DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A25SO Revision 35 Piper PA-46-310P PA-46-350P PA-46-500TP PA-46R-350T PA-46-600TP December 14, 2021

TYPE CERTIFICATE DATA SHEET NO. A25SO

This data sheet, which is part of Type Certificate No. A25SO, prescribes conditions and limitations under which the product for which 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 A25SO to Piper Aircraft, Inc on August 7,

2006.

I. - Model PA-46-310P (Malibu), 6 PCLM (Normal Category), Approved September 27, 1983.

Engine Teledyne Continental, TC No. E8CE, Model TSI0-520-BE

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

Engine Limits For all operations:

Rev. No.

26 | 35

2600 RPM and 38" Hg MAP (310 HP), sea level to 24,000 ft.

2600 RPM and 35" Hg MAP above 24,000 ft.

2400 RPM and 31" Hg MAP maximum when leaned to 50° F lean of peak,

any altitude.

Propeller and Propeller Limits Hartzell, TC No. P-920, Hub BHC-C2YF-1BF, Blade F8052 ()

Pitch: High $38.0^{\circ} \pm 1^{\circ}$, Low $16.0^{\circ} \pm 0.2^{\circ}$ at 30" station.

Diameter: Not over 80", not under 78".

Spinner: Hartzell D-4810 or D-4810P.

Governor: Hartzell Model E-5-2.

<u>Airspeed Limits</u> V_{NF} (Never Exceed) 203 KIAS

 $\begin{array}{lll} V_{NO} & (\text{Maximum Structural Cruise}) & 173 \text{ KIAS} \\ V_{A} & (\text{Maneuvering 4100 lb.}) & 135 \text{ KIAS} \\ V_{A} & (\text{Maneuvering 2450 lb.}) & 103 \text{ KIAS} \\ V_{FE} & (\text{Maximum Flaps Extended}) & 120 \text{ KIAS} \\ \end{array}$

V_{I,O} (Maximum Landing Gear Operation)

Extension 170 KIAS
Retraction 130 KIAS
V_{I,E} (Maximum Landing Gear Extended) 200 KIAS

C.G. Range (Gear Extended) WT. FWD. LIMIT AFT LIMIT (LB.) IN. AFT OF DATUM IN. AFT OF DATUM

L	Page No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Rev. No.	35	16	34	35	24	23	35	26	34	25	29	29	24	29	28	35	35	35	32	35
	Page No.	21	22																		

A25SO Page 2 of 22

4100 143.3 in. 147.1 in. 3680 136.1 in. 147.1 in. 2450 or less 130.7 in. 147.1 in.

Empty Weight C.G. Range None

<u>Maximum Weight</u> Ramp: 4118 lb.

Takeoff: 4100 lb. Landing: 3900 lb.

No. of Seats 6 (2 at +135.5, 2 at +177.0, 2 at +218.75)

Maximum Baggage 100 lb. at (+88.6) (Fwd.)

100 lb. at (+248.23) (Aft)

Fuel Capacity 122 gals. at (+150.31) (2 wing tanks)

See NOTE 1 for data on system fuel.

Oil Capacity 8 qts. at (+53.5)

See NOTE 1 for data on system oil.

<u>Maximum Operating Altitude</u> 25,000 ft.

Maximum Cabin Operating

Pressure Differential 5.5 PSID

<u>Control Surface Movements</u> Ailerons (±1°) Up 18° Down 18°

Elevator Up 23.5° Down 14.5 ° $(\pm .5^{\circ})$ Rudder $(+1^{\circ}, -0^{\circ})$ Left Right 26° 30° $(+0^{\circ}, -1^{\circ})$ Elevator Down 24.5° Up 19° Trim Tab (Elevator Neutral)

Wing Flaps Up 0° (±1°) Down 35° (±1°)

S/N 46-8608001 and up

<u>Manufacturer's Serial Numbers</u> 46-8408001 through 46-8508001 through 46-8508109,

46-8608001 through 46-8608067, 4608001 through 4608140.

II. - Model PA-46-350P (Malibu Mirage), 6 PCLM (Normal Category), Approved August 30, 1988.

Engine Textron Lycoming, TC No. E14EA, Model TIO-540-AE2A

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits For all operations:

2500 RPM and 42.0" Hg MAP (350 HP), sea level to 20,600 ft.

42 - 1.6" Hg MAP decrease per each $1000~\mathrm{ft.}$ altitude increase, $20,\!600~\mathrm{ft.}$ to $25,\!000~\mathrm{ft.}$

Propeller and Propeller Limits Hartzell, TC No. P42GL, Hub HC-I2YR-1BF, Blade F8074 (standard 2 blade-Serial

Numbers 4622001 through 4622200 and 4636001 through 4636195) Pitch: High $40.5^{\circ} \pm 0.5^{\circ}$ Low $17.6^{\circ} \pm 0.2^{\circ}$ at 30" station.

Diameter: Not over 80", not under 79".

Spinner: Hartzell A-2298-3P.

Governor: Hartzell Model V-5-2 or V-11-1

The following limitation is applicable to the two-bladed aluminum propeller

installation:

Do not exceed 36" MAP below 2400 RPM Do not exceed 32" MAP below 2300 RPM

A25SO Page 3 of 22

Hartzell, TC No. P33EA, Hub HC-I3YR-1E, Blade 7890K, 3-blade, Serial Numbers

4636132 and up

Pitch: High $38.7^{\circ} \pm 0.5^{\circ}$ Low $13.65^{\circ} \pm 0.15^{\circ}$ at 30" station.

Diameter: 80'

Spinner: Hartzell D-6750P.

Governor: Hartzell Model V-5-2 or V-11-1

Hartzell, TC No. P33EA, Hub HC-I3Y1R-1N, Blade N7605C+2, or N7605CK+2, 3-

blade, Serial Numbers 4636460, 4636463 and up

Pitch: High $38.0^{\circ} \pm 1.0^{\circ}$ Low $14.0^{\circ} \pm 0.2^{\circ}$ at 30" station.

Diameter: 80

Spinner: Hartzell D-6750-1P.

Governor: Hartzell Model V-5-2, V-11-1 or S-1-30

Airspeed Limits V_{NF} (Never Exceed) 198 KIAS

V_{FE} (Maximum Flaps Extended) 116 KIAS

V_{I,O} (Maximum Landing Gear Operation)

Extension 165 KIAS
Retraction 126 KIAS
V_{I F} (Maximum Landing Gear Extended) 195 KIAS

C.G. Range (Gear Extended) WT. FWD. LIMIT AFT LIMIT

IN. AFT OF DATUM (LB.) IN. AFT OF DATUM 4300 (4340) 143.3 in. (144.1 in) 147.1 in. 4100 (4123) 139.1 in. (139.6 in) 147.1 in. 137.0 in. 4000 146.5 in. 2450 130.7 in. 137.6 in 2400 130.7 in. 137.3 in.

Note: Numbers in parentheses apply to serial numbers 4636196 and up.

