

Department of Transportation Federal Aviation Administration

# Supplemental Type Certificate

*Number* SA01956SE

*This certificate, issued to*

**Joel A. Marketello**  
**16818 160<sup>th</sup> Ct. SE**  
**Renton, WA 98058**

*certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 4a of the Civil Air Regulations.*

*Original Product—Type Certificate Number:* A-725  
*Make:* Piper  
*Model:* J5A, Serial Number 5-397 Only

*Description of the Type Design Change:* Installation of the following: PA-12 Electrical Panel P/N 10177-00, Left and Right PA-20/22 Stabilizers P/N 12647-000, Left and Right PA-20/22 Elevators P/N 12649-000, Left PA-12 Wing Assembly P/N 14766-02, Right PA-12 Wing Assembly P/N 14766-01, Left and Right Front Wing Lift Struts P/N U85552-002, Left and Right Rear Wing Lift Struts P/N U85553-002, Wag Aero Left Main Fuel Tank P/N E451-002, Wag Aero Right Main Fuel Tank P/N E451-001, Header Tank P/N 3169-1, Fuel Firewall Shutoff Valve P/N 05-00848, Left and Right Fuel Valves P/N 701-4F4F-4, Left and Right Fuel Caps P/N 60750-002, Left Butt Rib P/N U1235-00, Right Butt Rib P/N U1235-01, Left and Right Fuel Gauges P/N M311-000, and Cleveland Wheel and Brake Kit No. 199-71.

*Limitations and Conditions:* This modification is contingent upon installation of STC SA495AL. Compatibility of this design with other subsequent modifications must be determined by the installer. A copy of this certificate and the FAA-approved Airplane Supplemental Flight Manual (ASFM) must be maintained as part of the permanent records for the modified aircraft. There are no changes to the continued airworthiness instructions associated with this modification.

Note: The holder cannot use the descriptive data about this design to duplicate other products. This approval is limited to only the installation made in Piper, Model J5A, serial number 5-397. This STC does not permit manufacturing of parts for multiple installations.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* June 13, 2008

*Date reissued:*

*Date of issuance:* January 9, 2009

*Date amended:*



*By direction of the Administrator*

*Jeffrey E. Deme*  
 \_\_\_\_\_  
 (Signature)

Manager, Seattle Aircraft Certification Office  
 \_\_\_\_\_  
 (Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

Joel Marketello  
16818 160th Ct. SE  
Renton, WA 98058

FAA-APPROVED  
SUPPLEMENTAL AIRPLANE FLIGHT MANUAL  
FOR FUEL SYSTEM MODIFICATIONS ON  
Piper J5A  
N397PA  
Serial #5-397

GENERAL

The purpose of this manual is to acquaint the pilot with the operation of the modification that adds a left wing fuel tank to the original fuel system utilizing one right wing fuel tank. On the left sidewall of the cockpit forward of the front seat the original Piper J5A fuel shutoff valve push-pull knob is located. It is placarded pull to shut off and push to turn on, and it must be on for all operations. It is in the "off" position only when the engine is not running and isolates fuel from the firewall forward. Ahead of the fuel shutoff valve control knob on the left sidewall of the cockpit are two shutoff valves, one for each main tank. Each shutoff valve has a lever and is placarded to indicate on and off positions and capacity of each tank (18 gallons). Each lever can only be turned on and off; no other positions are possible. The aircraft may be flown with either left or right main fuel tank valve on. If both valves are on fuel is used from both tanks simultaneously. The left main fuel tank is placarded at the filler neck, "Fuel right tank first" to prevent fuel transfer from one tank to the other during fueling.

LIMITATIONS

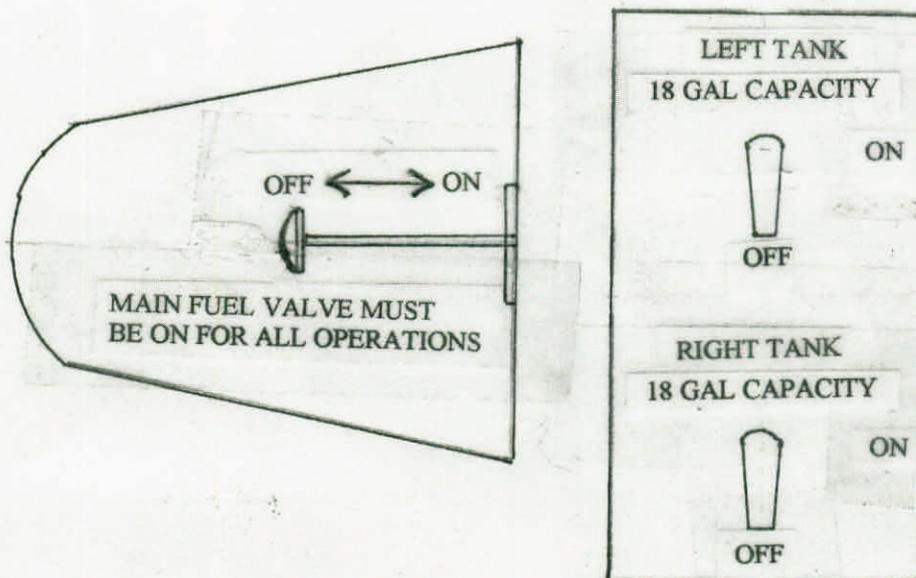
Main fuel tanks 36 gallons capacity  
Main fuel shutoff valve must be on for all operations

