



SERVICE BULLETIN

No. 443

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

"FAA DOA EA-1 Approved"

April 4, 1975

Subject:

Inspection of Main Fuel Cell Fitting

Models Affected:

PA-31 and PA-31-300

Serial Numbers Affected:

31-2 to 31-7300923 incl., 31-7300925, 31-7300927, 31-7300929 and 31-7300931. (See NOTE, in Purpose section, below)

Compliance Time:

Within the next 50 hours of operation.

Purpose:

The main fuel cells (Piper part number 40518-00 left and 40518-01 right) for the above referenced aircraft were originally designed and manufactured to include provisions for an item which was never used in production configuration aircraft. This item was a fitting ("nipple") which appeared on the initial fuel cell production quota, and was sealed during manufacture. Since that time, the subject fuel cells have been modified by the manufacturer to exclude the above referenced fitting.

A recent report was received describing a situation occurring on an early model, high-time Navajo whereby this fitting cracked at the base and permitted fuel leakage into the wing cavity. This service release provides instructions to inspect the fuel cells in the above referenced aircraft for presence of the above described fitting and to take corrective measures, if necessary (see Instructions, below.)

NOTE: Although factory records indicate that Navajo, serial numbers 31-250 and up had current type fuel cells installed in production, there is a possibility that one or more of the suspect fuel cell assemblies may have been provided through Customer Service Sales as a field replacement. Therefore, the aircraft serial numbers specified in Serial Numbers Affected, above encompass all Navajos that have a Piper part number 40518-00 (left) and 40518-01 (right) style fuel cells installed.

Instructions:

1. Refer to attached sketch/instruction sheet to locate the area of concern.
2. Gain access to the fuel cell area in which the above referenced fitting is located - if installed.

(over)

Instructions: (Continued)

3. Using a flashlight and mirror, check the fuel cells for the presence of the above referenced fitting ("nipple").
4. If the nipple exists, check for indications of fuel leakage at the nipple;
 - a. If no leakage is apparent, install Piper Kit no. 760-929, Fuel Cell Nipple Support. Subsequent to this modification, make appropriate log entry and return aircraft to service.
 - b. If leakage is apparent, replace appropriate fuel cell (ref. Material Required, number 2 below). Make appropriate log book entry and return aircraft to service.
5. If the fuel cell (s) does (do) not contain the subject fitting, no further action is required. Replace inspection plates, etc., make log book entry and return aircraft to service.

Material Required:

1. Reference Instructions number 4 a above; one (1) each per fuel cell Piper kit no. 760-929, Fuel Cell Nipple Support.
2. Reference Instructions number 4 b above; one (1) each per aircraft Piper part number 40518-00, Main Fuel Cell Assembly (left) and/or one (1) each per aircraft Piper part number 40518-01, Main Fuel Cell Assembly (right).

Availability of Parts:

Your Piper Field Service Facility.

Effectivity Date:

This service release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with the provisions of this service release in accordance with Compliance Time, above. Modification material specified in Instructions number 4 a above, and one (1) hour labor per cell (for installation of kit 760-929) will be provided free of charge through your Piper Field Service Facility.