Empty Weight C.G. Range None

Maximum Weight Ramp: 4318 lb. (4358 lb.)

Takeoff: 4300 lb. (4340 lb.) Landing: 4100 lb. (4123 lb.)

Note: Numbers in parentheses apply to serial numbers 4636196 and up.

No. of Seats 6 (2 at +135.5, 2 at +177.0, 2 at +218.75)

Maximum Baggage 100 lb. at (+88.6) (Fwd.)

100 lb. at (+248.23) (Aft)

Fuel Capacity 122 gals. at (+150.31) (2 wing tanks)

See NOTE 1 for data on system fuel.

Oil Capacity 12 qts. at (+53.5)

See NOTE 1 for data on system oil.

Maximum Operating Altitude 25,000 ft.

Maximum Cabin Operating

<u>Pressure Differential</u> 5.5 PSID (+0.1, -0.15)

A25SO Page 4 of 22

Control Surface Movements	Ailerons	(±1°)	Up	18°	Down	18°
Control Buriace Movements		` '	•			
	Elevator	$(\pm 0.5^{\circ})$	Up	23.5°	Down	14.5°
	Rudder	$(+1^{\circ}, -0^{\circ})$	Left	26°	Right	30°
	Elevator	$(+0^{\circ}, -1^{\circ})$	Down	24.5°	Up	19°
	Trim Tab	(Elevator Neutral)				
	Wing Flaps		Up	0° (±1°)	Down	10° (±2°)
						20° (+2°, -0°)
						36° (+0°, -1°)

Manufacturer's Serial Numbers 4622001 through 4622200, and 4636001 and up.

III. - Model PA-46-500TP (Malibu Meridian), 6PCLM (Normal Category), Approved September 27, 2000.

Engine Pratt & Whitney Canada, PT6A-42A

(per PWC Build Specifications BS1011, BS1192 or BS1430)

<u>Fuel</u> Jet A and A-1 fuels conforming to Pratt & Whitney Specification 522

or Service Bulletin 3044, CPW204. (Fuels shall conform to the specification as listed or to subsequent revisions thereto.)

MIL-DTL-85470 Fuel System Icing Inhibitor or equivalent must be used in

the fuel in the amount up to 0.15% by volume.

Oil (Engine & Gearbox) PWC PT6 Engine Service Bulletin No. 3001 lists approved brand oils.

Engine Limits Takeoff and max continuous power 500 SHP

Compressor Turbine Speed (Ng) 39000 RPM (104%)*

Propeller Speed (Np) 2205 RPM*

* See Note 5

Propeller and Propeller Limits Hartzell, T.C. No. P10NE, Hub HC-E4N-3Q, Blade E8501B-3.5

Pitch: Low 19.0° ± 0.1° at 30" station. Diameter: Not over 82.5", not under 81.5".

Spinner: Hartzell D-630-5P

Governor: Woodward Model 210 638 or Woodward Model 210 695

 V_{FE} (Flaps Extended Speed for 10° Flaps) 168 KIAS V_{FE} (Flaps Extended Speed for 20° Flaps) 135 KIAS V_{FE} (Flaps Extended Speed for 36° Flaps) 118 KIAS

V_{LO} (Maximum Landing Gear Operation)

<u>C.G. Range</u> For airplanes S/N 4697001, 4697003 through 4697156:

WT.	FWD LIMIT	AFT LIMIT
(LB.)	IN. AFT OF DATUM	IN. AFT OF DATUM
4892	140.22 in.	147.10 in.
4850	140.06 in.	147.10 in.
4100	137.23 in.	147.10 in.
3508	135.00 in.	143.67 in
3000	135.00 in.	140.75 in

For airplanes S/N 4697157 and up and earlier airplanes having Kit 767-360 installed:

WT.	FWD LIMIT	AFT LIMIT
(LB.)	IN. AFT OF DATUM	IN. AFT OF DATUM
5134	141.13 in.	147.10 in.
5092	140.97 in.	147.10 in.

