# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	A3SO
	Revision 33
	Piper Aircraft, Inc
PA-32-260	PA-32R-301 (SP)
PA-32-300	PA-32R-301 (HP)
PA-32S-300	PA-32R-301T
PA-32R-300	PA-32-301
PA-32RT-300	PA-32-301T
PA-32RT-300T	
PA-32-301FT	
PA-32-301XTC	October 13, 2014

## TYPE CERTIFICATE DATA SHEET NO. A3SO

This data sheet which is a part of Type Certificate No. A3SO, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Piper Aircraft, Inc.

2926 Piper Drive

Vero Beach, Florida 32960

Type Certificate Holder Record The New Piper Aircraft, Inc transferred TC A3SO to Piper Aircraft, Inc on August 7,

2006.

# <u>I. - Model PA-32-260 (Cherokee Six 260), 6 PCLM (Normal Category), Approved March 4, 1965; 7 PCLM (Normal Category), Approved November 15, 1966.</u>

Engine Lycoming O-540-E4B5 with carburetor setting 10-4404, 10-5042, or 10-5054

Oil cooler P/N 8529245 required with 10-5042 setting

<u>Fuel</u> 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m. (260 hp)

Propeller and Propeller Limits McCauley fixed pitch metal 1P235PFA82 (See NOTE 8)

Static r.p.m. at maximum permissible throttle setting, not over 2480 r.p.m.,

not under 2270 r.p.m.

Diameter: Not over 82 in., not under 80.5 in.

Spinner: P/N 63760-00 or 63760-03 (See NOTE 6)

Hartzell constant speed Model HC-C2YK-1() and Blade Model 8477-2, or Hartzell constant speed Model HC-C2YK-1()F and Blade Model F8477-2

Pitch: High  $32^{\circ} \pm 2^{\circ}$ , Low  $12.0^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 82 in., not under 80.5 in.

Governor Assembly: Hartzell F-4-4() or F-4-11() (See NOTE 10) Spinner: P/N 68713 or 66785 Spinner Tip and P/N 66786 Spinner Shell or P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0

Bulkhead, P/N 99499-0 Plate, two each P/N 67794-0 Cuff or

Kit 760-452V (See NOTE 6)

Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Rev No.	33	25	27	25	27	25	27	27	24	27	27	24	29	27	25	27	27	24	27
	20					2.5	2.5	25	20	20	20	2.1	1						

Page No.	20	21	22	23	24	25	26	27	28	29	30	31
Rev No.	29	29	27	29	29	31	31	31	32	32	32	33

A3SO Page 2 of 31

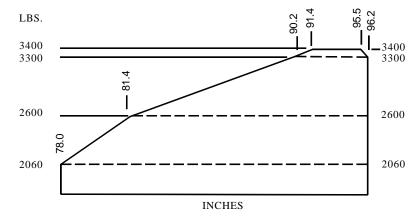
# I. - Model PA-32-260 (cont'd)

Airspeed Limits

Never exceed212 m.p.h. (184 knots)CASMaximum structural cruise168 m.p.h. (146 knots)CASManeuvering149 m.p.h. (130 knots)CASFlaps extended125 m.p.h. (109 knots)CAS

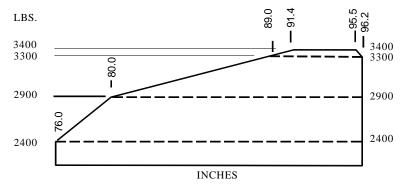
## C.G. Range (gear extended)

(+91.4) to (+95.5) at 3400 lb. (+90.2) to (+96.2) at 3300 lb. (+81.4) to (+96.2) at 2600 lb. (+78.0) to (+96.2) at 2060 lb. or less Straight line variation between points given.



(S/N 32-1 through 32-1075)

(+91.4) to (+95.5) at 3400 lb. (+89.0) to (+96.2) at 3300 lb. (+80.0) to (+96.2) at 2900 lb. (+76.0) to (+96.2) at 2400 lb. or less Straight line variation between points given.



(S/N 32-1111 through 32-1297, and 32-7100001 through 32-7800008)

Empty Weight C.G. Range

None

Maximum Weight

3400 lb.

A3SO Page 3 of 31

I. - Model PA-32-260 (cont'd)

No. of Seats 6 (2 at +85.5, 2 at +118.1, 2 at +155.7)

7 (2 at +85.5, 3 at +118.1, 2 at +155.7) (See NOTE 3)

6 (2 at +85.5, 2 at +118.1, 2 at +157.6)

7 (2 at +85.5, 3 at +118.1, 2 at +157.6) (See NOTE 3) 6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

Maximum Baggage 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity 84 gallons at +95.0 (4 wing tanks)

See NOTE 1 for data on system fuel

<u>Oil Capacity</u> 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

<u>Control Surface Movements</u> Wing Flaps Up  $0^{\circ} (\pm 2^{\circ})$  Down  $40^{\circ} (\pm 2^{\circ})$ 

Ailerons Up 30° (±2°) Down 15° (±2°) Rudder Left  $27^{\circ} (\pm 2^{\circ})$ Right 27° (±2°) Stabilator Up 16° (±1°) Down 2° (±1°) Stabilator Tab Up 5° (±1°) Down 8° (±1°)

Nose Wheel Travel S/N 32-1 through 32-1297, and 32-7100001

through 32-7300066:

Left  $30^{\circ} (\pm 2^{\circ})$  Right  $30^{\circ} (\pm 2^{\circ})$ 

S/N 32-7400001 through 32-7800008:

Left  $24^{\circ} (\pm 2^{\circ})$  Right  $24^{\circ} (\pm 2^{\circ})$ 

Manufacturer's Serial Nos. 32-03, 32-04, 32-1 through 32-1297, and 32-7100001 through 32-7800008. The

manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32-1034 through 32-1297, and 32-7100001 through 32-7800008 under the delegation

option provisions of FAR 21.

# II. - Model PA-32-300 (Cherokee Six 300), 6 PCLM (Normal Category), Approved May 27, 1966; 7 PCLM (Normal Category), Approved November 15, 1966.

Same as Model PA-32-260 except for engine installation and fuel system.

Engine Lycoming IO-540-K1A5, Bendix injector type RSA-10ED1

Lycoming IO-540-K1G5 (See NOTE 12)

Flow Setting No. 2524273

Fuel 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m. (300 hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-C2YK-1(), Blade Models 8475-4 & 8475D-4, or

Hartzell constant speed Model HC-C2YK-1()F, Blade Models F8475D-4

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in.

Governor Assembly: Hartzell F-4-4() or F-4-11() (See NOTE 10)

Spinner: P/N 68713 or P/N 66785 Spinner Tip and P/N 66786 Spinner Shell, or P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0 Bulkhead, P/N 99499-0

Plate, two each P/N 67794-0 Cuff or Kit 760-452V (See NOTE 6)

A3SO Page 4 of 31

## II. - Model PA-32-300 (cont'd)

Propeller and Propeller Limits (continued)

Hartzell constant speed Model HC-C2YK-1(), Blade Model 8475R-0, or Hartzell constant speed Model HC-C2YK-1()F, Blade Model F8475R-0

Pitch: High  $29^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 84 in., not under 82.3 in.

Governor Assembly: Hartzell F-4-4() or F-4-11() (See NOTE 10)

Spinner: P/N 68713 or P/N 66785 Spinner Tip and P/N 66786 Spinner

Shell or P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0

Bulkhead, P/N 99499-0 Plate, two each P/N 67794-0 Cuff or Kit 760-452V

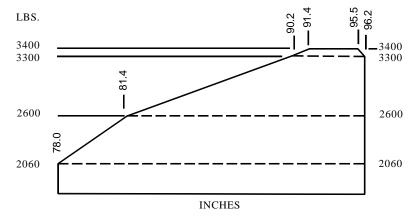
(See NOTE 6)

## Airspeed Limits

Never exceed	212 m.p.h. (184 knots) CAS
Maximum structural cruise	168 m.p.h. (146 knots) CAS
Maneuvering	149 m.p.h. (130 knots) CAS
Flaps extended	125 m.p.h. (109 knots) CAS

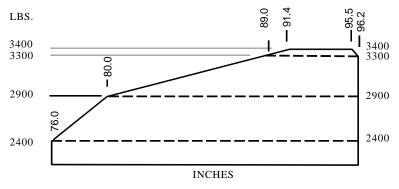
## C.G. Range (gear extended)

(+91.4) to (+95.5) at 3400 lb. (+90.2) to (+96.2) at 3300 lb. (+81.4) to (+96.2) at 2600 lb. (+78.0) to (+96.2) at 2060 lb. or less Straight line variation between points given.



(S/N 32-40001 through 32-40565)

(+91.4) to (+95.5) at 3400 lb. (+89.0) to (+96.2) at 3300 lb. (+80.0) to (+96.2) at 2900 lb. (+76.0) to (+96.2) at 2400 lb. or less Straight line variation between points given.



(S/N 32-40566 through 32-40974, and 32-7140001 through 32-7940290)

II. - Model PA-32-300 (cont'd)

Empty Weight C.G. Range None

Maximum Weight 3400 lb.

