

# A1EA - The New Piper Aircraft, Inc. - Data Pertinent to All Models

PA - 40  
PA - 39  
PA - 30  
Revision 15  
October 1, 1997

## TYPE CERTIFICATE DATA SHEET NO. A1EA

This data sheet, which is a part of Type Certificate No. A1EA, prescribes conditions and limitations under which the product, for which the type certificate was issued, meets the airworthiness requirements of the Civil Air Regulations and the Federal Aviation Regulations.

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## DATA PERTINENT TO ALL MODELS

### Certification Basis

CAR 3 effective May 15, 1956, through Amendment 3-6 effective September 13, 1961, and Par. 3.705(a) of Amendment 3-7 effective May 3, 1962. Also, FAR 23.1577(e)(1) of Amendment 23-7 effective September 14, 1969.

In addition, for Model PA-40, FAR 23.1041 of Amendment 23-11 effective August 11, 1971, and FAR 23.145, 23.161 and 23.175 of Amendment 23-14 effective December 20, 1973.

Type Certificate No. A1EA issued February 5, 1963, and reissued December 3, 1969 to include Model PA-39 under Delegation Option Authorization of Federal Aviation Regulations Part 21.  
Date of Application for Type Certificate March 1, 1962.

### Production Basis

Approved for manufacture of spare parts only under Production Certificate No. 206.

### Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis ) must be installed in the aircraft for certification. In addition, the following items of equipment are required:

1. (a) Stall warning indicator installation in accordance with Piper Dwg. 23945 and 23700 for Model PA-30, Serial Nos. 30-1 through 30-1716 and 30-1718 through 30-1744.  
(b) Stall warning indicator installation in accordance with Piper Dwg. 26658 and 26651 for Model PA-30, Serial Nos. 30-1717 and 30-1745 through 30-2000.  
(c) Stall warning indicator installation in accordance with Piper Dwg. 26651 for Model PA-39, Serial Nos. 39-1 through 39-162.
2. (a) FAA-DOA approved Airplane Flight Manual Report 1269 for Model PA-30, Serial Nos. 30-1 through 30-1716 and 30-1718 through 30-1744, dated February 5, 1963, reissued November 15, 1969, and FAA-DOA approved Flight Manual Supplements.  
(b) FAA-DOA approved Airplane Flight Manual Report 1515 for Model PA-30, Serial Nos. 30-1717 and 30-1745 through 3-2000, dated February 5, 1963, reissued November 15, 1969 and FAA-DOA approved Flight Manual Supplements.  
(c) FAA DOA approved Airplane Flight Manual Report 1605 for Model PA 39, Serial No. 39 1 through 39 162, dated November 28, 1969 and FAA DOA approved Flight Manual Supplements.  
(d) FAA-DOA approved Airplane Flight Manual Report 1840 for Model PA-40, Serial No. 40-7400002, dated July 18, 1974, and FAA-DOA approved Flight Manual Supplements.

### NOTE 1.

Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity location must include for PA-30 and PA-39 unusable fuel of 36 lb. at (+90) and 2 quarts unusable oil each engine at (+51), for PA-40 unusable fuel of 31.2 lb. at (+90) and 2 quarts unusable to each engine at (+51).

### NOTE 2.

All placards required in the approved airplane flight manual and approved airplane flight manual supplements must be installed in the appropriate location.

The following placards must be displayed:

1. On pedestal in full view of the pilot for Model PA-30, Serial Nos. 30-1 through 30-1716 and 30-1718 thru 30-1744.  
On instrument panel for Model PA-30, Serial Nos. 30-1717 and 30-1745 through 30-2000; Model PA-39, Serial Nos. 39-1 through 39-162; and Model PA-40, Serial No. 40-7400002.

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE AIRPLANE FLIGHT MANUAL. ACROBATICS MANEUVERS (INCLUDING SPINS) PROHIBITED"

2. In view of the pilot on aircraft equipped with alternate instrument static source in accordance with Piper Drawing No. 25237 for Model PA-30 of Piper Drawing No. 26722 for Models PA-30, PA-39 and PA-40.

(a) "INSTRUCTIONS FOR USE OF ALTERNATE STATIC SOURCE"

(1) IN CASE OF STATIC PRESSURE TUBE MALFUNCTION DUE TO ICE OR OTHER OBSTRUCTIONS CLOSE WINDOW AND ACTUATE ALTERNATE STATIC SOURCE VALVE.

(2) THE FOLLOWING AIRSPEEDS APPLY WHEN ALTERNATE STATIC SOURCE IS USED ON MODELS PA-30 AND PA-39.

INDICATOR READS	ACTUAL
104 MPH IAS	100 MPH CAS
140 MPH IAS	130 MPH CAS
163 MPH IAS	150 MPH CAS
185 MPH IAS	170 MPH CAS

(3) THE FOLLOWING AIRSPEEDS APPLY WHEN ALTERNATE STATIC SOURCE IS USED ON MODEL PA-40.