FAA Approved EPK/L  
FOR Manager, Seattle Aircraft Certification Office  
Federal Aviation Administration  
1601 Lind Ave SW  
Renton, WA 98055

Date 1-9-09

PLACARDS

Cockpit Left Sidewall



**EMERGENCY PROCEDURES**

In case of engine fire place main fuel shutoff valve in off position

**CAUTIONS**

At least one of either left or right wing tank valves must be on for all operations. The aircraft may be flown with both left and right wing fuel tank valves on. If both valves are on fuel is used from both tanks simultaneously. Fuel shutoff valve must be on for all operations.

**PROCEDURES**

If fuel imbalance exists after flight, position fuel shutoff valve to the off position and leave both wing tank valves in the on position. Over time fuel will transfer from the higher quantity wing tank to the lower quantity wing tank, balancing fuel load.

**PERFORMANCE**

No change

#### WEIGHT AND BALANCE

Changes to weight and balance are incorporated in the latest Aircraft Weight and Balance Revision. Left wing fuel tank distance from datum is same as right wing fuel tank (+23 inches).

#### SYSTEM DESCRIPTION

Originally the Piper J5A was equipped with a single 18 gallon right wing fuel tank. This STC adds an 18 gallon left wing fuel tank.

#### HANDLING, SERVICING, and MAINTENANCE

Both wing fuel tanks are sumped from the wing lower surface roots aft of the fuel gauges. Fuel gascolator is sumped by opening left engine side cowl for access. All inspection and maintenance instructions are included in the "Instructions for Continued Airworthiness" document in the STC.

DATE \_\_\_\_\_

Revised - /

STC Fuel System Modification Piper J5A N397PA



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

**Transport Airplane Directorate  
Aircraft Certification Service**

1601 Lind Avenue Southwest  
Renton, Washington 98057

**JAN -9 2009**

In Reply  
Refer To: 100S-GA-09-1

Mr. Joel A. Marketello  
16818 160<sup>th</sup> Ct. SE  
Renton, WA 98058

Dear Mr. Marketello:

We have completed our evaluation of your Supplemental Type Certificate (STC) Project Number ST10512SE-A and find that you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed STC number SA01956SE, dated January 9, 2009. This indicates our approval for the installation of alternate wings, horizontal tail, fuel system, electrical system, brakes, and associated components as defined in the STC in Piper Model J5A Serial Number 5-397 only. The approved Airplane Supplemental Flight Manual is also enclosed.

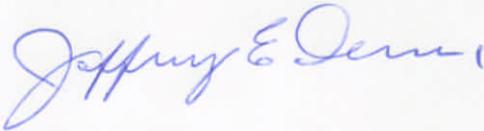
As a recipient of this approval, except as provided in Title 14 Code of Federal Regulations (CFR) section 21.3(d), you are required to report any failure, malfunction, or defect in any product or part manufactured by you that you have determined has resulted or could result in any of the occurrences listed in 14 CFR section 21.3(c). The report should be communicated initially by telephone to the Manager, Airframe Branch, ANM-120S, telephone number (425) 917-6424, within 24 hours after it has been determined that the failure has occurred. In addition, written notification to the Manager, Seattle Aircraft Certification Office, ANM-100S, at the above address is required. Federal Aviation Administration (FAA) Form 8010-4 (Malfunction or Defect Report) or any appropriate format is acceptable in transmitting the required details.

The descriptive data submitted for this project are not sufficient to permit duplication of the modification on other aircraft. Consequently, this approval is limited to the aircraft described on the certificate.

Since I am very much interested in the service we provide to the aviation community and the general public, it would be helpful if you would provide your thoughts and comments regarding how the approval process went. To gather this information, we have enclosed a short survey (with a self-addressed, stamped envelope) that I hope you will fill out and return. You will note that the return envelope is addressed to me. You may rest assured that your comments will receive my full attention and that I will hold your comments in

strict confidence, should you request I do so. Please note that this customer service survey is common to all Aircraft Certification Offices within the FAA's Aircraft Certification Service and is aimed at enabling the Aircraft Certification Service to deliver the best services to each of our customers.

Sincerely,



Jeffrey E. Duven  
Manager, Seattle Aircraft  
Certification Office

3 Enclosures

One Time STC SA01956SE, dated January 9, 2009  
Airplane Supplemental Flight Manual, approved January 9, 2009  
Survey