A25SO Page 5 of 22

Hard							
		4892	140.22 i	in.	147.1	0 in.	
Sample		4850	140.06 i	in.	147.1	0 in.	
Maximum Weight Maxi							
Maximum Weight C.G. Range Maximum Weight Maximum Operating Altitude Maximum Operating Altitude Maximum Weight Max							
Maximum Weight		3000	133.00	ın.	140.7	3 III.	
CIR CIR	Empty Weight C.G. Range	None					
For airplanes S/N 4697156: 4850 4850 4850 4850 4867001 4697003 through 4697157 5134 5092 4850	Maximum Weight			RAMP	TAKEOFF	LANDING	MZFW
A697003 through 4697156: For airplanes S/N 4697157 5134 5092 4850 4850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A850 A8							<u>(LB.)</u>
Maximum Baggage 100 lbs. at (+248.23) C2 wing tanks Fuel Capacity 173 galloms at (+148.75) (2 wing tanks 173 galloms at (+148.75) (2 wing tanks 170 galloms (1140 lbs.) useable See Note for data on system fuel. Oil Capacity 12 quarts at (+77.76) See Note for data on system fuel. OAT Operating Limitation For airplames S/N 4697001, 4697003 through 4697173:				4892	4850	4850	
Maximum Baggage 100 lbs. at (+248.23) C2 wing tanks) 173 galloms at (+148.75) (2 wing tanks) 170 galloms (1140 lbs.) useable See Note 1 for data on system fuel.		For airplanes S/N 4697	157	5134	5092	4850	4850
No. of Seats 6 (2 at +135.5, 2 at 177.0, 2 at 218.75)				5151	30,2	1030	1050
Maximum Baggage 100 lbs. at (+248.23) Fuel Capacity 173 gallons (1140 lbs.) useable See Note 1 for data on system fuel. Oil Capacity 12 quarts at (+77.76) See Note 1 for data on system oil. Maximum Operating Altitude 30,000 ft. OAT Operating Limitation For airplanes S/N 4697001, 4697003 through 4697173: +46°C (+115°F) maximum -34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1 For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum in-flight with Jet-A -41°C (-42°F) minimum in-flight with Jet-A -41°C (-42°F) minimum in-flight with Jet-A -1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileo							
173 gallons at (+148.75) (2 wing tanks) 170 gallons (1140 lbs.) useable See Note 1 for data on system fuel.	No. of Seats	6 (2 at +135.5, 2 a	nt 177.0, 2 a	at 218.75)			
170 gallons (1140 lbs.) useable See Note 1 for data on system fuel.	Maximum Baggage	100 lbs. at (+248.2	23)				
170 gallons (1140 lbs.) useable See Note 1 for data on system fuel.	Fuel Capacity	173 gallons at (+1	48.75)	(2 wing	tanks)		
Dil Capacity 12 quarts at (+77.76) See Note 1 for data on system oil.		170 gallons (1140	lbs.) useab	ole	•		
See Note 1 for data on system oil.		See Note 1 for dat	a on syster	n fuel.			
See Note 1 for data on system oil.	Oil Capacity	12 quarts at (+77.	76)				
OAT Operating Limitation For airplanes S/N 4697001, 4697003 through 4697173: +46°C (+115°F) maximum -34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1 For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential S.5 PSID (+0.1, -0.15) Control Surface Movements Ailero (±1°) Up 18° Down 18° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	<u>On Capacity</u>			n oil.			
OAT Operating Limitation For airplanes S/N 4697001, 4697003 through 4697173: +46°C (+115°F) maximum -34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1 For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential S.5 PSID (+0.1, -0.15) Control Surface Movements Ailero (±1°) Up 18° Down 18° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	Maximum Operating Altitude	20,000 ft					
+46°C (+115°F) maximum -34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1	Maximum Operating Attitude	30,000 11.					
-34°C (-30°F) minimum with Jet-A -41°C (-42°F) minimum with Jet A-1 For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (± 1°) Up 18° Down 18° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	OAT Operating Limitation	-		4697003 thr	ough 4697173:		
-41°C (-42°F) minimum with Jet A-1 For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed:				Ŧ . A			
For airplanes S/N 4697174 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-381 installed: -34°C (-65°F) minimum For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (± 1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)							
Piper Kit 767-380 installed and S/N 4697159 through 4697173 having Piper Kit 767-381 installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)		-41 C (-42 F) IIIII	iiiiiuiii witii	I Jet A-1			
installed: +46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)							
#46°C (+115°F) maximum -54°C (-65°F) minimum Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)			installed a	nd S/N 469	7159 through 469	97173 having Pip	er Kit 767-381
Minimum Fuel Temperature For airplanes S/N 4697159 and up and S/N 4697001, 4697003 through 4697158 having Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)			navimum				
Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)							
Piper Kit 767-380 installed: -34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	Minimum Fuel Temperature	For airplanes S/N	4607150 a	nd un and S	!/N 4607001 460	7003 through 46	07158 having
-34°C (-30°F) minimum for starting with Jet-A/A-1 -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	willimum Fuer Temperature			nd up and s	711 402 7001, 402	7003 tillough 40.	77136 having
-41°C (-42°F) minimum inflight with Jet A-1 NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential 5.5 PSID (+0.1, -0.15) Control Surface Movements Aileron (±1°) Up 18° Down 18° Elevator (±.5°) Up 23.5° Down 14.5° Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)				starting with	ı Jet-A/A-1		
NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum fuel temperature limits must be observed. Maximum Cabin Operating Pressure Differential							
		-41°C (-42°F) min	imum infli	ght with Jet	t A-1		
		NOTE: When a	mixture of	Jet A and J	et A-1 is present	in the fuel tanks,	the Jet A minimum
		fuel tem	perature li	mits must b	e observed.		
	Maximum Cabin Operating						
Elevator $(\pm .5^{\circ})$ Up 23.5° Down 14.5° Elevator Trim Tab $(+0^{\circ},-1^{\circ})$ Up 19° Down 24.5° (Elevator Neutral)		5.5 PSID (+0.1, -0).15)				
Elevator $(\pm .5^{\circ})$ Up 23.5° Down 14.5° Elevator Trim Tab $(+0^{\circ},-1^{\circ})$ Up 19° Down 24.5° (Elevator Neutral)	Control Surface Movements	Aileron		(± 1°)	Un 18°	Down 190	
Elevator Trim Tab (+0°,-1°) Up 19° Down 24.5° (Elevator Neutral)	Control Surface Iviovements				-		
			,		•		Elevator Neutral)
					-		· · · · · ,
Rudder Trim Tab $(\pm 1^{\circ})$ Left 13.5° Right 13° (Rudder Neutral)				(<u>+</u> 1°)		-	
Wing Flaps Up $0^{\circ} (\pm 1^{\circ})$ Down $10^{\circ} (\pm 2^{\circ})$		Wing Flaps			Up 0° (<u>+</u> 1°)		

20° (+2°,-0°) 36° (+0°,-1°) A25SO Page 6 of 22

Manufacturer's Serial Numbers 4697001, 4697003 and up

IV. - Model PA-46R-350T (Malibu Matrix), 6 PCLM (Normal Category), Approved October 26, 2007.

Engine Textron Lycoming, TC No. E14EA, Model TIO-540-AE2A

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits For all operations:

2500 RPM and 42.0" Hg MAP (350 HP), sea level to 20,600 ft.

42 - 1.6" Hg MAP decrease per each 1000 ft. altitude increase, 20,600 ft. to 25,000 ft.

Propeller and Propeller Limits Hartzell, TC No. P33EA, Hub HC-I3YR-1E, Blade 7890K or 7890B, 3-blade

Pitch: High $38.7^{\circ} \pm 0.5^{\circ}$ Low $13.65^{\circ} \pm 0.15^{\circ}$ at 30" station.

Diameter: 80"

Spinner: Hartzell D-6750P. Governor: Hartzell Model V-11-1

Hartzell, TC No. P33EA, Hub HC-I3Y1R-1N, Blade N7605+2 or N7605K+2, or

N7605C+2, or N7605CK+2 3-blade, Serial Numbers 4692123 and up Pitch: High $38.0^{\circ} \pm 1.0^{\circ}$ Low $14.0^{\circ} \pm 0.2^{\circ}$ at 30" station.

Diameter: 80'

Spinner: Hartzell D-6750-1P.

Governor: Hartzell Model V-11-1 or S-1-30

Airspeed Limits	V _{NE} (Never Exceed)	198 KIAS
	V _{NO} (Maximum Structural Cruise)	168 KIAS

 $V_{A} \ (\text{Maneuvering 4340 lb.}) \\ V_{A} \ (\text{Maneuvering 2900 lb.}) \\ 108 \ \text{KIAS} \\ V_{FE} \ (\text{Maximum Flaps Extended for } 10^{\circ}) \\ 165 \ \text{KIAS} \\ V_{FE} \ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ 130 \ \text{KIAS} \\ (\text{Maximum Flaps Extended for } 20^{\circ}) \\ (\text{Maximum Flaps Extended for$

 V_{FE} (Maximum Flaps Extended for 36°) V_{LO} (Maximum Landing Gear Operation)

Extension 165 KIAS Retraction 126 KIAS $V_{I,F}$ (Maximum Landing Gear Extended) 195 KIAS

C.G. Range (Gear Extended) WT. FWD. LIMIT AFT LIMIT

(LB.)	<u>IN. AFT OF DATUM</u>	<u>IN. AFT OF DATUM</u>
4340	144.1 in	147.1 in.
4123	139.6 in	147.1 in.
4000	137.0 in.	146.5 in.
2900	132.5 in.	140.2 in

116 KIAS

Empty Weight C.G. Range None

Maximum Weight Ramp: 4358 lb.

Takeoff: 4340 lb. Landing: 4123 lb.

