



SERVICE LETTER

No. 696

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

May 2, 1974

Subject: Control Surface Balancing Recommendation

Models Affected:
 PA-23-250 (Six Place) and
 PA-E23-250 (Six Place) Aztec
 PA-24-180, PA-24-250 and
 PA-24-260 Comanche
 PA-30 Twin Comanche
 PA-31 and PA-31-300 Navajo
 PA-31-350 Navajo Chieftain
 PA-31P Navajo
 PA-39 Twin Comanche C/R

Serial Numbers Affected:
 27-1 to 27-7305144 incl. and 27-7305147
 24-1 to 24-5047 incl.
 30-1 to 30-2000 incl.
 31-2 to 31-7300960 incl. and 31-7300962
 31-5001 to 31-7305071 incl., 31-7305073 and 31-7305076
 31P-1 to 31P-7300145 incl., 31P-7300147 to 31P-7300152 incl.,
 31P-7300154
 39-1 to 39-155 incl.

Compliance Time: Recommended at the next regularly scheduled inspection interval.

Purpose: The movable control surfaces of the above referenced models (ailerons, elevators, rudders and stabilators -- as installed on the affected models referenced above) are statically balanced at time of factory installation and normally do not require rebalancing unless the (control) surfaces have been repaired and/or repainted. Proper control surface balance is of extreme importance to the aerodynamic integrity of the aircraft.

The main objective of this service release is to inform owners and operators of the above referenced aircraft of the necessity of maintaining the movable control surfaces in proper balance within the specifications set forth in the applicable Piper service manual. It is therefore recommended that appropriate control surfaces listed below be checked to insure proper balance within service manual specifications -- particularly if any of the affected control surfaces have been repaired and/or repainted since original factory installation.

| <u>Aircraft Model</u> | <u>*Applicable Control Surface</u> | <u>**Service Manual Part Number</u> | <u>Section</u> |
|-----------------------|------------------------------------|-------------------------------------|----------------|
| PA-23-250 (6 pl.) | S, R | 753 522 | IV. Structures |
| PA-24 Series | S, R | 752 464 | IV. Structures |
| PA-30 Series | S, R | 753 646 | IV. Structures |

(over)

| <u>Aircraft Model</u> | <u>*Applicable Control Surface</u> | <u>**Service Manual Part Number</u> | <u>Section</u> |
|-----------------------|------------------------------------|-------------------------------------|----------------|
| PA-31, 31-300 | A, E, R | 753 703 | IV. Structures |
| PA-31-350 | A, E, R | 761 487 | IV. Structures |
| PA-31P | A, E, R | 753 769 | IV. Structures |
| PA-39 | S, R | 753 646 | IV. Structures |

* S-Stabilator; R-Rudder; A-Aileron; E-Elevator

**Be sure referenced Service Manuals are current

Instructions:

1. Employ applicable control surface balance check and rebalancing procedures specified in applicable Piper service manual listed above.
2. If any of the above specified control surfaces cannot be balanced within specifications, replacement of the affected control surface component (refer to appropriate Piper model parts catalog for proper component nomenclature, part number, etc.) will be necessary.
3. Subsequent to completion of any installations (if required) and adjustments, and before any flight tests, check that all controls are connected and properly rigged, all turn buckles, bolts, etc. have been safetied, and all panels and plates secured.

Material Required:

Reference appropriate Piper model parts catalog for proper component nomenclature, part number, etc. if replacement of any of the above referenced control surfaces is required per Instructions No. 2, above.

Availability of Parts:

Your Piper Field Service Facility.

Effectivity Date:

This Service Letter is effective May 17, 1974.

Summary:

It is recommended that owners and operators of the above referenced aircraft contact their Piper Field Service Facility to make arrangements for applicable control surface balance check and rebalancing or replacement -- as necessitated by the provisions of this service release.