



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

January 28, 1947

No. 13

SUBJECT – HARTZELL HYDRO-SELECTIVE PROPELLER

The following information was received from the Hartzell Propeller Co. and is being distributed for the information of all concerned.

Subject: Replacement of rivets in the blade tipping.

1. Rivets, which break off or come out of the tipping should be replaced immediately. This can be done in the field. All rivets, whether they be 3/32 or 1/8 diameter brass or copper should be replaced with 1/8 annealed copper, having a 7/32 diameter flat head.
2. If a 1/8 inch rivet is to be replaced, remove the broken rivet by:
 - a) Drill 1/8" into head using 1/16" drill
 - b) Cut out head with 1/4" countersink (82°)
 - c) Punch out old rivet with 1/8" punch

Prepare hole for new rivet by re-dimpling metal tipping with dimpling punch (80° included angle). Insert rivet from flat side of blade. Cut rivet off leaving 3/16" to 1/4" extending beyond metal. Head rivet with bucking iron and hammer. Use very light tapping strokes.

3. If a 3/32 rivet is to be replaced the procedure is identical to the above except the rivet hole must be drilled out to 1/8" diameter. Re-dimple the metal and insert the rivet as noted above.
4. The rivet heads should be filed or sanded off smooth.
5. Soldering is optional. If the rivet head is well formed and filed off there is no reason to solder, as it would all be filed off anyway.
6. If rivets cannot be obtained locally, please write Hartzell Propeller Co. for a supply. (Biqua, Ohio)

Note: "Hartzite" blade material is a special plastic composition through and through. If the varnish finish is worn off or if stones nick the surface the blade need not be refinished immediately as water will not affect the material.