No. of Seats 6 (2 at +135.5, 2 at +177.0, 2 at +218.75)

<u>Maximum Baggage</u> 100 lb. at (+88.6) (Fwd.) 100 lb. at (+248.23) (Aft) A25SO Page 7 of 22

(2 wing tanks) Fuel Capacity 122 gals. at (+150.31)

See NOTE 1 for data on system fuel.

Oil Capacity 12 qts. at (+53.5)

See NOTE 1 for data on system oil.

Maximum Operating Altitude 25,000 ft.

Control Surface Movements Ailerons $(\pm 1^{\circ})$ Up 18° Down 18° Elevator Up 23.5° Down 14.5 ° $(\pm 0.5^{\circ})$

Rudder $(+1^{\circ}, -0^{\circ})$ Left 26° Right 30° Elevator $(+0^{\circ}, -1^{\circ})$ Down 24.5° Up 19°

Trim Tab (Elevator Neutral)

Wing Flaps Up 0° (±1°) Down 10° (±2°)

 $20^{\circ} (+2^{\circ}, -0^{\circ})$

 $36^{\circ} (+0^{\circ}, -1^{\circ})$

Manufacturer's Serial Numbers 4692001 and up.

V. - Model PA-46-600TP (M600), 6PCLM (Normal Category), Approved June 16, 2016.

Pratt & Whitney Canada, PT6A-42A **Engine**

(per PWC Build Specification BS1322 or BS1415)

Fuel Jet A and A-1 fuels conforming to Pratt & Whitney Specification 522

> or Service Bulletin 3044, CPW204. (Fuels shall conform to the specification as listed or to subsequent revisions thereto.)

MIL-DTL-85470 Fuel System Icing Inhibitor or equivalent must be used in

the fuel in the amount up to 0.15% by volume.

Oil (Engine & Gearbox) PWC PT6 Engine Service Bulletin No. 3001 lists approved brand oils.

Engine Limits Takeoff and max continuous power 600 SHP

> Compressor Turbine Speed (Ng) 39000 RPM (104%)* Propeller Speed (Np) 2205 RPM*

* See Note 5

Propeller and Propeller Limits Hartzell, T.C. No. P10NE, Hub HC-E4N-3Q, Blade E8501K-3.5*1

> Low $19.0^{\circ} + 0.1^{\circ}$ at 30" station. Pitch: Not over 82.5", not under 81.5". Diameter:

Spinner: Hartzell D-630-5P

Governor: Woodward Model 210695

Hartzell, T.C. No. P00015CH, Hub 5D3-N338A1, Blade 78D01B

Low 17.7° ± 0.1° at 30" station Pitch:

Feather 83.2° ± 0.5° at 30" station

Reverse -11.0° \pm 0.5° at 30" station

Diameter: 82.5 inches (No additional reduction permitted)

Spinner: Hartzell Standard: 106917(P) or Light Weight: 105951(P)

Governor: Woodward Model 210695

V_{MO} (Maximum Operating Airspeed) Airspeed Limits 250 KCAS

M_{MO} (Maximum Operating Mach) 0.55 M

Vo (Maximum Operating Maneuvering Speed)

6000 lbs 151 KCAS 3750 lbs 119 KCAS

V_{FE} (Flaps Extended Speed for T/O Flaps)

Flaps Extended Speed for T/O Flaps 145 KCAS Flaps Extended Speed for LND Flaps 108 KCAS V_{LE} (Maximum Landing Gear Extended) 168 KCAS

V_{LO} (Maximum Landing Gear Operation)

V_{LOE} Extension 168 KCAS V_{LOR} Retraction **128 KCAS**

Page 8 of 22 A25SO

C.G. Range For airplanes S/N 4698001 and up:

WT.	FWD LIMIT	AFT LIMIT
(LB.)	IN. AFT OF DATUM	IN. AFT OF DATUM
6050	144.00 in.	146.00 in.
6000	144.00 in.	146.00 in.
5850	141.26 in	146.00 in.
5800	141.15 in.	146.00 in.
4850	139.05 in.	146.00 in.
3925	137.00 in	142.40 in
3500	137.00 in	140.00 in

Empty Weight C.G. Range None

RAMP **TAKEOFF** LANDING **MZFW** Maximum Weight (LB.) (LB.) (LB.) (LB.) For airplanes S/N 4698001 and up: 6050 6000 5800 4850

6 (1 at +140.6, 1 at 141.8, 2 at 171.9, 2 at 223.8) No. of Seats

Maximum Baggage 100 lbs. at (+248.20)

Fuel Capacity 263.2 gallons at (+148.90) (2 wing tanks)

260 gallons (1742 lbs.) useable See Note 1 for data on system fuel.

Oil Capacity 12 quarts at (+77.76)

See Note 1 for data on system oil.

Maximum Operating Altitude 30,000 ft.

OAT Operating Limitation +46°C (+115°F) maximum -54°C (-65°F) minimum

Minimum Fuel Temperature -34°C (-30°F) minimum for starting with Jet-A/A-1

> -34°C (-30°F) minimum in-flight with Jet-A -41°C (-42°F) minimum inflight with Jet A-1

NOTE: When a mixture of Jet A and Jet A-1 is present in the fuel tanks, the Jet A minimum

fuel temperature limits must be observed.

Maximum Cabin Operating

Pressure Differential 5.5 PSID (+0.1, -0.15)

Control Surface Movements Up 24.7° Down 20° Aileron $(\pm 1^{\circ})$ Down 14° Elevator $(+.5^{\circ})$ Up 13 °

Elevator Trim Tab $(+0^{\circ},-1^{\circ})$ Up 19° Down 16° (Elevator Neutral)

Rudder $(+1^{\circ}-0^{\circ})$ Left 20° Right 30°

Rudder Trim Tab Left 13.5° Right 13° (Rudder Neutral) (<u>+</u>1°) Wing Flaps Up 0° (<u>+</u>1°) Down 15° (±1°)

35° (<u>+</u>1°)

Manufacturer's Serial Numbers 4698001 and up

DATA PERTINENT TO ALL MODELS

A25SO Page 9 of 22

Datum 100 in. forward pressure bulkhead.

Leveling Means Top or bottom fuselage at B.L. 0 (constant section).

Certification Basis Type Certificate No. A25SO issued September 27, 1983.

Date of application for Type Certificate, August 22, 1979.

PA-46-310P and PA-46-350P:

FAR Part 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980; FAR 25.783(e) as amended by Amendment 25-54, effective October 14, 1980; FAR 25.831(c) and (d) as amended by Amendment 25-41, effective September 1, 1977; and FAR 36, Appendix F through Amendment 36-15, effective May 6, 1988 when equipped with 2 blade propeller or FAR 36, Appendix G through Amendment 36-16, effective December 18, 1988 when equipped with optional 3 blade propeller.

No equivalent safety findings.

Special Conditions No. 23-ACE-53, Docket No. 082CE.

