



# SERVICE LETTER

No. 787

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

December 1, 1976

S/M

Subject:

Aileron Spar Inspection and Reinforcement

Models Affected:

PA-24, PA-24-250 and  
PA-24-260 Comanche  
PA-24-400 Comanche  
PA-30 Twin Comanche  
PA-39 Twin Comanche

Serial Numbers Affected:

24-1 to 24-5047 Inclusive\*  
26-2 to 26-148 Inclusive\*  
30-2 to 30-2000 Inclusive\*  
39-1 to 39-155 Inclusive\*

\* Aircraft within this group that have previously installed Piper Kit No. 760 914, Aileron Outboard Hinge Bracket Replacement, are not affected by this service release.

Compliance Time:

At owner/operators discretion, recommended at the next regularly scheduled inspection interval (100 hours or annual), and at each successive 100 hours of operation until kit 760 914, Aileron Outboard Hinge Bracket Replacement, is installed.

Purpose:

We have received a few field reports describing the existence of cracks in the aileron spar assembly radiating from the outboard hinge attachment point. This condition was discovered during compliance with F.A.A. AD 74-10-03, concerning the aileron nose bulkheads (PA-30 models only) and affected aircraft with relatively high operating time in service. Aileron spar cracks are obvious cause for spar replacement.

This service release recommends a repetitive aileron spar inspection program - to detect possible cracking at the outboard hinge attachment point, and announces the availability of a field installation kit containing material and instructions to reinforce the aileron spar in the outboard hinge attachment area to resist the above described cracks and provide maximum aileron spar service life.

Instructions:

A. Inspection:

1. Remove ailerons and expose aileron spar (outboard segment) to view.
2. Visually inspect (with minimum 5X magnification) spar surface adjacent to outboard hinge bracket (clean area to distinguish between paint and structural cracks).

Instructions: (A Inspection continued)

3. If the above described cracks are evident, the aileron spar must be replaced.
4. If no cracks appear (as described above), either:
  - a. Return aircraft to service, making appropriate log book entry, and repeat inspection at next specified interval (see Compliance Time), or
  - b. Install kit 760 914, Aileron Outboard Hinge Bracket Replacement on each aileron (installation of this kit obviates the need for repetitive inspections).

B. Installation:

Kit 760 914 Aileron Outboard Hinge Bracket Replacement instructions contained in kit.

Material Required:

One (1) each per Aileron (i.e., two each per aircraft) Piper Kit No. 760 914, Aileron Outboard Hinge Bracket Replacement @ suggested unit list price \$13.05A.

Availability of Parts:

Your Piper Field Service Facility.

Effectivity Date:

This service letter is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for the inspection procedure and/or the product refinement installation described herein. This program is designed to insure the structural integrity of the aileron spar assembly in the area of the outboard hinge bracket.