No. of Seats 6 (2 at +85.5, 2 at +118.1, 2 at +155.7)

7 (2 at +85.5, 3 at +118.1, 2 at +155.7) (See NOTE 3)

6 (2 at +85.5, 2 at +118.1, 2 at +157.6)

7 (2 at +85.5, 3 at +118.1, 2 at +157.6) (See NOTE 3) 6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity S/N 32-15, 32-21, 32-40000 through 32-40974, and 32-7140001 through 32-7840202:

84 gallons at +95.0 (4 wing tanks) S/N 32-7940001 through 32-7940290:

98 gallons at +93.6 (2 wing tanks) (94 gallons usable)

See NOTE 1 for data on system fuel

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

 $\underline{\text{Control Surface Movements}} \qquad \qquad \text{Wing Flaps} \qquad \qquad \text{Up} \qquad 0^{\circ} \ (\pm 2^{\circ}) \qquad \quad \text{Down} \qquad 40^{\circ} \ (\pm 2^{\circ})$ 

Ailerons Up 30° (±2°) Down 15° (±2°) Rudder 27° (±2°) 27° (±2°) Left Right Up 16° (±1°) Stabilator Down 2° (±1°) Stabilator Tab Down Up 5° (±1°) 8° (±1°)

Nose Wheel Travel S/N 32-40001 through 32-40974, and

32-7140001 through 32-7340191:

Left  $30^{\circ} (\pm 2^{\circ})$  Right  $30^{\circ} (\pm 2^{\circ})$ 

S/N 32-7400001 through 32-7940290:

Left  $24^{\circ} (\pm 2^{\circ})$  Right  $24^{\circ} (\pm 2^{\circ})$ 

Manufacturer's Serial Nos. 32-15, 32-21, 32-40000 through 32-40974, and 32-7140001 through 32-7940290. The

manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32-40382, 32-40385, 32-40403, 32-40465 through 32-40469, 32-40471 through 32-40974, and 32-7140001 through 32-7940290 under the delegation option provisions

of FAR 21 (See NOTE 7 and 9).

## III. - Model PA-32S-300 (Cherokee Six Seaplane), 7 PCSM (Normal Category), Approved February 14, 1967.

Same as Model PA-32-300 except for float installation.

Engine Lycoming IO-540-K1A5

Flow Setting No. 2524273

<u>Fuel</u> 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m. (300 hp)

A3SO Page 6 of 31

# III. - Model PA-32S-300 (cont'd)

Propeller and Propeller Limits

Hartzell constant speed Model HC-C2YK-1(), Blade Models 8475-4 & 8475D-4, or

Hartzell constant speed Model HC-C2YK-1()F, Blade Model F8475D-4

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in.

Governor Assembly: Hartzell F-4-4() or F-4-11() (See NOTE 10)

Spinner: P/N 68713 or P/N 66785 Spinner Tip and P/N 66786 Spinner Shell

(See NOTE 6)

Hartzell constant speed Model HC-C2YK-1(), Blade Model 8475R-0, or Hartzell constant speed Model HC-C2YK-1()F, Blade Model F8475R-0

Pitch: High  $29^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 84 in., not under 82.3 in.

Governor Assembly: Hartzell F-4-4() or F-4-11() (See NOTE 10)

Spinner: P/N 68713 or P/N 66785 Spinner Tip and P/N 66786 Spinner Shell or

P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0 Bulkhead, P/N 99499-0 Plate, two each P/N 67794-0 Cuff or Kit 760-452V

(See NOTE 6)

Airspeed Limits

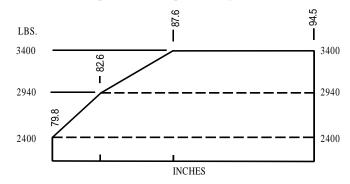
Never exceed 176 m.p.h. (153 knots) CAS
Maximum structural cruise 140 m.p.h. (122 knots) CAS
Maneuvering 140 m.p.h. (122 knots) CAS
Flaps extended 125 m.p.h. (109 knots) CAS

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

(+87.6) to (+94.5) at 3400 lb. (+82.6) to (+94.5) at 2940 lb. (+79.8) to (+94.5) at 2400 lb.

Straight line variation between points given.

(See NOTE 4 for operation in landplane configuration)



(S/N 32S-40001 through 32S-40974, and 32S-7140001 through 32S-7240137)

Empty Weight C. G. Range

None

Maximum Weight

3400 lb.

No. of Seats

7 (2 at +85.5, 2 at +118.1, 2 at +155.7)

Maximum Baggage

200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

A3SO Page 7 of 31

# III. - Model PA-32S-300 (cont'd)

Fuel Capacity 84 gallons at +95.0 (4 wing tanks)

See NOTE 1 for data on system fuel

<u>Oil Capacity</u> 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

<u>Control Surface Movements</u> Wing Flaps Up  $0^{\circ} (\pm 2^{\circ})$  Down  $40^{\circ} (\pm 2^{\circ})$ 

Ailerons Up 30° (±2°) Down 15° (±2°) 27° (±2°) Rudder Left 27° (±2°) Right Stabilator Up 16° (±1°) Down 2° (±1°) Stabilator Tab Up Down 5° (±1°) 8° (±1°)

Manufacturer's Serial Nos. 32S-15, 32S-40000 through 32S-40974, and 32S-7140001 through 32S-7240137. The

manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32S-40382, 32S-40385, 32S-40403, 32S-40465 through 32S-40469, 32S-40471 through 32S-40974, and 32S-7140001 through 32S-7240137 under the delegation option

provisions of FAR 21 (See NOTE 7 and 9).

## IV. - Model PA-32R-300 (Lance), 7 PCLM (Normal Category), Approved February 25,1975.

Same as Model PA-32-300 except for redesigned wing and engine mount to accommodate retractable landing gear, gross weight increase, increased capability fuel system and other minor changes.

Engine Lycoming IO-540-K1A5D

Lycoming IO-540-K1G5D for S/N 32R-7680141 through 32R-7880068 (See NOTE 13)

Flow Setting No. 2524273

<u>Fuel</u> 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m. (300 hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-C2YK-1()F, Blade Model F8475D-4

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11B()

Spinner: P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0 Bulkhead,

P/N 99499-0 Plate, and two each P/N 67794-0 Cuff (See NOTE 6)

Airspeed Limits Never exceed 217 m.p.h. (188 knots) CAS

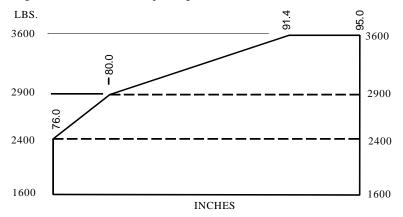
Maximum structural cruise172 m.p.h. (149 knots)CASManeuvering125 m.p.h. (109 knots)CASMaximum flaps extended125 m.p.h. (109 knots)CASMaximum gear extension150 m.p.h. (130 knots)CASMaximum gear retraction125 m.p.h. (109 knots)CAS

A3SO Page 8 of 31

## IV. - Model PA-32R-300 (cont'd)

C.G. Range (gear extended)

(+91.4) to (+95.0) at 3600 lb. (+80.0) to (+95.0) at 2900 lb. (+76.0) to (+95.0) at 2400 lb. or less Straight line variation between points given.



Empty Weight C.G. Range

None

Maximum Weight

3600 lb.

No. of Seats

7 (2 at +85.5, 3 at +118.1, 2 at +155.7) 7 (2 at +85.5, 3 at +118.1, 2 at +157.6)

6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

Maximum Baggage

200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity

98 gallons at +93.6 (2 wing tanks) (94 gallons usable) See NOTE 1 for data on system fuel

Oil Capacity

12 qt. at +16.6 (9-1/4 qt. usable) See NOTE 1 for data on system oil

Control Surface Movements

Wing Flaps	Up	0° (±2°)	Down	40° (±2°)
Ailerons	Up	30° (±2°)	Down	15° (±2°)
Rudder	Left	27° (±2°)	Right	27° (±2°)
Stabilator	Up	16° (±1°)	Down	2° (±1°)
Stabilator Tab	Up	5° (±1°)	Down	8° (±1°)

Manufacturer's Serial Nos.

32R-7680001 through 32R-7880068. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32R-7680001 through 32R-7880068 under the delegation option provisions FAR 21 (See NOTE 7).

A3SO Page 9 of 31

# V. - Model PA-32RT-300 (Lance II), 7 PCLM (Normal Category), Approved December 13, 1977.

Same as Model PA-32R-300 except for redesigned tail surfaces in "T" configuration and other minor changes.

Engine Lycoming IO-540-K1G5D

Flow Setting No. 2524273

Fuel 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2700 r.p.m. (300 hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-C2YK-1()F, Blade Model F8475D-4

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11B() Spinner: P/N 99374 (See NOTE 6)

Airspeed Limits Never exceed 217 m.p.h. (189 knots) CAS

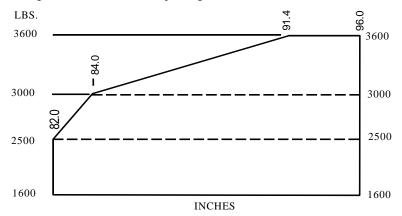
Maximum structural cruise 173 m.p.h. (150 knots) CAS Maneuvering 152 m.p.h. (132 knots) CAS

(with 3600 lb. gross weight)

Maximum flaps extended 125 m.p.h. (109 knots) CAS
Maximum gear extension 150 m.p.h. (130 knots) CAS
Maximum gear retraction 125 m.p.h. (109 knots) CAS

<u>C.G. Range (gear extended)</u> (+91.4) to (+96.0) at 3600 lb.

(+84.0) to (+96.0) at 3000 lb. (+82.0) to (+96.0) at 2500 lb. or less Straight line variation between points given.



Empty Weight C.G. Range N

None

Maximum Weight 3600 lb.