For PA-46-350P aircraft equipped with Piper factory installed Avidyne Entegra system (See Piper Report VB-1954), the additional certification basis for installation specific items only is: FAR 23.1529 as amended by Amendment 23-26, effective 14 October 1980; FAR 23.1523 as amended by Amendment 23-34, effective 17 February 1987; FAR 23.1322, 23.1331, 23.1357 (a)(2), (b), (c), (d) as amended by Amendment 23-43, effective 10 May 1993; FAR 23.305, 23.613, 23.773 (a)(2), 23.1525, 23.1549 (a) as amended by Amendment 23-45, effective 7 September 1993; FAR 23.301, 23.337 (a)(1), (b)(1), 23.341 (a), 23.473, 23.561 (b)(3), (e), 23.571 (a), 23.607, 23.611, as amended by Amendment 23-48, effective 11 March 1996; FAR 23.1303 (a), (b), (f), 23.1307, 23.1309 (a), (a)(1), (a)(2), (b),(e), 23.1311 (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c), 23.1321 (a), (c), (d), (e), 23.1323(a), (c), 23.1329, 23.1351 (a)(1), (a)(2)(i), (b)(2), (b)(3), 23.1353 (d), (h), 23.1359 (c), 23.1365 (a), (b), (d), (e), (f), 23.1431 (a), (b) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.1325 (a), (b)(1), (b)(2)(ii), (b)(3), (c), (e), 23.1543 (b), (c), 23.1545 (a), (b)(3), (b)(4), (c), 23.1555 (a), (b), 23.1563, 23.1581 (a), (b)(2), (b)(3), (f), 23.1583 (m), 23.1585 (j) as amended by Amendment 23-50, effective 11 March1996; FAR 23.777 (a), (b), 23.1337 as amended by Amendment 23-51, effective 11 March 1996; FAR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(3), (b)(4), (b)(5), (b)(6)(i) as amended by Amendment 23-52, effective 25 July 1996; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005.

Eligible Serial Numbers: 4636375 and up.

For the PA-46-350P Mirage aircraft equipped with Hartzell propeller HC-I3Y1R-1N/N7605C+2, or N7605CK+2 (See Piper Report VB-2132) the additional certification basis for installation specific items only is: FAR 23.905 (a), (b), (d) as amended by Amendment 23-43, effective 10 May 1993; 23.907 as amended by Amendment 23-59, effective 24 October 2008; and FAR 36, Appendix G through Amendment 36-28, dated 3 February 2006.

Eligible Serial Numbers: 4636460, 4636463 & up.

For PA-46-350P aircraft equipped with Piper factory installed Garmin G1000 system and GFC 700 AFCS (See Piper Drawing 106800), the additional certification basis for installation specific items only as amended by Amendment 23-59 dated December 23, 2008, is:

14 CFR 23.23 14 CFR 23.25 14 CFR 23.251 14 CFR 23.301 (a), (b), (c) 14 CFR 23.305 14 CFR 23.337 14 CFR 23.341 (a), (c) 14 CFR 23.397 (a) 14 CFR 23.473 A25SO Page 10 of 22

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14 CFR 23.561 (a), (b)(3), (e)
14 CFR 23.607
14 CFR 23.611
14 CFR 23.613
14 CFR 23.677 (b), (d)
14 CFR 23.773 (a) (1), (a)(2)
14 CFR 23.777 (a), (b), (d)
14 CFR 23.841 (b)(5), (6)
14 CFR 23.867
14 CFR 23.1141 (a), (b), (c), (d)
14 CFR 23.1303 (a), (b), (c), (f)
14 CFR 23.1305 (a) (1), (a)(2), (a)(3), (b)(2), (b)(4)(i), (b)(5), (b)(6)(i)
14 CFR 23.1307
14 CFR 23.1308 (a)(l), (a)(2), (a)(3), (b), (c)
14 CFR 23.1309 (a)(I), (a)(2), (b), (c), (e)
14 CFR 23.1311 (a) (1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c)
14 CFR 23.1321 (a), (c), (d)(5), (e)
14 CFR 23.1322 (a), (b), (c), (d), (e)
14 CFR 23.1323 (a), (c)
14 CFR 23.1325 (a), (b)(I), (b)(2)(ii)
14 CFR 23.1326
14 CFR 23.1329 (a)(1), (b), (d), (e), (f), (g), (h)
14 CFR 23.1331 (a), (b), (c)
14 CFR 23.1337 (b)(I), (b)(4)
14 CFR 23.1351 (a)(I), (a)(2)(i), (b)(I)(i)
14 CFR 23.1353 (h)
14 CFR 23.1357 (a)(2), (b), (c), (d)
14 CFR 23.1359 (c)
14 CFR 23.1365 (a), (b), (d), (e), (f)
14 CFR 23.1431 (a), (b), (e)
14 CFR 23.1507
14 CFR 23.1523
14 CFR 23.1525
14 CFR 23.1529
14 CFR 23.1543 (b)(c)
14 CFR 23.1545 (a), (b) (1), (b)(2), (b)(3), (b) (4)
14 CFR 23.1549 (a), (b), (c)
14 CFR 23.1553
14 CFR 23.1555 (a), (b), (d)(2)
14 CFR 23.1559 (c)
14 CFR 23.1563 (a)(b)
14 CFR 23.1567 (a)
14 CFR 23.1581
14 CFR 23.1583
14 CFR 23.1585
Eligible Serial Numbers: 4636460, 4636463 and up
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PA-46-350P serial numbers 4636375 through 4636459, 4636461 and 4636462 affected by Piper Service Bulletin SB1195B, only in the area of the communications antenna installations, the following additional certification basis is applicable:

14 CFR 23.571(c) as amended by Amendment 23-48, effective March 11, 1996; 14 CFR 23.573(b) as amended by Amendment 23-45, effective September 7, 1993.

A25SO Page 11 of 22

PA-46-350P aircraft equipped with Piper factory installed Enviro Cabin Pressure Control System, the additional certification basis for installation specific items only is:

23.303, 23.307, 23.601, 23.609, 23.627, 23.843(b) as amended by Amendment 23-0 effective February 1, 1965; 23.625 as amended by Amendment 23-7 effective September 14, 1969; 23.29, as amended by Amendment 23-21 effective March 1, 1978; 23.603, 23.605(a) as amended by Amendment 23-23 effective December 1, 1978; 23.607, 23.613 as amended by Amendment 23-25 effective March 3, 1980; 23.1529 as amended by Amendment 23-26 effective October 14, 1980; 23.831(b) as amended by Amendment 23-42 effective February 4, 1991; 23.1322 (a)(b)(c)(d) as amended by Amendment 23-43effective May 10, 1993; 23.305 as amended by Amendment 23-45 effective September 7, 1993; 23.301(a)(b)(c), 23.337, 23.341(a)(c), 23.473, 23.561(a)(b))(3)(e)23.611 as amended by Amendment 23-48 effective March 11, 1996; 23.841(a)(b)(1)(2)(3)(4)(b)(5)(6)(7)(8)(9), 23.867, 23.1307, 23.1351(a)(1)(i) as amended by Amendment 23-49 effective March 11, 1996; 23.25, 23.1325(b)(1)(2)(ii)(3)23.1581(a)23.1583(h)(m)23.1585(j) as amended by Amendment 23-50 effective March 11, 1996; 23.1308(a)(b)(c) as amended by Amendment 23-57 effective September 5, 2007; 23.1306, as amended by Amendment 23-61 effective August 8, 2011; 23.1301(a)(b)(c), 23.1309(a)(1)(2)b)(c)(d) as amended by Amendment 23-62 effective January 31,

Eligible Serial Numbers: 4636633, 4636652 and up.

