United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

RESTRICTED CATEGORY

Number SA3452WE

This certificate issued to Johnston Aircraft Service, Inc.

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Federal Aviation Regulations. (For certification basis see T. C. Data Sheet A10SO)

Original Product — Type Certificate Number: A10SO

Make: Piper

Model: PA-30-285, PA-36-300 (Restricted Category)

Description of Type Design Change: Installation of Lycoming IO-720-A1B engine and Hartzell HC-C3YR-1RF/F8475R constant speed propeller in accordance with FAA sealed Johnston Aircraft Service Master Drawing List .0003 dated June 15, 1977, or later FAA approved revision.

See continuation sheets 3 and 4. FAA approved Johnston Aircraft Service Airplane Flight Manual Supplement No. 1 dated November 11, 1977, or Supplement No. 2 dated February 5, 1979, or later FAA approved revision, is required with this installation.

Limitations and Conditions: The approval of this change in type design applies to the basic aircraft of the specified model that is otherwise unmodified. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft.

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: November 30, 1976

Date of issuance: August 22, 1977

Date reissued:

Date amended: November 11, 1977, February 5, 1979

By direction of the Administrator

D. C. Fairbanks
(Signature)

Chief, Aircraft Modification Branch
(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.

FAA Form 8110-2 (10-68)

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

(I) August 22, 1977
(A) November 11, 1977
Number SA3452WE (A) February 5, 1979

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA3452WE

The conditions and limitations of T. C. Data Sheet A10SO apply except as follows:

This Addendum, which is part of Supplemental Type Certificate No. SA3452WE, prescribes conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Civil Air Regulations. A copy of this Addendum shall be maintained as part of the modified aircraft permanent records.

Supplemental Type Certificate Holder: Johnston Aircraft Service, Inc.

I - Model PA-36-285, -300 (Restricted Category) as modified by STC SA3452WE.

Engine:	Lycoming IO-720-A1B
Fuel:	100/130 Minimum Grade Aviation Gasoline
Engine limits:	For all operations 400 HP, 2650 RPM
Propeller and Propeller Limits:	Hartzell HC-C3YR-1RF/F8475R constant speed Hub Model: HC-C3YR-1RF Blade Model: F8475R Diameter: 86" Maximum 82.5" Minimum Pitch Settings: At 30" Sta. Low 14° High 28.2° Governor: Hartzell 49F-4-1 Spinner: Hartzell 82A2295-1
Maximum Operating Speed:	135 MPH (Ref.)
Oil Capacity:	19 qt. (16 qt. useable) @ (+81.5)
Powerplant Instrument Markings:	Tachometer: Maximum 2650 RPM (red radial) Oil Temperature Gage: Maximum 245°F (red radial) Normal 150° to 245°F (green arc) Caution 75°F to 100°F (yellow arc)

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

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Powerplant Instrument Markings: (Cont'd)

Oil Pressure Gage: Maximum 100 psi (red radial)
Minimum 25 psi (red radial)
Normal 60 to 90 psi (green arc)

Cylinder Head Temperature Gage:
Maximum 500°F (red radial)
(Bayonet type thermocouple on #3 cylinder)

Metered Fuel Pressure Gage (Fuel Flow):
Maximum 34 gph (red radial)

Airspeed Indicator Markings: Never exceed (V_{ne}) 135 MPH CAS (red radial)

Certification Basis: Same as specified by T.C. Data Sheet A10SO

Required Equipment: In addition to the equipment applicable and required by T.C.D.S. A10SO, the equipment specified by Johnston Aircraft Service must be installed as a result of the incorporation of this STC.

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in the aircraft.

NOTE 2. The following placards must be installed, (or removed, as noted), in front of and in clear view of the pilot:

a. Delete existing reference to normal category.

b. Delete:

"AVOID CONTINUOUS OPERATION ON THE GROUND BETWEEN 950 AND 1150 PROP RPM IN WINDS ABOVE 15 MPH."

c. Adjacent to Starter Switch: Delete -

"PUSH TO PRIME."

d. Delete from Takeoff Checklist:

"ALT. AIR --- OFF".

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