

# PITTS AVIATION ENTERPRISES, Inc.

P.O. BOX 548 • HOMESTEAD, FLORIDA 33030

May 13, 1974

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## SERVICE BULLETIN NO. 8

**APPLICABILITY:** This service bulletin applies to Pitts Model S-1S airplanes from Serial No. 1-0001 through 1-0025. Serial No. 1-0026 and up will be modified at the factory, as will replacement wings S/N K013 & up.

**PURPOSE:** To inspect the upper wing leading edge for failed leading edge ribs and if failed leading edge ribs are found, to repair them acceptably. Compliance with this service bulletin is mandatory.

**DISCUSSION:** Failed leading edge ribs have been noted in the upper wings of airplanes which have been repeatedly flown to or beyond the limits of the design speed-acceleration envelope.

### ACCOMPLISH THE FOLLOWING:

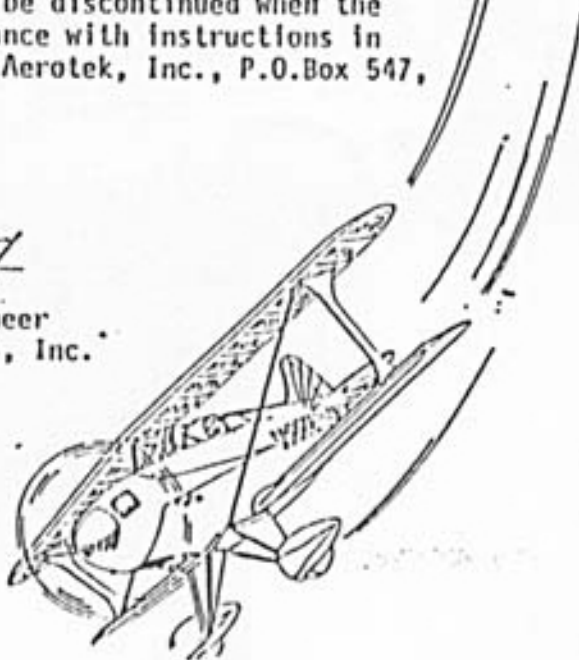
1. Inspect each upper wing leading edge rib for damage as follows: (Note that it is not necessary to uncover the wing for this inspection.) At each upper wing leading edge rib station, try to move the aluminum leading edge up and down, and at the same time, try to squeeze the leading edge closed with your fingers. If relative motion or sponginess is felt underneath the aluminum leading edge at any rib, then the wing must be removed from the airplane, uncovered, and the leading edge skin removed to allow repair of the broken rib or ribs. (Note: FAA approved instructions for wing and aileron installation and rigging are contained in pages 57 through 70 of Pitts Aviation Enterprises Assembly Manual No. 5.)
2. If the above inspection shows no damaged leading edge ribs, it is only necessary that you repeat the same simple inspection at least every 50 flight hours.
3. If damage to leading edge ribs is noted, then the damage must be repaired as shown on page 2 & 3 of this bulletin.