No. of Seats 7 (2 at +85.5, 3 at +118.1, 2 at +157.6)

6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

Maximum Baggage 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

A3SO Page 10 of 31

V. - Model PA-32RT-300 (cont'd)

Fuel Capacity 98 gallons at +93.6 (2 wing tanks) (94 gallons usable)

See NOTE 1 for data on system fuel

<u>Oil Capacity</u> 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

Control Surface MovementsWing FlapsUp  $0^{\circ}$  ( $\pm 2^{\circ}$ )Down  $30^{\circ}$  ( $\pm 2^{\circ}$ )AileronsUp  $30^{\circ}$  ( $\pm 2^{\circ}$ )Down  $15^{\circ}$  ( $\pm 2^{\circ}$ )

30° (±2°) 15° (±2°) Rudder Left 36° (±2°) Right 36° (±2°) Stabilator 14.5° (±.5°) Up Down  $10^{\circ} (\pm 1^{\circ})$ Stabilator Tab Up  $2.5^{\circ}~(\pm 1^{\circ})$ Down 10° (±.5°)

Manufacturer's Serial Nos. 32R-7885002 through 32R-7985106. The manufacturer is authorized to issue

airworthiness certificates for airplane serial numbers 32R-7885002 through 32R-7985106 under the delegation option provisions FAR 21 (See NOTE 7).

#### VI. - Model PA-32RT-300T (Turbo Lance II), 7 PCLM (Normal Category), Approved April 20, 1978.

Same as Model PA-32RT-300 except for turbocharged engine installation and other minor changes.

Engine Lycoming TIO-540-S1AD

Bendix Injector Type RSA-10ED1

Flow Setting No. 2524693 for S/N 32R-7787001, 32R-7887002 through 32R-7887041

Bendix Injector Type RSA-10ED2

Flow Setting No. 2524791 for S/N 32R-7787001, 32R-7887002 through 32R-7987126

<u>Fuel</u> 100/130 minimum grade aviation gasoline

Engine Limits For 5 minute takeoff, 2700 r.p.m. and 36.0" Hg MAP (300 hp)

For maximum continuous operation, 2575 r.p.m. and 33.0" Hg MAP (270 hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-E2YR-1()F, Blade Model F8477-4

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $15.6^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N 98708-2 or Hartzell P/N A-2298-2

Airspeed Limits Never exceed 217 m.p.h. (189 knots) CAS

Maximum structural cruise 173 m.p.h. (150 knots) CAS Maneuvering 152 m.p.h. (132 knots) CAS

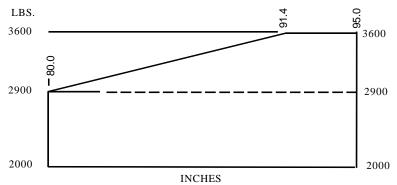
(with 3600 lb. gross weight)

Maximum flaps extended 125 m.p.h. (109 knots) CAS Maximum gear extension 150 m.p.h. (130 knots) CAS Maximum gear retraction 125 m.p.h. (109 knots) CAS A3SO Page 11 of 31

## VI. - Model PA-32RT-300T (cont'd)

C.G. Range (gear extended)

(+91.4) to (+95.0) at 3600 lb. (+80.0) to (+95.0) at 2900 lb. or less Straight line variation between points given.



Empty Weight C.G. Range None

Maximum Weight 3600 lb.

No. of Seats 7 (2 at +85.5, 3 at +118.1, 2 at +157.6)

6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

<u>Fuel Capacity</u> 98 gallons at +93.6 (2 wing tanks) (94 gallons usable)

See NOTE 1 for data on system fuel

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

Control Surface Movements Wing Flaps Up 0° (±2°) Down 40° (±2°)

Ailerons Up 30° (±2°) Down 15° (±2°) Rudder Left 36° (±2°) Right 36° (±2°) Stabilator Up 14.5° (±.5°) Down 10° (±1°) Stabilator Tab Up Down 1.0° (±1°) 10° (±.5°)

Manufacturer's Serial Nos. 32R-787001, 32R-7887002 through 32R-7987126. The manufacturer is authorized to

issue airworthiness certificates for airplane serial numbers 32R-7787001, 32R-7887002 through 32R-7987126 under the delegation option provisions of FAR 21 (See NOTE 7).

# VII. - Model PA-32R-301 (Saratoga SP), 7 PCLM (Normal Category), Approved November 7, 1979.

Same as Model PA-32R-300 except for tapered wings and other minor changes.

Engine Lycoming IO-540-K1G5D

Bendix Injector Type RSA-10ED1

Flow Setting No. 2524273

<u>Fuel</u> 100 or 100LL aviation grade fuel

<u>A3SO</u> Page 12 of 31

## VII. - Model PA-32R-301 (cont'd)

**Engine Limits** 

For airplanes equipped with standard Hartzell 2 blade propeller

HC-C2Y(K,R)-1()F/F8475D-4:

For 5 minute takeoff, 2700 r.p.m. and full throttle (300 rated hp)

For maximum continuous operation, 2600 r.p.m. and full throttle (294 rated hp)

For airplanes equipped with optional Hartzell 3 blade propeller

HC-C3YR-1()F/F7663R-0:

For all operations, 2700 r.p.m. and full throttle (300 rated hp)

#### Propeller and Propeller Limits

Hartzell constant speed Model HC-C2Y(K,R)-1()F/F8475D-4 (standard 2 blade):

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N 98708-2 or Hartzell P/N A-2298-2

Hartzell constant speed Model HC-C3YR-1()F/F7663R-0 (optional 3 blade):

Pitch: High  $32.0^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 76 in.

Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper PS50077-56 or Hartzell P/N 835-47

#### Airspeed Limits (Indicated)

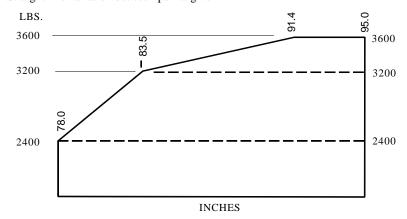
Never exceed 197 knots (226 m.p.h.) Maximum structural cruise 154 knots (177 m.p.h.) Maneuvering 134 knots (154 m.p.h.)

(with 3600 lb. gross weight)Maximum flaps extended112 knots (129 m.p.h.)Maximum gear extension132 knots (151 m.p.h.)Maximum gear retraction110 knots (126 m.p.h.)Maximum gear extended132 knots (151 m.p.h.)

## C.G. Range (gear extended)

(+91.4) to (+95.0) at 3600 lb. (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.



## Empty Weight C.G. Range

None

Maximum Weight Ramp: 3615 lb.

Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats

7 (2 at +85.5, 3 at +118.1, 2 at +157.6)

6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

<u>A3SO</u> Page 13 of 31

VII. - Model PA-32R-301 (cont'd)

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity 107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on system fuel

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

<u>Control Surface Movements</u> Wing Flaps Up 0° (±1°) Down 40° (±2°)

Ailerons Up 28° (±1°) Down 22° (±1°) Rudder Right Left 28° (±1°) 28° (±1°) 14.5° (±.5°) Stabilator Down 5.5° (±.5°) Up Stabilator Tab 5° (±1°) Down 8° (±1°) Up

Manufacturer's Serial Nos. 32R-8013001 through 32R-8613006, 3213001 through 3213028, and 3213030 through

3213041. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32R-8013001 through 32R-8613006, 3213001 through 3213028, and 3213030 through 3213041 under the delegation option provisions of FAR 21.

VIII. - Model PA-32R-301 (Saratoga II HP), 7 PCLM (Normal Category), Approved May 26, 1993.

Same as Model PA-32R-301, Saratoga SP, except for engine cowling, engine model designation and other minor changes.

Engine Lycoming IO-540-K1G5

Precision Airmotive Injector, Type RSA-10ED1

Flow Setting No. 2524273 for S/N 3213042 through 3213103, and 3246001 and up

Lycoming IO-540-K1G5D for S/N 3213029 only

<u>Fuel</u> 100 or 100LL aviation grade fuel

Engine Limits Equipped with Hartzell 3 blade propeller HC-I3YR-1RF/F7663DR:

For all operations, 2700 r.p.m. and full throttle (300 rated hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-I3YR-1RF/F7663DR (3 blade)

Hartzell constant speed Model HC-I3YR-1RF/F7663DRB

(3 blade with TKS Ice Protection System)

Pitch: High  $32.0^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 77 in.

Governor: Hartzell V-5-4

Spinner Assy: Hartzell P/N C3575-1 (P)

Dome: Hartzell P/N C-3532-16P (with TKS Ice Protection System)

Do not exceed 23" manifold pressure below 2100 r.p.m.

Airspeed Limits For S/N 3213029, 3213042 through 3213103, and 3246001 through 3246017:

(Indicated) Never exceed 193 knots (222 m.p.h.)

Maximum structural cruise 160 knots (184 m.p.h.) Maneuvering 132 knots (152 m.p.h.)

(with 3600 lb. gross weight)

Flaps extended 108 knots (124 m.p.h.)
Maximum gear extension 130 knots (150 m.p.h.)
Maximum gear retraction 108 knots (124 m.p.h.)
Maximum gear extended 130 knots (150 m.p.h.)

For S/N 3246018 and up:

Never exceed 191 knots (220 m.p.h.)
Maximum structural cruise 160 knots (184 m.p.h.)
Maneuvering 134 knots (154 m.p.h.)

(with 3600 lb. gross weight)

Flaps extended 110 knots (127 m.p.h.)

Maximum gear extension 132 knots (152 m.p.h.)
Maximum gear retraction 110 knots (127 m.p.h.)
Maximum gear extended 132 knots (152 m.p.h.)

A3SO Page 14 of 31

## VIII. - Model PA-32R-301 (cont'd)

C.G. Range (gear extended)

(+91.4) to (+95.0) at 3600 lb. (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.

