

## SECTION V FINISH SPECIFICATIONS



### 1. GENERAL

a. The airplanes to which this handbook is applicable were finished in accordance with high grade commercial practice using high grade commercial finishes. The following finishing schemes are specified for the airplanes.

b. The markings for the airplanes and parts are to be in accordance with Specification 98-24105.

### 2. METAL SURFACE FINISHING

a. Cleaning prior to application of protective coating.

Metal surfaces which are to receive a protective coating of paint are to be cleaned prior to application of coating in accordance with Specification 98-20007. In general, steel parts, with the exception of corrosion resistant parts, are to be cleaned by sand-blasting, wire brushing, use of plater's cleaner, suitable solvent or pickling. Aluminum and aluminum alloy may be cleaned by suitable solvents, a sulfuric acid solution specifically designated for cleaning aluminum or approved commercial type cleaning compound.

#### b. PRIMER

First coat (primer) for all metal surfaces, except those parts cadmium plated, chromium plated and fluid lines and conduits, consists of one spray or one dip coat of a yellow green primer mixture of the following proportions:

#### YELLOW-GREEN PRIMER

5 gallons of zinc chromate primer tinted yellow-green, conforming to Specifications AN-TT-P-656 (Martin-Senour No. E4965 or equivalent).

10 gallons of Toluol thinner or Toluol substitute (Martin-Senour No. 23M039 or equivalent).

4 ounces of aluminum pigment powder. Federal Specification TT-A-468 (for each 5 gallons of primer).

The above should be mixed not longer than 24 hours before using.

#### c. FINISH COAT FOR METAL

An additional coat of the "primer" specified above is applied to all parts subjected to wear and exposure for additional corrosion protection.

### 3. WOOD SURFACE FINISHING

Finish for all wood surfaces consists of two coats of Martin-Senour Sealer No. 31M060-V-13864 mixed four parts of sealer to one part thinner No. 04M039. (Varnish, specification TT-V-121, may be used; however, it is not a direct substitute for the above sealer.)

### CAUTION

Remove varnish or sealer before attempting to glue wood surfaces which have been finished with sealer or varnish. Sanding or scraping surface of the wood will be sufficient.

### 4. FABRIC FINISH

#### a. GENERAL

Several different finishing schemes and several different color combinations have been used.

b. Aluminum Color (Berry Bros. Scheme). Two brush coats of clear dope—thinned 10%. Two cross-spray coats of clear dope—thinned 20%.

One cross spray coat of aluminized dope\*—thinned 40%.

\*Aluminized dope to consist of 4 ounces of No. 1-c-14-Y-408-2772 extra fine aluminum powder (or 5 ounces of AN-TT-A-461 aluminum paste) per gallon

of clear dope specification AN-TT-D-551 thoroughly mixed.

Remove nap by light scuffing with sandpaper before each coat after the third coat. Thin the first brush coat up to 10% with thinner.

c. Yellow Color (Berry Bros. Scheme). Three brush coats of clear dope. Three spray coats of clear dope. Two cross-spray coats of yellow dope\*.

\*R.C.A.F. yellow specification 231T26.

#### d. CAMOUFLAGE COLOR

##### (1) BERRY BROS. SCHEME

Two brush coats of clear dope (thin first coat up to 10%).

Three spray coats of clear dope.

Two spray coats of camouflage dope using 35 to 50% thinner.

All exposed fabric surfaces shall be dark olive drab, shade No. 41 except bottom surfaces which are neutral gray, No. 43 shade.

##### (2) TITANINE SCHEME

*First Coat.*—One coat brush and hand-rubbed clear dope Titanine No. 3180. Thinner Titanine No. 3094 not to exceed 5%.

*Second Coat.*—One brush coat clear dope Titanine No. 3180 thinned 10 to 15% with thinner No. 3094.

*Third Coat.*—One spray coat clear dope Titanine No. 3180 thinned 20 to 30% with No. 3094 thinner.

*Fourth Coat.*—One spray coat of clear dope. Titanine No. 3180 thinned 20 to 30% with thinner. Remove nap by lightly sanding.

*Fifth Coat.*—One spray coat of clear dope—Titanine No. 3180 thinned 20 to 30% with thinner. Remove nap by lightly sanding.

*Sixth Coat.*—One spray coat of camouflage dope Titanine No. 3541 for dark olive drab and Titanine No. 3543 for neutral gray each thinned with 40% Titanine No. 3094 and 10% retarder Titanine No. 963N. No masking to be employed between the two camouflage colors.

*Seventh Coat.*—One spray coat of camouflage dope Titanine No. 3541 (olive drab) and Titanine No. 3543 (neutral gray) each thinned with 40% Titanine thinner No. 3094 and 10% retarder Titanine No. 963N. No masking is to be employed between the two camouflage colors.

Caution: Do not mix different "makes" of paint.

### NOTE

Dope and thinner must be at room temperature before application. (Minimum temperature 75° F.)

## 5. MISCELLANEOUS PAINT FINISH

Carburetor cold air scoop, engine cowl mounting ring and baffles are finished with black baked enamel consisting of three parts of Martin-Senour No. E4945 Black Baking Enamel and one part Martin-Senour No. x3150 thinner. Painted parts are "baked" by means of heat lamps until thoroughly dry.

## 6. PLATED SURFACES

### a. CHROMIUM PLATING

The following parts are hard chrome plated:

Landing Gear Strut Inner Cylinder

Tail Wheel Strut Cylinder

Tail Wheel Locking Pin

Control Wheel Push-Pull Tube

Control Wheel Rollers

Cabin Door Latch Plate

The above parts are to be kept clean and bright.

### b. CADMIUM PLATING

Replating of cadmium plated parts is not recommended; however, if re-cadmium plating is done the parts must be cleaned thoroughly after plating and then heat-treated in an air furnace for one hour at 375° to relieve hydrogen embrittlement. See specification AN-P-39.

## 7. OTHER

Firewalls and exhaust stacks are not painted.