PA-46-350P aircraft equipped with Piper factory installed G1000 Phase III Integrated Avionics the additional certification basis for installation specific items only is: 23.21, 23.23(a), 23.25(a)(b), 23.29, 23.143(a)(b), 23.207(b), 23.251, 23.301(a)(b)(c), 23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.365(a)(b)(d), 23.473, 23.561(a)(b)(3)(e), 23.571(a), 23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.729(e)(f), 23.771(a), 23.773(a)(1)(2), 23.777(a)(b), 23.867, 23.1301 (a)(b)(c)(d), 23.1305(a)(1)(2)(3)(b)(2)(4)(i)(5)(6)(i), 23.1306, 23.1307, 23.1308(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d)(e), 23.1311(a)(1)(2)(3)(4)(5)(6)(7)(b)(c), 23.1321(a)(c)(d)(5)(e), 23.1322(a)(b)(c)(d)(e), 23.1323(a)(c), 23.1325(a)(b)(1)(2)(ii), 23.1326(a)(b), 23.1327(a), 23.1329(d)(e)(h), 23.1335, 23.1337(b)(1)(4), 23.1351(a)(1)(2)(i)(b)(1)(i)(3)(c)(4)(d),23.1353(a)(b)(c)(d)(e)(h), 23.1357(a)(b)(c)(d), 23.1359(c), 23.1361(a)(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c), 23.1416(c), 23.1419(c), 23.1431(a)(b)(e), 23.1501(a)(b), 23.1523, 23.1525, 23.1529, 23.1541(a)(b), 23.1543(b)(c), 23.1545(a)(b)(1)(2)(3)(4), 23.1549(a)(b)(c), 23.1553, 23.1555(a)(b)(e)(1), 23.1581(a)(c), 23.1583(g)(h)(m), 23.1585(j), 23.1589 as amended by Amendment 23-61 effective June 8, 2011; 23.1303(a)(b)(c)(f) as amended by Amendment 23-62 effective January 31, 2012. Eligible Serial Numbers: 4636633, 4636652 and up.

PA-46-350P aircraft equipped with Piper factory installed G1000NXi Integrated Avionics the additional certification basis for installation specific items only is: 14CFR 23.23(a)(b)(3), 23.25(a)(b), 23.29, 23.301(a)(b)(c), 23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.473, 23.561(a)(b)(3)(e), 23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.699, 23.771(a), 23.777(a)(b), 23.867, 23.1301(a)(b)(c)(d), 23.1305(a)(1)(2)(3)(b)(2)(4)(i)(5)(6)(i), 23.1306, 23.1308(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d)(e), 23.1311(a)(1)(2)(3)(4)(5)(6)(7)(b)(c), 23.1321(a)(c)(d)(5)(e), 23.1322(a)(b)(c)(d)(e), 23.1323(a)(c), 23.1325(a)(b)(1)(2)(ii), 23.1326, 23.1327(a), 23.1329(a)(1)(b)(c)(d)(e)(f)(g)(h), 23.1335, 23.1337(b)(1)(4), 23.1351(a)(1)(2)(i)(c)(4)(d), 23.1353(h),

231357(a)(b)(c)(d), 23.1359(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c), 23.1431(a)(b)(e), 23.1501, 23.1523, 23.1525, 23.1529, 23.1541(a)(b), 23.1543(b)(c), 23.1545(a)(b), 23.1549(a)(b)(c), 23.1553, 23.1555(a)(b)(e)(1), 23.1581(a)(c), 23.1583(g)(h)(m), 23.1585(j), 23.1589(a) as amended by Amendment 23-61 effective June 8, 2011; 14 CFR 23.1303(a)(b)(c)(f) as amended by Amendment 23-62 effective January

Eligible Serial Numbers: 4636716, 4636720 and up.

31, 2012.

PA-46-500TP: FAR 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980 unless otherwise indicated herein; FAR 23.1529 as amended by Amendment 23-26, effective October 14, 1980; FAR 23.441 as amended by Amendment 23-28, effective April 28, 1982; FAR 23.994 and 23.995 as amended by Amendment 23-29, effective March 26, 1984; FAR 23.781 as amended by Amendment 23-33, effective August 11, 1986; FAR 23.173, 23.333, 23.443, and 23.1165 as amended by Amendment 23-34, effective February 17, 1987; FAR 23.2, 23.783(a), (b), (e)(2) and (e)(3), and 23.1413 as amended by Amendment 23-36, effective September 14, 1988; FAR 23.331, 23.351, 23.421, 23.423, 23.425, 23.427, 23.831, 23.939, and 23.1163 as amended by Amendment 23-42, effective February 4, 1991; FAR 23.905, 23.937, 23.943, 23.951, 23.957, 23.961, 23.967, 23.971, 23.977, 23.991, 23.993, 23.997, 23.999, 23.1011, 23.1019, 23.1021, 23.1027, 23.1103, 23.1123, 23.1145, 23.1189, 23.1193, 23.1322, 23.1331, 23.1357, 23.1385, 23.1387, 23.1441, 23.1443, and 23.1445 as amended by Amendment 23-43, effective May 10, 1993; FAR 23.23, 23.141, 23.181, 23.251, 23.305, 23.321, 23.361, 23.397, 23.479, 23.485, 23.571, 23.572, 23.621, 23.655, 23.731, 23.733, 23.773, 23.1507, 23.1525, 23.1527, 23.1549, 23.1557, and 23.1563 as amended by Amendment 23-45, effective September 7,1993; FAR 23.301, 23.335, 23.337, 23.341, 23.343, 23.345, 23.347, 23.349, 23.371, 23.391, 23.393, 23.399, 23.415, 23.457, 23.473, 23.499, 23.561, 23.575, 23.611, 23.629, 23.657, 23.673, 23.725, and 23.865 as amended by FAR 23-48, effective March 11,1996; FAR 23.677, 23.723, 23.735, 23.745, 23.775, 23.841, 23.853, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1326, 23.1329, 23.1353, 23.1359, 23.1361, 23.1383, 23.1401, 23.1447, 23.1451, and 23.1453 as amended by Amendment 23-49, effective March 11, 1996; FAR 23.3, 23.25, 23.33, 23.45, 23.49, 23.51, 23.53, 23.63, 23.65, 23.69, 23.71, 23.73, 23.75, 23.77, 23.143, 23.145, 23.153, 23.155, 23.157, 23.161, 23.175, 23.177, 23.201, 23.203, 23.207, 23.221, 23.233, 23.235, 23.253, 23.1325, 23.1511, 23.1521, 23.1543, 23.1553, 23.1555, 23.1559, 23.1567, 23.1581, 23.1583, 23.1585, 23.1587, and 23.1589 as amended by Amendment 23-50, effective March 11, 1996; FAR 23.777, 23.779, 23.901, 23.903, 23.907, 23.925, 23.929, 23.933, 23.955, 23.959, 23.963, 23.965, 23.973, 23.975, 23.1013, 23.1041, 23.1043, 23.1045, 23.1091, 23.1093, 23.1121, 23.1141, 23.1143, 23.1153, 23.1181, 23.1183, 23.1191, and 23.1337 as amended by Amendment 23-51, effective March 11, 1996; and FAR 23.1305 as amended by Amendment 23-52, effective July 25, 1996. In addition, FAR 34.11, effective September 10, 1990, and FAR 36, Appendix G, Amendment 36-22. Equivalent Level of Safety (ELOS) for FAR 23.955(f)(3), June 6, 2000. Special Condition 23-123-SC (Docket CE153), August 27, 1999.