3200 ES

**INCHES** 

3600

3200

2400

Empty Weight C.G. Range

None

2400

Maximum Weight

Ramp: 3615 lb. Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats

6 (2 at +85.5, 2 at +119.1, 2 at +157.6)

Maximum Baggage

200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity

107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on fuel system

Oil Capacity

12 qt. at +16.6 (9-1/4 qt. usable) See NOTE 1 for data on oil system

Control Surface Movements

Wing Flaps Up 0° (±1°) Down 40° (±2°) Ailerons 28° (±1°) Down Up 22° (±1°) Rudder 28° (±1°) Right Left 28° (±1°) Stabilator 14.5° (±.5°) Up Down 5.5° (±.5°) Stabilator Tab Up 5° (±1°) Down 8° (±1°)

Manufacturer's Serial Nos.

3213029, 3213042 through 3213103 (14v), 3246001 through 3246017 (14v), and 3246018 and up (28v). The manufacturer is authorized to issue airworthiness certificates under the delegation option provisions of FAR 21.

## IX. - Model PA-32R-301T (Turbo Saratoga SP), 7 PCLM (Normal Category), Approved November 7, 1979.

Same as Model PA-32R-300 except for tapered wings, turbocharged powerplant installation and other minor changes.

Engine Lycoming TIO-540-S1AD

Bendix Injector, Type RSA-10ED2

Flow Setting No. 2524791

Fuel 100 or 100LL aviation grade fuel

A3SO Page 15 of 31

## IX. - Model PA-32R-301T (cont'd)

**Engine Limits** 

For airplanes equipped with standard Hartzell 2 blade propeller HC-E2YR-1( )F/F8477-4: For 5 minute take-off, 2700 r.p.m. and 36.0" Hg MAP (300 hp) - Sea level to 16,000 ft. altitude

For maximum continuous operation, 2575 r.p.m. and 36.0" Hg MAP (294 hp) - Sea level to 16,000 ft. altitude

For airplanes equipped with optional Hartzell 3 blade propeller HC-E3YR-1()F/F7673DR-0: For all operations, 2700 r.p.m. and 36.0" Hg MAP (300 rated hp) - Sea level to 16.000 ft. altitude

## Propeller and Propeller Limits

Hartzell constant speed Model HC-E2YR-1()F/F8477-4 (standard 2 blade):

Pitch: High  $34.0^{\circ} \pm 1^{\circ}$ , Low  $15.6^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in.

Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N 98708-2 or Hartzell P/N A-2298-2

Hartzell constant speed Model HC-E3YR-1()F/F7673DR-0 (optional 3 blade):

Pitch: High  $34.5^{\circ} \pm 1^{\circ}$ , Low  $13.2^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 76 in.

Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N PS50077-58 or Hartzell P/N C-3575

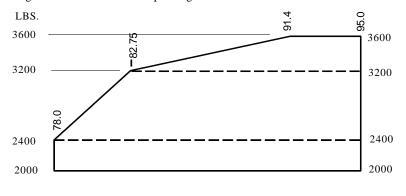
# Airspeed Limits (Indicated)

Never exceed	197 knots
Maximum structural cruise	154 knots
Maneuvering	134 knots
(with 3600 lb. gross weight)	
Flaps extended	112 knots
M	1221

Flaps extended 112 knots
Maximum gear extension 132 knots
Maximum gear retraction 110 knots
Maximum gear extended 132 knots

## C.G. Range (gear extended)

(+91.4) to (+95.0) at 3600 lb. (+82.75) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb. Straight line variation between points given.



**INCHES** 

## Empty Weight C.G. Range

None

Maximum Weight

Ramp: 3615 lb. Takeoff: 3600 lb. Landing: 3600 lb. A3SO Page 16 of 31

IX. - Model PA-32R-301T (cont'd)

No. of Seats 7 (2 at +85.5, 3 at +118.1, 2 at +157.6)

6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11)

\* - Optional Club Seats

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity 107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on system fuel

<u>Oil Capacity</u> 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on system oil

Control Surface Movements Wing Flaps Up 0° (±1°) Down 40° (±2°)

Ailerons Up 28° (±1°) Down 22° (±1°) Rudder Left 28° (±1°) Right 28° (±1°) Stabilator 5.5° (±0.5°) Up 14.5° (±.5°) Down Stabilator Tab Down 8° (±1°) Up 5° (±1°)

Manufacturer's Serial Nos. 32R-8029001 through 32R-8629008, and 3229001 through 3229003. The manufacturer

is authorized to issue airworthiness certificates for airplane serial numbers 32R-8029001 through 32R-8629008, and 3229001 through 3229003 under the

delegation option provisions of FAR 21 (See NOTE 7).

## X. - Model PA-32-301 (Saratoga), 7 PCLM (Normal Category), Approved January 9, 1980.

Same as Model PA-32-300 except for tapered wings, increased gross weight and other minor changes.

Engine Lycoming IO-540-K1G5

Bendix Injector Type RSA-10ED1 Flow Setting No. 2524273

Fuel 100 or 100LL aviation grade fuel

Engine Limits For airplanes equipped with standard Hartzell 2 blade propeller

HC-C2Y(K,R)-1()F/F8475D-4:

For 5 minute takeoff, 2700 r.p.m. and full throttle (300 rated hp)

For maximum continuous operation, 2600 r.p.m. and full throttle (294 rated hp)

For airplanes equipped with optional Hartzell 3 blade propeller

HC-C3YR-1()F/F7663R-0:

For all operations, 2700 r.p.m. and full throttle (300 rated hp)

Propeller and Propeller Limits Hartzell constant speed Model HC-C2Y(K,R)-1()F/F8475D-4 (standard 2 blade):

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $13.5^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11 or F-4-11()

Spinner: P/N 67790-0 Spinner, P/N 67791-0 Bulkhead, P/N 67793-0 Bulkhead,

P/N 99499-0 Plate, and two each 67794-0 Cuff (See NOTE 6)

Hartzell constant speed Model HC-C3YR-1()F/F7663R-0 (optional 3 blade):

Pitch: High  $32^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 76 in.

Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Hartzell P/N 835-47 (See NOTE 6) A3SO Page 17 of 31

## X. - Model PA-32-301 (cont'd)

Airspeed Limits Never exceed 197 knots (Indicated) Maximum structural cruise 154 knots

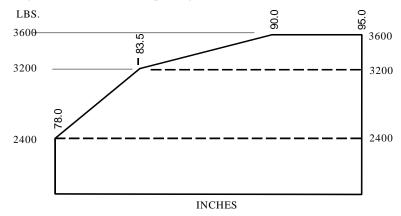
(with 3600 lb. gross weight)

Maneuvering 134 knots Flaps extended 112 knots

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

(+90.0) to (+95.0) at 3600 lb. (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.



#### Empty Weight C.G. Range

None

Maximum Weight

Ramp: 3615 lb. Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats

6 (2 at +85.5, 2 at +118.1, 2 at +157.6) 7 (2 at +85.5, 3 at +118.1, 2 at +157.6) 6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11) \* - Optional Club Seats

Maximum Baggage

200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity

107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on system fuel

Oil Capacity

12 qt. at +16.6 (9-1/4 qt. usable) See NOTE 1 for data on system oil

## Control Surface Movements

Wing Flaps Up 0° (±1°) Down 40° (±2°) Ailerons Up 28° (±1°) Down 22° (±1°) Rudder Left 28° (±1°) Right 28° (±1°) Stabilator Down Up 14.5° (±0.5°) 5.5° (±0.5°) Stabilator Tab Up 5° (±1°) Down 8° (±1°) Nose Wheel Travel 24° (±2°) Left Right 24° (±2°)

## Manufacturer's Serial Nos.

 $32\text{-}8006002 \text{ through } 32\text{-}8606023, \text{ and } 3206001 \text{ through } 3206019, 3206042 \text{ through } 3206042 \text{$ 3206044, 3206047, 3206050 through 3206055, and 3206060. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32-8006002 through 32-8606023, and 3206001 through 3206019 under the delegation option provisions of FAR 21 (See NOTE 7).

A3SO Page 18 of 31

# XI. - Model PA-32-301T (Turbo Saratoga), 7 PCLM (Normal Category), Approved January 9, 1980.

Same as Model PA-32-300 except for tapered wings, turbocharged powerplant, increased gross weight, and other minor changes.

Engine Lycoming TIO-540-S1AD

Bendix Injector Type RSA-10ED2

Flow Setting No. 2524791

Fuel 100 or 100LL aviation grade fuel

Engine Limits For airplanes equipped with standard Hartzell 2 blade propeller HC-E2YR-1()F/F8477-4:

For 5 minute takeoff, 2700 r.p.m. and 36.0" Hg MAP (300 hp) - Sea level to

16,000 ft. altitude

For maximum continuous operation, 2575 r.p.m. and 36.0" Hg MAP (294 rated hp)

- Sea level to 16,000 ft. altitude

For airplanes equipped with optional Hartzell 3 blade propeller HC-E3YR-1()F/F7673DR-0:

For all operations, 2700 r.p.m. and 36.0" Hg MAP (300 rated hp) - Sea level

to 16,000 ft

<u>Propeller and Propeller Limits</u> Hartzell constant speed Model HC-E2YR-1()F/F8477-4 (standard 2 blade):

Pitch: High  $34^{\circ} \pm 1^{\circ}$ , Low  $15.6^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 80 in., not under 78.5 in. Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N 98708-2 or Hartzell P/N A-2298-2

Hartzell constant speed Model HC-E3YR-1()F/F7673R-0 (optional 3 blade):

Pitch: High  $34.5^{\circ} \pm 1^{\circ}$ , Low  $13.2^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 76 in.

Governor Assembly: Hartzell F-4-11B or F-4-11B() Spinner: Piper P/N PS50077-58 or Hartzell P/N C-3575

<u>Airspeed Limits</u> Never exceed 197 knots (226 m.p.h.) (Indicated) Maximum structural cruise 154 knots (177 m.p.h.)

