

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

October 28, 1946

DISTRIBUTORS BULLETIN No. 12

CHECK YOUR ELEVATOR TRIM TABS

A recent failure of a trim tab flexible shaft caused one of the tabs on an elevator to become disconnected. This was discovered when a slight flutter occurred at certain air speeds in excess of 100 mph. Inspection of the trim tab system disclosed that on several earlier airplanes maintained at the factory, the sweat-soldered joint between the tab flexible shaft and the gear box, located in the stabilizer, had failed. It is recommended that the trim tab flexible joints be inspected visually and, if so desired, be given the check outlined below. In any case, if such a flutter is experienced, the trim tabs should immediately be checked. The following check has already been performed on all airplanes delivered since Sept. 27th.

- 1. Turn the elevator tabs to their most downward position.
- 2. Remove the cotter and clevis pin from the tab horn on one elevator only.
- 3. Remove clevis rod end and insert \(\frac{1}{4} 20 \) hexhead bolt into threaded tube.
- 4. With a pair of pliers, grasp the rod in the stabilizer immediately inboard of the gear box. Apply a clockwise load of 26 inch-lbs. to the hex-head bolt by use of a standard torque wrench, making certain that none of the load is transmitted into the trim tab control system beyond the pliers.
- 5. If test is satisfactory, remove bolt, insert clevis rod end to same position as when removed, re-insert clevis pin and safety with a cotter pin.
- 6. Repeat operation on other elevator.
- 7. If failure occurs, advise the Service Department by wire or telephone.

W. H. Ehmann Service Manager