Compliance with the requirements of FAR 23.1419 as amended by Amendment 23-14, effective December 20, 1973, has been established, provided the required ice protection systems are installed and functioning properly.

For aircraft equipped with Piper factory installed Avidyne Entegra system and S-Tec Magic 1500 DFCS (See Piper Report VB-1919), the additional certification basis for installation specific items only is: FAR 23.1523 as amended by Amendment 23-34; FAR 23.613 as amended by Amendment 23-45; 14 CFR Part 23 regulations FAR 23.607 as amended by Amendment 23-48; FAR 23.1351, 23.1365, and 23.1431 as amended by Amendment 23-49; FAR 23.1545 and 23.1563 as amended by Amendment 23-50; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005. Eligible Serial Numbers: 4697198, 4697216 and up.

For aircraft equipped with Piper factory installed G1000 system and GFC700 AFCS (see Piper Report VB-1988), the additional certification basis for installation specific items

A25SO Page 13 of 22

only is: 14 CFR 23.1523 as amended by Amendment 23-34; 14 CFR 23.613, 23.672 as amended by Amendment 23-45; 14 CFR 23.607 as amended by Amendment 23-48; 14 CFR 23.1351, , 23.1365, and 23.1431 as amended by Amendment 23-49; 14 CFR 23.1545 and , 23.1563 as amended by Amendment 23-50; Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005. Eligible Serial Numbers: 4697340, 4697399and up.

PA-46-500TP serial numbers 4697001, 4697003 through 4697423 affected by Piper Service Bulletin SB1195B, only in the area of the communications antenna installations, the following additional certification basis is applicable: 14 CFR 23.571(c), 23.573(b) as amended by Amendment 23-45, effective September 7, 1993.

PA-46-500TP aircraft equipped with Piper factory installed Enviro Cabin Pressure Control System, the additional certification basis for installation specific items only is:

23.303, 23.307, 23.601, 23.609, 23.627, 23.843(b) as amended by Amendment 23-0 effective February 1, 1965; 23.625 as amended by Amendment 23-7 effective September 14, 1969; 23.29 as amended by Amendment 23-20 effective September 9, 1977; 23.29, as amended by Amendment 23-21 effective March 1, 1978; 23.603, 23.605(a) as amended by Amendment 23-23 effective December 1, 1978; 23.607, 23.613 as amended by Amendment 23-25 effective March 3, 1980; 23.1529 as amended by Amendment 23-26 effective October 14, 1980; 23.831(b) as amended by Amendment 23-42 effective February 4, 1991; 23.1322 (a)(b)(c)(d) as amended by Amendment 23-43effective May 10, 1993; 23.305 as amended by Amendment 23-45 effective September 7, 1993; 23.301(a)(b)(c), 23.337, 23.341(a)(c), 23.473, 23.561(a)(b))(3)(e)23.611 as amended by Amendment 23-48 effective March 11, 1996; 23.841(a)(b)(1)(2)(3)(4)(b)(5)(6)(7)(8)(9), 23.867, 23.1307, 23.1351(a)(1)(i) as amended by Amendment 23-49 effective March 11, 1996; 23.25, 23.1325(b)(1)(2)(ii)(3)23.1581(a)23.1583(h)(m)23.1585(j) as amended by Amendment 23-50 effective March 11, 1996; 23.1308(a)(b)(c) as amended by Amendment 23-57 effective September 5, 2007; 23.1306, as amended by Amendment 23-61 effective August 8, 2011; 23.1301(a)(b)(c), 23.1309(a)(1)(2)b)(c)(d) as amended by Amendment 23-62 effective January 31, 2012.

Eligible Serial Numbers: 4697549, 467569, 4697582 and up.

PA-46-500TP aircraft equipped with Piper factory installed G1000 Phase III Integrated Avionics the additional certification basis for installation specific items only is: 23.21, 23.23(a), 23.25(a)(b), 23.29, 23.143(a)(b), 23.207(b), 23.251, 23.301(a)(b)(c), 23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.365(a)(b)(d), 23.473, 23.561(a)(b)(3)(e), 23.571(a), 23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.729(e)(f), 23.771(a), 23.773(a)(1)(2), 23.777(a)(b), 23.867, 23.1301(a)(b)(c)(d), 23.1305(a)(1)(2)(3)(c)(1)(2)(3)(4)(5)(6)(8),(e)(1)(2), 23.1306, 23.1307,23.1308(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d)(e), 23.1311(a)(1)(2)(3)(4)(5)(6)(7)(b)(c), 23.1321(a)(c)(d)(5)(e),23.1322(a)(b)(c)(d)(e), 23.1323(a)(c), 23.1325(a)(b)(1)(2)(ii), 23.1326(a)(b), 23.1327(a), 23.1329(d)(e)(h), 23.1335, 23.1337(b)(1)(4), 23.1351(a)(1)(2)(i)(b)(1)(i)(3)(c)(4)(d), 23.1353(a)(b)(c)(d)(e)(h),23.1357(a)(b)(c)(d), 23.1359(c), 23.1361(a)(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c), 23.1416(c), 23.1419(c), 23.1431(a)(b)(e), 23.1501(a)(b), 23.1523, 23.1525, 23.1529, 23.1541(a)(b), 23.1543(b)(c), 23.1545(a)(b)(1)(2)(3)(4), 23.1549(a)(b)(c), 23.1553, 23.1555(a)(b)(e)(1), 23.1581(a)(c), 23.1583(g)(h)(m), 23.1585(j), 23.1589 as amended by

Amendment 23-61 effective June 8, 2011; 23.1303(a)(b)(c)(f) as amended by Amendment 23-62 effective January 31, 2012. Eligible Serial Numbers: 4697549, 467569, 4697582 and up.