(with 3600 lb. gross weight)

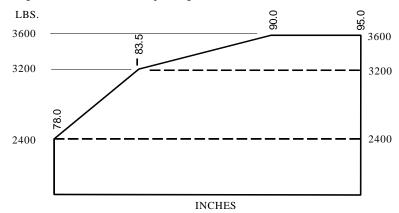
Maneuvering 134 knots (154 m.p.h.) Maximum flaps extended 112 knots (129 m.p.h.) A3SO Page 19 of 31

## XI. - Model PA-32-301T (cont'd)

C.G. Range (gear extended)

(+90.0) to (+95.0) at 3600 lb. (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.



Empty Weight C.G. Range

None

Maximum Weight

Ramp: 3617 lb. Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats

6 (2 at +85.5, 2 at +118.1, 2 at +157.6) 7 (2 at +85.5, 3 at +118.1, 2 at +157.6) 6 (2 at +85.5, \*2 at +119.1, 2 at +157.6) (See NOTE 11) \* - Optional Club Seats

Maximum Baggage

200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

**Fuel Capacity** 

107 gallons at +94.0 (2 wing tanks) (102 gallons usable) See NOTE 1 for data on system fuel

See NOTE I for a

Oil Capacity

12 qt. at +16.6 (9-1/4 qt. usable) See NOTE 1 for data on system oil

Control Surface Movements

Wing Flaps Up 0° (±1°) Down 40° (±2°) Ailerons Up 28° (±1°) Down 22° (±1°) Rudder Right  $28^{\circ} (\pm 1^{\circ})$ Left  $28^{\circ} (\pm 1^{\circ})$ Stabilator Up Down  $5.5^{\circ} (\pm 0.5^{\circ})$ 14.5° (±0.5°) Stabilator Tab Up 5° (±1°) Down 8° (±1°)

Nose Wheel Travel

Left  $24^{\circ} (\pm 2^{\circ})$  Right  $24^{\circ} (\pm 2^{\circ})$ 

Manufacturer's Serial Nos.

32-8024001 and 32-8424002. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 32-8024001 through 32-8424002 the delegation option provisions of FAR 21 (See NOTE 7).

<u>A3SO</u> Page 20 of 31

## XII. - Model PA-32R-301T (Saratoga II TC), 6 PCLM (Normal Category), Approved July 9, 1997.

Same as Model PA-32R-301T, Turbo Saratoga SP, except for new turbocharged powerplant, 28 Volt electrical system and other minor changes.

Engine Lycoming TIO-540-AH1A

Precision Airmotive Injector, Type RSA-10ED1

Flow Setting No. 2576554-2

Fuel 100 or 100LL aviation grade fuel

Engine Limits For all operations, 2500 r.p.m. and 38.0" Hg MAP (300 rated hp) - Sea level to

12,000 ft. altitude

Do not operate above 26.0" Hg MAP below 2100 r.p.m.

Propeller and Propeller Limits Hartzell constant speed Model HC-I3YR-1RF/F7663DR (3 blade)

Hartzell constant speed Model HC-I3YR-1RF/F7663DRB

(3 blade with TKS Ice Protection System)

Pitch: High  $34.0^{\circ} \pm 0.5^{\circ}$ , Low  $15.2^{\circ} \pm 0.2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 76 in.

Governor: Hartzell V-5-6

Spinner Assy: Piper P/N PS50077-90 or Hartzell P/N C-3575-1 (P) Dome: Hartzell P/N 3532-16P (with TKS Ice Protection System)

Airspeed Limits Never exceed 191 knots (Indicated) Maximum structural cruise 167 knots Maneuvering 134 knots

aneuvering

(with 3600 lb. gross weight)

Flaps extended 110 knots
Maximum gear extension 132 knots
Maximum gear retraction 110 knots
Maximum gear extended 132 knots

<u>C.G. Range (gear extended)</u> (+91.4) to (+95.0) at 3600 lb.

(+83.5) to (+95.0) at 3200 lb.

(+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.

18S. 3600
3200
2400

NOTES

1 Solution 1 Sol

Empty Weight C.G. Range None

Maximum Weight Ramp: 3615 lb.

Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats 6 (2 at +85.5, 2 at +119.1, 2 at +157.6)

5 (2 at +85.5, 1 at +119.1, 2 at +157.6)

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

A3SO Page 21 of 31

XII. - Model PA-32R-301T (cont'd)

Fuel Capacity 107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on fuel system

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on oil system

Control Surface Movements Wing Flaps Up 0° (±1°) Down 40° (±2°)

Ailerons Up 28° (±1°) Down 22° (±1°) Rudder Left 28° (±1°) Right 28° (±1°) Stabilator 5.5° (±.5°) Up 14.5° (±.5°) Down Stabilator Tab Up Down 8° (±1°) 5° (±1°)

Manufacturer's Serial Nos. 3257001 and up. The manufacturer is authorized to issue airworthiness certificates for

serial numbers 3257001 and up under the delegation option provisions of FAR 21.

## XIII - Model PA-32-301FT (Piper 6X), 6 PCLM (Normal Category), Approved July 22, 2003.

Similar to Model PA-32R-301, Saratoga IIHP, except for fixed landing gear and other minor changes.

Engine Lycoming IO-540-K1G5

Precision Airmotive Injector, Type RSA-10ED1

Flow Setting No. 2524273

Fuel 100 or 100LL aviation grade fuel

Equipped with Hartzell 3 blade propeller HC-I3YR-1RF/F7663DR:

For all operations, 2700 r.p.m. and full throttle (300 rated hp)

<u>Propeller and Propeller Limits</u> Hartzell constant speed Model HC-I3YR-1RF/F7663DR (3 blade)

Hartzell constant speed Model HC-I3YR-1RF/F7663DRB

(3 blade with TKS Ice Protection System)

Pitch: High  $32.0^{\circ} \pm 1^{\circ}$ , Low  $12.4^{\circ} \pm .2^{\circ}$  at 30 in. station

Diameter: Not over 78 in., not under 77 in.

Governor: Hartzell V-5-4

Spinner Assy: Hartzell P/N C3575-1 (P)

Dome: Hartzell P/N C-3532-16P (with TKS Ice Protection System)

Do not exceed 23" manifold pressure below 2100 r.p.m.

<u>Airspeed Limits</u> For serial number 3232001 and up:

(Indicated) Never exceed 189 knots (218 m.p.h.)

Maximum structural cruise 150 knots (173 m.p.h.) Maneuvering 132 knots (152 m.p.h.)

(with 3600 lb. gross weight)

Flaps extended 113 knots (130 m.p.h.)

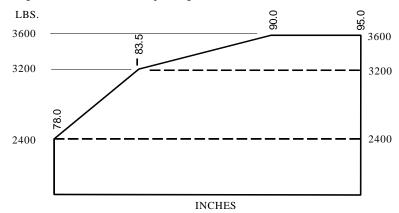
A3SO Page 22 of 31

# XIII. - Model PA-32-301FT (cont'd)

C.G. Range

(+90.0) to (+95.0) at 3600 lb. (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.



Empty Weight C.G. Range

Maximum Weight Ramp: 3615 lb.

Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats 6 (2 at +85.5, 2 at +119.1, 2 at +157.6)

None

<u>Maximum Baggage</u> 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity 107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on fuel system

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable)

See NOTE 1 for data on oil system

<u>Control Surface Movements</u> Wing Flaps Up  $0^{\circ}$  ( $\pm 1^{\circ}$ ) Down  $40^{\circ}$  ( $\pm 2^{\circ}$ )

Ailerons Down Up 28° (±1°) 22° (±1°) Rudder Left Right 28° (±1°) 28° (±1°) Stabilator Up  $14.5^{\circ} (\pm 0.5^{\circ})$ Down 5.5° (±0.5°) Stabilator Tab Up 5° (±1°) Down 8° (±1°) Nose Wheel Travel

Left  $24^{\circ} (\pm 2^{\circ})$  Right  $24^{\circ} (\pm 2^{\circ})$ 

Manufacturer's Serial Nos.

3232001 and up. The manufacturer is authorized to issue airworthiness certificates for serial numbers 3232001 and up under the delegation option provisions of FAR 21.

A3SO Page 23 of 31

## XIV. - Model PA-32-301XTC (Piper 6XT), 6 PCLM (Normal Category), Approved August 28, 2003.

Similar to Model PA-32R-301T, Saratoga IITC, except for fixed landing gear and other minor changes.

**Engine** Lycoming TIO-540-AH1A

Precision Airmotive Injector, Type RSA-10ED1

Flow Setting No. 2576554-2

100 or 100LL aviation grade fuel Fuel

**Engine Limits** For all operations, 2500 r.p.m. and 38.0" Hg MAP (300 rated hp) - Sea level to

12,000 ft. altitude

Do not operate above 26.0" Hg MAP below 2100 r.p.m.

Propeller and Propeller Limits Hartzell constant speed Model HC-I3YR-1RF/F7663DR (3 blade)

Hartzell constant speed Model HC-I3YR-1RF/F7663DRB

(3 blade with TKS Ice Protection System)

High  $34.0^{\circ} \pm 0.5^{\circ}$ , Low  $15.2^{\circ} \pm 0.2^{\circ}$  at 30 in. station Pitch:

Diameter: Not over 78 in., not under 76 in.

Governor: Hartzell V-5-6

Piper P/N PS50077-90 or Hartzell P/N C-3575-1 (P) Spinner Assy: Dome: Hartzell P/N C-3532-16P (with TKS Ice Protection System)

Never exceed Airspeed Limits 189 knots (218 m.p.h.) Maximum structural cruise (Indicated) 150 knots (173 m.p.h.) 132 knots (152 m.p.h.)