INDICATOR READS	ACTUAL
100 MPH IAS	96 MPH CAS
120 MPH IAS	114 MPH CAS
160 MPH IAS	151 MPH CAS
200 MPH IAS	187 MPH CAS

(b) (1) On instrument panel above alternate static source actuating valve on Model PA-30, Serial Nos. 30-1 through 30-1716 and 30-1718 through 30-1744: "ALTERNATE STATIC SOURCE PULL AFT TO OPEN"

(2) On left side control quadrant on Model PA-30, Serial Nos. 30-1717 and 30-1745 through 30-2000; Model PA-39, Serial Nos. 39-1 through 39-162; and Model PA-40, Serial No. 40-7400002.

"ALTERNATE STATIC ON  
OFF"

### NOTE 3.

Balance weights are required on stabilator and rudder to provide the following moments:

(a.) Model PA-30, Serial Nos. 30-1 through 30-852, 30-854 through 30-901, 30-1717, and 30-1745 through 30-2000; and Model PA-39, Serial Nos. 39-1 through 39-162:

Stabilator	49 in.- lb.	(+0, -3 in.- lb.)	(trailing edge heavy)
Rudder	13.5 in.- lb.	(± 1 in.- lb.)	(trailing edge heavy)

(b.) Model PA-30, Serial Nos. 30-853, 30-902 through 30-1716, and 30-1718 through 30-1744:

Stabilator	24.6 in.- lb.	(± 4 in.- lb.)	(leading edge heavy)
Rudder	13.5 in.- lb.	(± 1 in.- lb.)	(trailing edge heavy)

(c.) Model PA-40 Serial No. 40-7400002:

Stabilator	3 in.- lb.	(± 3 in.- lb.)	(leading edge heavy)
Rudder	13.5 in.- lb.	(-0, +3 in.- lb.)	(trailing edge heavy)
Aileron	1 in.- lb.	(± 1 in.- lb.)	(leading edge heavy)

### NOTE 4.

Maximum baggage and/or passenger weight 250 lb. in baggage area including seats. See weight and balance.

### NOTE 5.

Optional engines eligible for installation and applicable limitations.

### Engines

1 Lycoming IO-320-B1A (Left)

1 Lycoming LIO-320-B1A (Right)

**Fuel**

100/130 minimum grade aviation gasoline

**Engine Limits**

For all operations, 2700 r.p.m. (160 hp)

(See Maneuvers under Limitations Section of AFM)

**Propellers and Propeller Limits**

1 Hartzell, Hub Model HC-E2YL-2, -2A, -2B, -2C, -2D, -2BS or -2BSF	(Left) *
1 Hartzell, Hub Model HC-E2YL-2BL, -2BLS, -2BLF, or -2BLSF	(Right) *
Blades Model: 7663-4 or F7663-4	(Left) **
J7663-4 or FJ7663-4	(Right) **

\* The -2BS, -2BSF, -2BLS, and -2BLSF propellers not to be intermixed with other propellers listed.

\*\* Blades prefixed by an "F" may be used only on propeller hubs suffixed by an "F".

**Governors**

1 Hartzell hydraulic governor, Model F-6, F-6-3, F-6-3S, or F-6-3A	(Left)
1 Hartzell hydraulic governor, Model F-6-3AL	(Right)

**Airspeed Limits (CAS)**

$V_{mc}$  Minimum Control Speed 80 mph (69 Knots)

**C.G. Range (gear extended)**

(+82.0) to (+92.0) at 2825 lb. or less

**Equipment**

(a) FAA-DOA approved Airplane Flight Manual Report 1269 for Model PA-30, Serial Nos. 30-1 through 30-1716 and 30-1718 through 30-1744, dated February 5, 1963, reissued November 15, 1969 and FAA-DOA approved Flight Manual Supplements.

(b) FAA-DOA approved Airplane Flight Manual Report 1515 for Model PA-30, Serial Nos. 30-1717, 30-1745 through 30-2000, dated February 5, 1963, reissued November 15, 1969 and FAA-DOA approved Flight Manual Supplements.

The use of the optional engine installation is permitted only when installed in accordance with Piper Kit No. 760 368.

**NOTE 6.**

Piper PA-30 Airflow Modification Kits for Model PA-30, Serial Nos. 30-1 through 30-2000:

When Airflow Modification Kit, Part Number 760 409, is installed, the FAA-DOA approved airflow modification kit data are described in Piper Service Letter 558, dated July 1, 1970.

When Counter-Rotating Powerplant Conversion Kit 760 368 is installed, the FAA-DOA approved counter-rotating powerplant conversion data are described in Piper Service Letter 552, dated May 1, 1970. Airflow Modification 760 409 must be removed, if installed. See Piper Service Letter 552, for new airflow kit modification requirements when counter rotating powerplant is installed.

When Wiggins Supplemental Type Certificate SA233EA, Reservoir Type Pneumatic Wing De-Icing Kit is installed, the FAA-DOA approved Piper Air Flow Modification Kit 760 564 data are described in Piper Service Letter 558, dated July 1, 1970, Addendum No. 1 dated August 20, 1971, and in "Rubber Wing Flow Strip Installation" Instructions for Piper Kit 760 563.

When Wiggins Supplemental Type Certificate SA233EA, Reservoir Type Pneumatic Wing De-Icing Kit, is installed with a "Counter-Rotating Powerplant Modification Propeller and Wing De-Icing Equipment" Modification, the FAA-DOA approved Piper Air Flow Modification Kit 760 562 data are described in Piper Service Letter 552, dated May 1, 1970, Addendum No. 2, dated August 20, 1971.