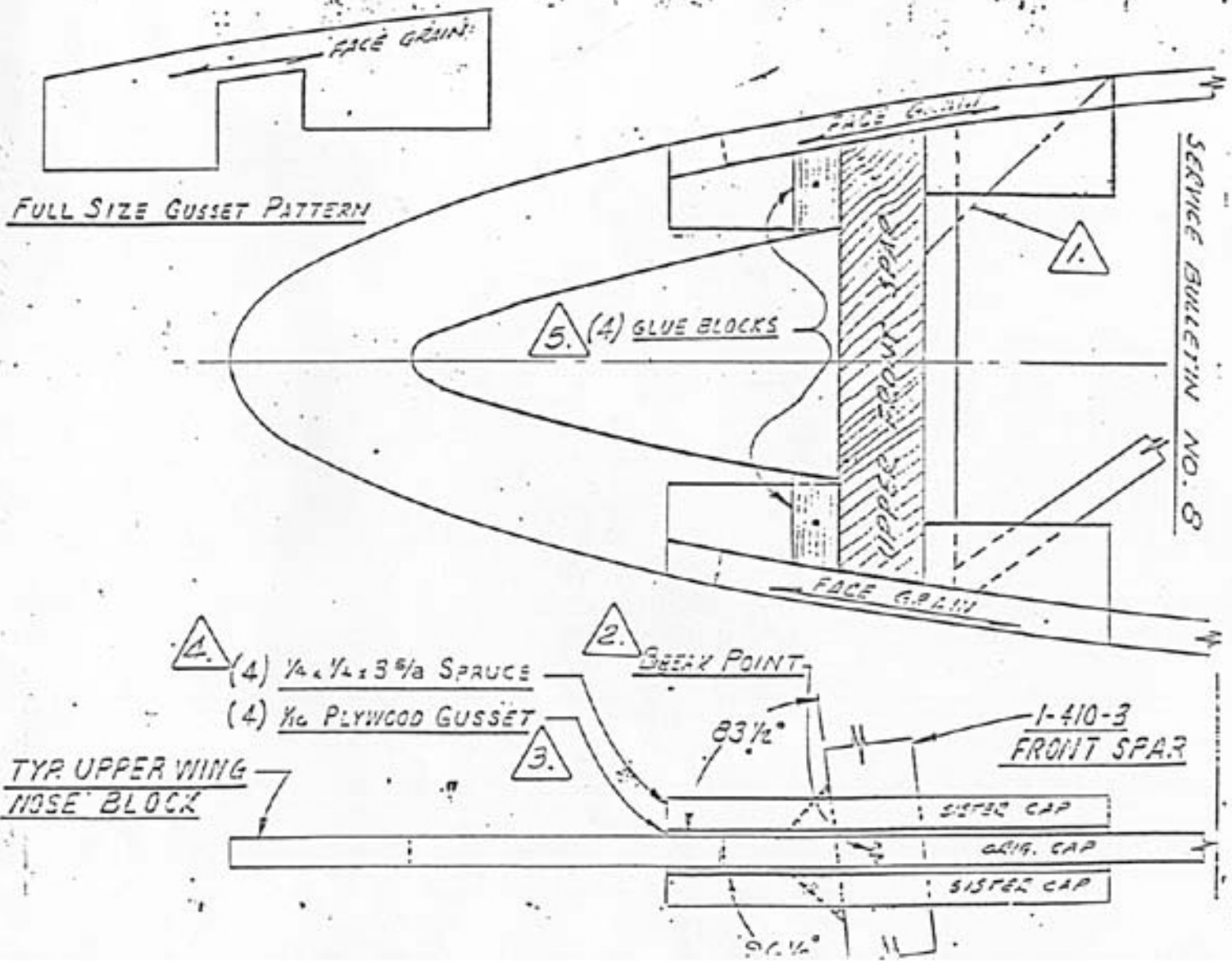
**NOTE:** The repetitive inspection of (2.) above may be discontinued when the 1-437-54 & -55 glue blocks are installed in accordance with instructions in Pitts-Leading Edge Rib Retrofit Kit available from Aerotek, Inc., P.O. Box 547, Afton, Wyoming 83110.

This service bulletin is FM approved.

*E. F. Dearing*

E. F. Dearing, Chief Engineer  
Pitts Aviation Enterprises, Inc.





PITTS AVIATION ENTERPRISES, INC.SERVICE BULLETIN NO. 8NOTES: (Ref. sketch page 2 of 3)

1. Remove existing plywood gussets, eight places each rib. (See note 6.)
2. Do not "clean up" fracture - push fibers back together and glue. Glue to be Weldwood Plastic Resin Glue. Manufacturer's instructions for use must be followed. All varnish must be removed from surfaces to be glued.
3. Mahogany/poplar/mahogany plywood per MIL-P-6070, or MIL-P-18066.
4. Spruce to be aircraft quality per MIL-S-6073.
5. Four per rib. Note bevel angles shown in lower view. Each glue block to be secured while glue dries by one 18 gage cement-coated aircraft nail, 3/4" long. Make from spruce per note 4 above. Glue faces, on rib and spar, to be 3/8" minimum width.
6. At root ribs, make repair on outboard side of ribs only. On compression ribs, 1/16" plywood filler is required to fill gap across spar between original gussets. Do not remove gussets on compression ribs - add four large repair gussets, (Shown full size, sheet 2 of 3), on top of existing gussets. Else as shown.