Maneuvering

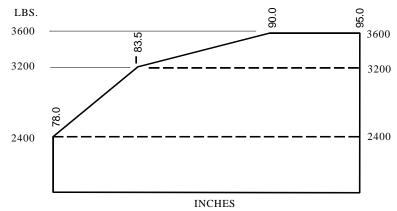
(with 3600 lb. gross weight) Flaps extended

113 knots (130 m.p.h.)

C.G. Range (+90.0) to (+95.0) at 3600 lb.

> (+83.5) to (+95.0) at 3200 lb. (+78.0) to (+95.0) at 2400 lb.

Straight line variation between points given.



Empty Weight C.G. Range None

3615 lb. Maximum Weight Ramp:

Takeoff: 3600 lb. Landing: 3600 lb.

No. of Seats 6 (2 at +85.5, 2 at +119.1, 2 at +157.6)

Maximum Baggage 200 lb. (100 lb. at +42.0, 100 lb. at +178.7)

Fuel Capacity 107 gallons at +94.0 (2 wing tanks) (102 gallons usable)

See NOTE 1 for data on fuel system

Oil Capacity 12 qt. at +16.6 (9-1/4 qt. usable) See NOTE 1 for data on oil system

#### Control Surface Movements

Wing Flaps	Up	0° (±1°)	Down	40° (±2°)
Ailerons	Up	28° (±1°)	Down	22° (±1°)
Rudder	Left	28° (±1°)	Right	28° (±1°)
Stabilator	Up	14.5° (±0.5°)	Down	5.5° (±0.5°)
Stabilator Tab	Up	5° (±1°)	Down	8° (±1°)
Nose Wheel Travel				
	Left	24° (±2°)	Right	24° (±2°)

Manufacturer's Serial Nos.

3255001 and up. The manufacturer is authorized to issue airworthiness certificates for serial numbers 3255001 and up under the delegation option provisions of FAR 21.

#### **Data Pertinent to All Models**

Datum 78.4" forward of wing leading edge

<u>Leveling Means</u> Two screws left side fuselage below window

Certification Basis

Type Certificate No. A3SO issued March 4, 1965. Date of application for Type Certificate, February 20, 1964. Delegation Option Authorization per FAR 21, Subpart J, granted July 17, 1968.

PA-32-260, PA-32S-300, and PA-32-300 (S/N 32-15 through 32-7840202): CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962.

PA-32-300, S/N 32-7940001 through 32-7940290: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.221 and 23.959 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; and FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978. Equivalent Safety Finding for CAR 3.757.

PA-32R-300: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.221 and 23.959 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; and FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977.

PA-32RT-300: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.221, 23.959, and 23.1091 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.427 and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-15, effective October 31, 1974; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; and FAR Part 36, through Amendment 36-7, effective October 1, 1977. Equivalent Safety Finding for CAR 3.757.

PA-32RT-300T: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.221, 23.901, 23.909, 23.959, 23.1041, 23.1043, 23.1047, 23.1091, 23.1143, and 23.1527 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.427 and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 and 23.1305 as amended by Amendment 23-15, effective October 31, 1974; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21 effective March 1, 1978; and FAR Part 36 through Amendment 36-7, effective October 1, 1977. Equivalent Safety Finding for CAR 3.757, 3.84 and 3.86.

A3SO Page 25 of 31

PA-32R-301, S/N 32R-8013001 through 32R-8613006, 3213001 through 3213028, and 3213030 through 3213041: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.207, 23.221, 23.959, and 23.1091 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 and 23.1557(c)(1) as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978; and FAR 36 through Amendment 36-9, effective January 15, 1979. Equivalent Safety Finding for CAR 3.757 and 3.777.

PA-32R-301, S/N 3213029, 3213042 through 3213103, and 3246001 through 3246087: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.207, 23.221, 23.959, and 23.1091 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 and 23.1557(c)(1) as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978; and FAR 36, Appendix G, through Amendment 36-16, effective December 22, 1988. Equivalent Safety Finding for CAR 3,757 and 3,777.

PA-32R-301, S/N 3246088 and up: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.207, 23.221, 23.959, and 23.1091 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978; FAR 23.1545 as amended by Amendment 23-23, effective December 1, 1978; FAR 23.1529 as amended by Amendment 23-26, effective October 14, 1980; FAR 23.1557(c)(1) as amended by Amendment 23-45, effective September 7, 1993; FAR 23.561(b)(3) as amended by Amendment 23-51, effective March 11, 1996; FAR 23.1305 as amended by Amendment 23-52, effective July 25, 1996; and FAR 36 through Amendment 36-16, effective December 22, 1988.

For aircraft S/N 3246218 and up equipped with Piper factory installed optional Avidyne Entegra system and Mid-Continent Model 4300-411 Electric Attitude Indicator, the additional certification basis for installation specific items only (see Report VB-1885) is: 14 CFR Part 23 regulations FAR 23.301, 23.337, 23.341, 23.561, 23.607, 23.611, as amended by Amdt. 23-48; FAR 23.303, 23.307, 23.601, 23.609, 23.1367, 23.1381 issued on 02/01/65; FAR 23.305, 23.613, 23.773, 23.1525, 23.1549 as amended by Amdt. 23-45; FAR 23.603, 23.605 as amended by Amdt. 23-23; FAR 23.777, 23.1191, 23.1337 as amended by Amdt. 23-51; FAR 23.1301, 23.1327, 23.1335 as amended by Amdt. 23-20; FAR 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1329, 23.1351, 23.1353, 23.1359, 23.1361, 23.1365, 23.1431 as amended by Amdt. 23-49; FAR 23.1305 as amended by Amdt. 23-52; FAR 23.1322, 23.1331, 23.1357 as amended by Amdt. 23-43; FAR 23.1325, 23.1543, 23.1545, 23.1555, 23.1563, 23.1581, 23.1583, 23.1585 as amended by Amdt. 23-50; FAR 23. 771 as amended by Amdt. 23-14; FAR 23.1501, 23.1541 as amended by Amdt. 23-21; FAR 23.1523 as amended by Amdt. 23-34; FAR 23.1529 as amended by Amdt. 23-26; Special Condition 23-147-SC for HIRF (Docket No. CE207), dated July 16, 2004.

PA-32R-301T, S/N 32R-8029001 through 32R-8629008, and 3229001 through 3229003: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.965 of FAR 23 effective February 1, 1965; FAR 23.207, 23.221, 23.901, 23.909, 23.959, 23.1041, 23.1043, 23.1047, 23.1091, and 23.1527 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and

A3SO Page 26 of 31

23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1305 as amended by Amendment 23-15, effective October 31, 1974; FAR 23.1093 and 23.1557(c)(1) as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978; and FAR 36 through Amendment 36-9, effective January 15, 1979. Equivalent Safety Finding for CAR 3.757 and 3.777. Compliance with FAR 23.1441 as amended by Amendment 23-9, effective June 17, 1970, will be shown with optional supplemental oxygen.

PA-32-301: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.965 of FAR 23, effective February 1, 1965; FAR 23.207, 23.221, 23.959, and 23.1091 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 and 23.1557(c)(1) as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21, effective March 1, 1978; FAR 23.1545 as amended by Amendment 23-23, effective December 1, 1978; and FAR 36 through Amendment 36-9, effective January 15, 1979.

PA-32-301T: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.965 of FAR 23, effective February 1, 1965; FAR 23.207, 23.221, 23.901, 23.959, 23.1041, 23.1043, 23.1047, 23.1091, 23.1143, and 23.1527 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201 and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1305 as amended by Amendment 23-15, effective October 31, 1974; FAR 23.1093 and 23.1557(e)(1) as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1545 as amended by Amendment 23-21, effective March 1, 1978; FAR 23.1545 as amended by Amendment 23-23, effective December 1, 1978; and FAR 36 through Amendment 36-9, effective January 15, 1979. Compliance with FAR 23.1441as amended by Amendment 23-9, effective June 17, 1970, will be shown with optional supplemental oxygen.

PA-32R-301T, S/N 3257001 and up: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.965 of FAR 23, effective February 1, 1965; FAR 23.207, 23.221, 23.901, 23.909, 23.959, 23.1041, 23.1043, 23.1047, 23.1091, and 23.1527 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581 as amended by Amendment 23-21, effective March 1, 1978; FAR 23.1545 as amended by Amendment 23-23, effective December 1, 1978; FAR 23.1529 as amended by Amendment 23-26, effective October 14, 1980; FAR 23.1557(c)(1) as amended by Amendment 23-45, effective September 7, 1993; FAR 23.1305 as amended by Amendment 23-52, effective July 25, 1996; and FAR 36 through Amendment 36-16, effective December 22, 1988. Compliance with FAR 23.1441 as amended by Amendment 23-9, effective June 17, 1970, has been shown with optional supplemental oxygen.

For aircraft S/N 3257339 and up equipped with Piper factory installed optional Avidyne Entegra system and Mid-Continent Model 4300-411 Electric Attitude Indicator, the additional certification basis for installation specific items only (see Report VB-1885) is: 14 CFR Part 23 regulations FAR 23.301, 23.337, 23.341, 23.561, 23.607, 23.611, as amended by Amdt. 23-48; FAR 23.303, 23.307, 23.601, 23.609, 23.1367, 23.1381 issued on 02/01/65; FAR 23.305, 23.613, 23.773, 23.1525, 23.1549 as amended by Amdt. 23-45; FAR 23.603, 23.605 as amended by Amdt. 23-23; FAR 23.777, 23.1191, 23.1337 as amended by Amdt. 23-51; FAR 23.1301, 23.1327, 23.1335 as amended by Amdt. 23-20; FAR 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323,

A3SO Page 27 of 31

> 23.1329, 23.1351, 23.1353, 23.1359, 23.1361, 23.1365, 23.1431 as amended by Amdt. 23-49; FAR 23.1305 as amended by Amdt. 23-52; FAR 23.1322, 23.1331, 23.1357 as amended by Amdt. 23-43; FAR 23.1325, 23.1543, 23.1545, 23.1555, 23.1563, 23.1581, 23.1583, 23.1585 as amended by Amdt. 23-50; FAR 23. 771 as amended by Amdt. 23-14; FAR 23.1501, 23.1541 as amended by Amdt. 23-21; FAR 23.1523 as amended by Amdt. 23-34; FAR 23.1529 as amended by Amdt. 23-26; Special Condition 23-147-SC for HIRF (Docket No. CE207), dated July 16, 2004.

