

## REPUBLIC AVIATION CORPORATION FARMINGDALE, LONG ISLAND, NEW YORK SERVICE DEPARTMENT

May 19, 1950

MANDATORY CHANGE

SERVICE BULLETIN NO. 25

## **INSPECTION FOR CORROSION**

Examinations made during several recent relicensing inspections have disclosed unusually severe corrosion at the right and left STRUT FITTINGS AT HULL STATION 103.625 by means of which the cabin, the cabin floor, the hull and the lift struts are connected. These particular fittings are covered by the Lower Wing Lift Strut Fairings and their condition may be overlooked during regular periodic inspections.

Owing to the extreme importance of these parts with reference to the safety of the airplane in flight, an immediate and thorough examination and test with a pointed instrument of the fittings should be made for evidence of surface or interior corrosion. If slight surface corrosion is found which has not, in the opinion of an accredited inspector, affected its strength the instructions noted below may be followed. If the corrosion has progressed to the extent of making it unsafe, the airplane should be grounded until new fittings (Part No. 17F11013-L or R) are procured.

While the above and subsequent recommended inspections every 25 hours are being made, it would be advisable to make a special check of the entire airplane and its accessories for corrosion; particularly those hidden parts which are normally examined only during 100 Hour and Annual Inspections.

## DIRECTIONS FOR TREATMENT OF CORRODED SURFACES

After removing the paint, primers, etc., wash corroded area thoroughly with clean, fresh water after which remove all products of corrosion (metal flakes, shavings, powder and salt crystals) from the area with a stiff bristle scrub brush, light brushing with steel brushes or light sanding (avoid use of steel wool). Wash with a solution of 7 oz. Of Sodium Dichromate with 1 qt. Of warm water which will neutralize the corrosion. (Standard commercial quality Sodium Dichromate retails at approximately 10 cents per pound). Allow the solution to dry on the surface after which excess chromate crystals must be brushed off.

CAUTION: Handle solution with care and if spilled on body wash off with water.

Finish with one coat of zinc chromate primer, and two coats of aluminized lacquer in the proportion of 1<sup>1</sup>/<sub>2</sub> oz. of aluminum paste pigment to 1 pint of clear lacquer.

NOTE: The Sodium Dichromate solution will cause a stain when it comes in contact with any visible surface. However, in the event such contact does inadvertently occur the parts can be repainted without adverse effect.

W. H. Ehmann Service Manager

If you have sold your airplane, please forward this Bulletin to the present owner.