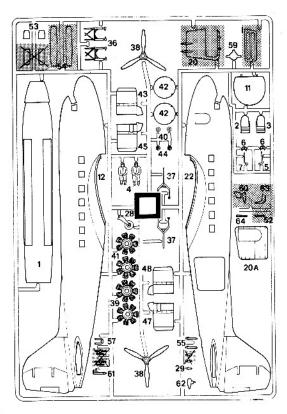
- the water and place on a dry paper towel for about one minute.
- 4. When the decal slides easily on the backing paper, slide it to the edge of the paper and onto the surface of the model with a soft paintbrush or tweezers. Remember: the decals are very thin and can be easily ripped if care is not taken. Work slowly and patiently.
- 5. Once the decal is in the desired position, apply a small amount of Testor Decal Set #8804. This will help the decal to conform to any irregularities in the surface of the model (rivets, curves, etc.). Allow the decal to dry undisturbed. Should you find the decal has moved or should you desire to purposely move it, apply a little Decal Set to a soft brush and push the decal slowly into the desired position.
- 6. When the decals are completely dry (usually overnight), apply a coat of Testor Dullcote #1260 to the entire model. This will give it an authentic, dull finish and protect the surface of the model. Then carefully remove masking from canopy and other clear areas.



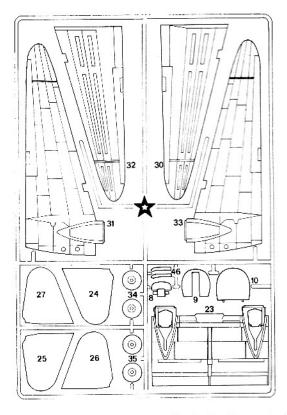
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