> For aircraft S/N 3257447, 3257455 and up equipped with Piper factory installed optional Garmin G1000 system, the additional certification basis for installation specific items only (see Report VB-1965) is: 14 CFR Part 23 regulations FAR 23.301, 23.337, 23.341, 23.561, 23.607, 23.611, as amended by Amdt. 23-48; FAR 23.303, 23.307, 23.601, 23.609, 23.1367, 23.1381 issued on 02/01/65; FAR 23.305, 23.613, 23.773, 23.1525, 23.1549 as amended by Amdt. 23-45; FAR 23.603, 23.605 as amended by Amdt. 23-23; FAR 23.777, 23.1191, 23.1337 as amended by Amdt. 23-51; FAR 23.1301, 23.1327, 23.1335, 23.1547 as amended by Amdt. 23-20; FAR 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1326, 23.1329, 23.1351, 23.1353, 23.1359, 23.1361, 23.1365, 23.1431 as amended by Amdt. 23-49; FAR 23.1305 as amended by Amdt. 23-52; FAR 23.1322, 23.1331, 23.1357 as amended by Amdt. 23-43; FAR 23.1325, 23.1543, 23.1545, 23.1553, 23.1555, 23.1563, 23.1581, 23.1583, 23.1585 as amended by Amdt. 23-50; FAR 23. 771 as amended by Amdt. 23-14; FAR 23.1501, 23.1541 as amended by Amdt. 23-21; FAR 23.1523 as amended by Amdt. 23-34; FAR 23.1529 as amended by Amdt. 23-26; Special Condition 23-204-SC for HIRF (Docket No. CE264), dated January 24, 2007.

# PA-32-301FT, S/N 3232001 and up and PA-32-301 XTC, S/N 3255001 and

up: CAR 3, effective May 15, 1956, through Amendment 3-8, effective December 18, 1962. In addition, FAR 23.965 of FAR 23, effective February 1, 1965; FAR 23.207, 23.221, 23.901, 23.909, 23.959, 23.1091, and 23.1527 as amended by Amendment 23-7, effective September 14, 1969; FAR 23.201, 23.203, and 23.967(e)(2) as amended by Amendment 23-14, effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-18, effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20, effective September 1, 1977; FAR 23.1581 as amended by Amendment 23-21, effective March 1, 1978; FAR 23.1545 as amended by Amendment 23-23, effective December 1, 1978; FAR 23.1529 as amended by Amendment 23-26, effective October 14, 1980; FAR 23.853(a) and (c)(1) as amended by Amendment 23-34, effective January 15, 1987; FAR 23.1309 as amended by Amendment 23-41 for the communication and navigation LRUs only; FAR 23.1557(c)(1) as amended by Amendment 23-45, effective September 7, 1993; FAR 23.561(b)(3) as amended by Amendment 23-48, effective March 11, 1996; FAR 23.1041, 23.1043, and 23.1047 as amended by Amendment 23-51, effective March 11, 1996; FAR 23.1305 as amended by Amendment 23-52, effective July 25, 1996; and FAR 36 through the latest Amendment at the time of certification. Compliance with FAR 23.1441 as amended by Amendment 23-9, effective June 17, 1970, has been show with supplemental oxygen for the PA-32-301XTC only.

For aircraft equipped with Piper factory installed S-Tec system 55X autopilot installations, the additional certification basis for installation specific items only is: 14 CFR Part 23 regulations FAR 23.609, 23.627 issued on 02/01/65; FAR 23.611, 23.619, 23.625 as amended by Amdt. 23-7 Eff. 09/14/69; FAR 23.603 as amended by Amdt. 23-23, Eff. 12/01/78; FAR 23.1309 as amended by 23-41 Eff. 11/26/90; FAR 23.572(a)(1), 23.613(a)(b)(d) as amended by Amdt. 23-45,

A3SO Page 28 of 31

Eff. 09/07/93; FAR 23.561(b)(3)(e) as amended by Amdt. 23-48, Eff. 03/11/96; FAR 23.1329 as amended by Amdt. 23-49 Eff. 02/09/96.

For PA-32-301FT aircraft S/N 3232014 and up and PA-32-301XTC aircraft S/N 3255015 and up equipped with Piper factory installed optional Avidyne Entegra system and Mid-Continent Model 4300-411 Electric Attitude Indicator, the additional certification basis for installation specific items only (see Report VB-1885) is: 14 CFR Part 23 regulations FAR 23.301, 23.337, 23.341, 23.561, 23.607, 23.611, as amended by Amdt. 23-48; FAR 23.303, 23.307, 23.601, 23.609, 23.1367, 23.1381 issued on 02/01/65; FAR 23.305, 23.613, 23.773, 23.1525, 23.1549 as amended by Amdt. 23-45; FAR 23.603, 23.605 as amended by Amdt. 23-23; FAR 23.777, 23.1191, 23.1337 as amended by Amdt. 23-51; FAR 23.1301, 23.1327, 23.1335 as amended by Amdt. 23-20; FAR 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1329, 23.1351, 23.1353, 23.1359, 23.1361, 23.1365, 23.1431 as amended by Amdt. 23-49; FAR 23.1305 as amended by Amdt. 23-52; FAR 23.1322, 23.1331, 23.1357 as amended by Amdt. 23-43; FAR 23.1325, 23.1543, 23.1545, 23.1555, 23.1563, 23.1581, 23.1583, 23.1585 as amended by Amdt. 23-50; FAR 23. 771 as amended by Amdt. 23-14; FAR 23.1501, 23.1541 as amended by Amdt. 23-21; FAR 23.1523 as amended by Amdt. 23-34; FAR 23.1529 as amended by Amdt. 23-26; Special Condition 23-147-SC for HIRF (Docket No. CE207), dated July 16, 2004.

For PA-32-301FT aircraft S/N 3232068 and up equipped with Piper factory installed optional Garmin G1000 system, the additional certification basis for installation specific items only (see Report VB-1965) is: 14 CFR Part 23 regulations FAR 23.301, 23.337, 23.341, 23.473, 23.561, 23.607, 23.611, as amended by Amdt. 23-48; FAR 23.303, 23.307, 23.601, 23.609, 23.1367, 23.1381 issued on 02/01/65; FAR 23.305, 23.613, 23.773, 23.1525, 23.1549 as amended by Amdt. 23-45; FAR 23.603, 23.605 as amended by Amdt. 23-23; FAR 23.777, 23.1337 as amended by Amdt. 23-51; FAR 23.1301, 23.1327, 23.1335, 23.1547 as amended by Amdt. 23-20; FAR 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1326, 23.1329, 23.1351, 23.1353, 23.1359, 23.1361, 23.1365, 23.1431 as amended by Amdt. 23-49; FAR 23.1305 as amended by Amdt. 23-52; FAR 23.1322, 23.1331, 23.1357 as amended by Amdt. 23-43; FAR 23.1325, 23.1543, 23.1545, 23.1553, 23.1555, 23.1563, 23.1567, 23.1581, 23.1583, 23.1585 as amended by Amdt. 23-50; FAR 23.771 as amended by Amdt. 23-14; FAR 23.1541 as amended by Amdt. 23-21; FAR 23.1523 as amended by Amdt. 23-34; FAR 23.1529 as amended by Amdt. 23-26; Special Condition 23-204-SC for HIRF (Docket No. CE264), dated January 24, 2007.

Production basis

Production Certificate No. 206. The manufacturer is authorized to issue airworthiness certificates under the delegation option provisions of FAR 21.

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 documents are required:

MODEL	AFM/POH	REPORT NO.	<u>APPROVED</u>	S/N EFFECTIVITY
PA-32-260	AFM AFM	VB-152 VB-156	3- 4-65 12-17-68	32-1 through 32-1110 32-1111 through 32-1297, and 32-7100001 through 32-7200045

A3SO Page 29 of 31

	AFM Supp.	VB-357	8-25-71	32-1 through 32-1297, and
	A 773 6	IID 450	0.1.50	32-7100001 through 32-7100027
	AFM	VB-478	9- 1-72	32-7300001 through 32-7300065
	AFM POH	VB-561 VB-820	5-14-73	32-7400001 through 32-7600024
	РОП	V D-820	8-18-76	32-7700001 through 32-7800008
PA-32-300	AFM	VB-154	5-27-66	32-40000 through 32-40565
	AFM	VB-158	12-17-68	32-40566 through 32-40974, and
				32-7140001 through 32-7240055
	AFM Supp.	VB-357	8-25-71	32-40000 through 32-40974, and
				32-7140001 through 32-7240001
	AFM	VB-393	1-20-72	32-7240056 through 32-7340191
	AFM	VB-562	5-14-73	32-7440001 through 32-7640130
	РОН	VB-830	8-19-76	32-7740001 through 32-7840202
	POH	VB-830, Rev. 4	9-21-78	32-7940001 through 32-7940290
PA-32R-300	РОН	VB-750	8- 1-75	32R-7680001 through 32R-7680525
	РОН	VB-840	8-20-76	32R-7780001 through 32R-7880066
PA-32S-300	AFM	VB-184	2-14-67	32S-40001 through 32S-40565
	AFM	VB-186	12-17-68	32S-40566 through 32S-40974, and
				32S-7140001 through 32S-7240137
	AFM Supp.	VB-357	8-25-71	32S-40001 through 32S-40974, and
				32S-7140001 through 32S-7240137
PA-32RT-300	POH/AFM	VB-890	12-13-77	32R-7885002 through 32-7985106
PA-32RT-300T	POH/AFM	VB-900	5-1-78	32R-7787001, and
				32R-7887002 through 32R-7987126
PA-32R-301	POH/AFM	VB-1080	11-8-79	32R-8013001 through 32R-8613006,
I A-32K-301	I OII/AI WI	V D-1000	11-0-79	3213001 through 3213028, and
				3213030 through 3213041
	POH/AFM	VB-1551	5-31-93	3213029, and
	1 011/111 1/1	V D 1331	5 51 75	3213042 through 3213103
	POH/AFM	VB-1614	7-12-95	3246001 through 3246017
	POH/AFM	VB-1600	11-30-95	3246018 through 3246087
	POH/AFM	VB-1669	6-30-97	3246088 and up
PA-32R-301T	POH/AFM	VB-1090	11-8-79	32R-8029001 through 32R-8629008,
	2011/12/1			and 3229001 through 3229003
	POH/AFM	VB-1647	6-30-97	3257001 and up
	POH/AFM	VB-1975	4-9-2007	3257447, 3257455 and up having the
				Garmin G1000 system installed
PA-32-301	POH/AFM	VB-1060	1-9-80	32-8006002 through 32-8606023, and
11102 001	1 011/111 1/1	, 2 1000	1,00	3206001 through 3206019
PA-32-301T	POH/AFM	VB-1070	1-9-80	32-8024001 through 32-8424002
PA-32-301FT	POH/AFM	VB-1850	7-22-2003	3232001 and up
111 32 3011 1	POH/AFM	VB-1976	4-9-2007	3232061 and up having the Garmin
	1 012/11/11	. 2 27.0	. > 2007	G1000 system installed
				•
PA-32-301XTC	POH/AFM	VB-1881	8-26-2003	3255001 and up

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 locations must include undrainable system oil (not included in oil capacity) and unusable fuel as noted below:

A3SO Page 30 of 31

Models PA-32-260 and PA-32-300 (S/N 32-40000 through 32-40974, and 32-7140001 through 32-7840202):

Fuel 2.3 lb. at +103.0

 $Models\ PA-32R-300,\ PA-32RT-300,\ PA-32RT-300T\ and\ PA-32-300\ (S/N\ 32-7940001\ through\ 32-7940290):$ 

Fuel 24.0 lb. at +103.0

Models PA-32R-301, PA-32R-301T, PA-32-301T, PA-32-301T, PA-32-301TT and PA-32-301XTC:

Fuel 30.0 lb. at +95.2

Model PA-32-260:

Oil 2.4 lb. at +23.0

Models PA-32-300, PA-32R-300, PA-32RT-300T, PA-32R-301, PA-32R-301T, PA-32-301 and PA-32-301T:
Oil 3.0 lb, at +23.0

- NOTE 2 All placards required in the Approved Airplane Flight Manual or "Pilot's Operating Handbook and Approved Airplane Flight Manual" and Approved A.F.M. Supplements, plus the following placards, must be displayed in full view of the pilot, in the appropriate location.
  - (a) "THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS, AND MANUALS. NO ACROBATIC MANEUVERS, INCLUDING SPINS, APPROVED."
  - (b) "THIS AIRCRAFT APPROVED FOR VFR, IFR, DAY AND NIGHT NON-ICING FLIGHT WHEN EQUIPPED IN ACCORDANCE WITH FAR 91 OR FAR 135."
- NOTE 3 The Models PA-32-260, PA-32-300, and PA-32S-300, 6 PCLM, may be converted to the 7 place (7 PCLM) configuration by the installation of Piper Kit No. 69072-3. All weight in excess of 3112 lb. must be fuel weight only. This restriction does not apply to PA-32-300 aircraft, S/N 32-7940001 through 32-7940290.
- NOTE 4 When the Model PA-32S-300 is operated in a landplane configuration, use the PA-32-300 C.G. envelope with the corresponding airplane serial number (last five digits).
- NOTE 5 The Model PA-32-260, S/N 32-1 through 32-1297, and 32-7100001 through 32-7700023, and Model PA-32-300, S/N 32-40001 through 32-40974, and 32-7140001 through 32-7740113, require two nose wheel centering springs (P/N 67168) installed, if the optional nose wheel fairing or the optional nose and main wheel fairings are removed or not installed.

The Model PA-32-260, S/N 32-7800001 through 32-7800008, and Model PA-32-300, S/N 32-7840001 through 32-7940290, require rudder centering spring (P/N 37929-2) installed, if the optional nose wheel fairing or the optional nose and main wheel fairings are removed or not installed.

The Model PA-32-260, S/N 32-7800001 through 32-7800008, requires the removal of the nose gear strut fairing (P/N 37891) when the nose gear wheel fairing is removed or not installed.

- NOTE 6 Models PA-32-260, PA-32-300, PA-32S-300, and PA-32R-301 (S/N 32R-8013001 through 32R-8613006, 3213001 through 3213028, and 3213030 through 3213041) may be operated with the spinner dome removed or with the spinner dome and rear bulkhead removed. Models PA-32R-300, PA-32RT-300 and PA-32-301 may be operated with spinner dome and front bulkhead removed.
- NOTE 7 The following serial numbered aircraft are not eligible for import certification to the U.S.:

#### PA-32-300:

32-40491, 32-40503, 32-40518, 32-40532, 32-40533, 32-40544, 32-40545, 32-40965, 32-40966, 32-40968 through 32-40974, 32-7240120, 32-7240123, 32-7240126, 32-7240129, 32-7240132, 32-7340155, 32-7340159, 32-7340160, 32-7340172, 32-7440144, 32-7540114, 32-7540136, 32-7640127, 32-7740100, 32-7840028, 32-7940141, and 32-7940240.

## PA-32R-300:

32R-7680409, 32R-7680410, 32R-7780520, 32R-7880057, 32R-7880058, 32R-7880067, and 32R-7880068. PA-32RT-300:

32R-7885027, 32R-7885099, 32R-7885100, 32R-7885176, 32R-7885177, 32R-7885213 through 32R-7885215, 32R-7885234 through 32R-7885237, 32R-7885259, 32R-7885260, 32R-7885285, and 32R-7985027. PA-32RT-300T:

32R-7887036, 32R-7887081, 32R-7887222, 32R-7987050, 32R-7987085, and 32R-7987122. PA-32R-301T: A3SO Page 31 of 31

32R-8029121, 32R-8129041, 32R-8229065, and 32R-8329017.

#### PA-32-301:

32-8006090, 32-8106043, and 3206005, 3206020 through 3206041, 3206045, 3206046, 3206048, 3206049, 3206056 through 3206059, 3206061 through 3206088.

#### PA-32-301T:

32-8024031, 32-8024032, 32-8124011, 32-8124017, 32-8124018, 32-8124035, 32-8124036, 32-8224011, 32-8224013, 32-8224014, 32-8324006, 32-8324015, and 32-8324016.

- NOTE 8 The fixed pitch propeller may be used on S/N 32-1 through 32-1297, and 32-7100001 through 32-7200045.
- NOTE 9 The following serial numbered aircraft are not eligible for import certification to the U.S.:

AR32-7440144, AR32-7340133, AR32-7340155, AR32-7340159, AR32-7340160, AR32-7340172.

- NOTE 10 Engines with serial numbers ending with "A" require the F-4-11() propeller governor assembly. Other engines require the F-4-4() propeller governor.
- NOTE 11 In the following serial numbered aircraft the rear seat location is farther aft as shown and the center seats may be removed and replaced by CLUB SEATS INSTALLATION, which has a more aft C.G. location as shown:

PA-32-260	S/N 32-7/00001 through 32-7800008
PA-32-300	S/N 32-7740001 through 32-7940290
PA-32R-300	S/N 32R-7780001 through 32R-7880068
PA-32RT-300	S/N 32R-7885002 through 32R-7985106
PA-32RT-300T	S/N 32R-7787001 32R-7887002 through 3

PA-32RT-300T S/N 32R-7787001, 32R-7887002 through 32R-7987126

PA-32R-301 S/N 32R-8013001 through 32R-8613006, 3213001 through 3213103, and

3246001 and up

PA-32R-301T S/N 32R-8029001 through 32R-8629008, and 3229001 through 3229003 PA-32-301 S/N 32-8006002 through 32-8606023, and 3206001 through 3206019 PA-32-301T S/N 32-8024001 through 32-8424002

- NOTE 12 Lycoming engine Model IO-540-K1G5 with Hartzell propeller HC-C2YK-1(F), Blade Model 8475D-4, S/N 32-7640066 (only) and S/N 32-7640072 through 32-7940290.
- NOTE 13 Lycoming engine Model IO-540-K1G5D with Hartzell propeller HC-C2YK-1(F), Blade Model 8475D-4, S/N 32R-7680141 through 32R-7880068.
- NOTE 14 On Models PA-32-301, S/N 32-8006001 through 32-8606023 and 3206001 through 3206019, and PA-32-301T, S/N 32-8024001 through 32-8424002, the wheel fairings alone or the wheel fairings and landing gear strut fairings may be removed.
- NOTE 15 On models PA-32-301FT, S/N 3232001 and up, and PA-32-301XTC, S/N 3255001 and up, the nose wheel centering springs must be installed when operating the aircraft with or without wheel pants.

...END...