PA-46-500TP aircraft equipped with Piper factory installed G1000NXi Integrated Avionics the additional certification basis for installation specific items only is:

14CFR 23.23(a)(b)(3), 23.25(a)(b), 23.29, 23.301(a)(b)(c), 23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.473, 23.561(a)(b)(3)(e), 23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.699, 23.771(a), 23.777(a)(b), 23.867, 23.1301(a)(b)(c)(d), 23.1305(a)(1)(2)(3)(c)(1)(2)(3)(4)(5)(6)(8)(e), 23.1306, 23.1308(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d)(e), 23.1311(a)(1)(2)(3)(4)(5)(6)(7)(b)(c), 23.1321(a)(c)(d)(5)(e), 23.1322(a)(b)(c)(d)(e), 23.1323(a)(c), 23.1325(a)(b)(1)(2)(ii), 23.1326, 23.1327(a), 23.1329(a)(1)(b)(c)(d)(e)(f)(g)(h), 23.1357(a)(b)(c)(d), 23.1351(a)(1)(2)(i)(c)(4)(d), 23.1353(h), 23.1357(a)(b)(c)(d), 23.1359(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c)

231357(a)(b)(c)(d), 23.1359(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c), 23.1431(a)(b)(e), 23.1501, 23.1523, 23.1525, 23.1529, 23.1541(a)(b),

23.1543(b)(c), 23.1545(a)(b), 23.1549(a)(b)(c), 23.1553, 23.1555(a)(b)(e)(1), 23.1581(a)(c), 23.1583(g)(h)(m), 23.1585(j), 23.1589(a) as amended by Amendment 23-61 effective June 8, 2011;

14 CFR 23.1303(a)(b)(c)(f) as amended by Amendment 23-62 effective January 31, 2012.

Eligible Serial Numbers: 4697626, 4697631 and up.

<u>PA-46R-350T:</u> For those portions of the airplane that are unchanged from the Model PA-46-350P: FAR Part 23, effective February 1, 1965, as amended by Amendment 23-25, effective March 6, 1980; FAR 25.783(e) as amended by Amendment 25-54, effective October 14, 1980; FAR 25.831(c) and (d) as amended by Amendment 25-41, effective September 1, 1977. No equivalent safety findings.

Special Conditions No. 23-ACE-53, Docket No. 082CE.

For the Avidyne Entegra system installation (See Piper Report VB-1954) and modifications to that installation (See Piper Report VB-2008) the following additional requirements are applicable: FAR 23.1529 as amended by Amendment 23-26, effective 14 October 1980; FAR 23.1523 as amended by Amendment 23-34, effective 17 February 1987; FAR 23.1322, 23.1331, 23.1357 (a)(2), (b), (c), (d) as amended by Amendment 23-43, effective 10 May 1993; FAR 23.305, 23.613, 23.773 (a)(2), 23.1525, 23.1549 (a) as amended by Amendment 23-45, effective 7 September 1993; FAR 23.301, 23.337 (a)(1), (b)(1), 23.341 (a), 23.473, 23.561 (b)(3), (e), 23.571 (a), 23.607, 23.611, as amended by Amendment 23-48, effective 11 March 1996; FAR 23.1303 (a), (b), (f), 23.1307, 23.1309 (a), (a)(1), (a)(2), (b),(e), 23.1311 (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c), 23.1321 (a), (c), (d), (e), 23.1323 (a), (c), 23.1329, 23.1351 (a)(1), (a)(2)(i), (b)(2), (b)(3), 23.1353 (d), (h), 23.1359 (c), 23.1365 (a), (b), (d), (e), (f), 23.1431 (a), (b) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.1325 (a), (b)(1), (b)(2)(ii), (b)(3), (c), (e), 23.1543 (b), (c), 23.1545(a), (b)(3), (b)(4), (c), 23.1555 (a), (b), 23.1563, 23.1581 (a), (b)(2), (b)(3), (f), 23.1583 (m), 23.1585 (j) as amended by Amendment 23-50, effective 11 March1996; FAR 23.777 (a), (b), 23.1337 as amended by Amendment 23-51, effective 11 March 1996; FAR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(3), (b)(4), (b)(5), (b)(6)(i) as amended by Amendment 23-52, effective 25 July 1996 Special Condition for HIRF (Docket # CE215, Special Condition 23-154-SC), January 7, 2005.

For modifications specific to the PA-46R-350T airplane (see Piper Report VB-2008) the following additional requirements are applicable: FAR 23.1529 and Appendix G (Sec G23.1 and G23.2) as amended by Amendment 23-26, effective 14 October 1980; Appendix G (Sec G23.3) as amended by Amendment 23-34 effective 17 February 1987; FAR 23.2 as amended by Amendment 23-36 effective 14 September 1988; Appendix G (Sec G23.4) as amended by Amendment 23-37, effective 18 August 1990; FAR 23.831 as amended by Amendment 23-42, effective 4 February 1991; FAR 23.905, 23.1357, 23.1441, 23.1443, and 23.1445 as amended by Amendment 23-43, effective 10 May 1993; FAR 23.613, 23.773, 23. 851, and 23.1527 as amended by Amendment 23-45, effective 7 September 1993; FAR 23.561, 23.572,, 23.575, 23.607, and 23.611 as amended by Amendment 23-48, effective 11 March 1996; FAR 23.775, 23.783, 23.853, 23.1309, 23.1311, 23.1321, 23.1323, 23.1351, 23.1447, 23.1451, 23.1453, and Appendix F (Sec F23) as amended by Amendment 23-49, effective 11 March 1996; FAR 23.25, 23.1325, 23.1543, 23.1545, and 23.1589 as amended by Amendment 23-50, effective 11 March 1996; FAR 23.907 and 23.1191 as amended by Amendment 23-51, effective 11 March 1996; and FAR Part 36, effective December 1, 1969, as amended by Amendment 36-1, dated December 1, 1969 through Amendment 36-28, dated 3 February 2006

For the PA-46R-350T Matrix aircraft equipped with Hartzell propeller HC-I3Y1R-1N/N7605+2 or HC-I3Y1R-1N/N7605K+2 or HC-I3Y1R-1N/N7605C+2 or HC-I3Y1R-1N/N7605CK+ (See Piper Report VB-2132) the additional certification basis for installation specific items only is: 23.907 as amended by Amendment 23-59, effective 24 October 2008. Eligible Serial Numbers: 4692123 & up.

For PA-46R-350T aircraft equipped with Piper factory installed Garmin G1000 system and GFC 700 AFCS (See Piper Drawing 106900), the additional certification basis for installation specific items only as amended by Amendment 23-59 dated December 23, 2008, is:

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14 CFR 23.23
14 CFR 23.25
14 CFR 23.251
14 CFR 23.301 (a), (b), (c)
14 CFR 23.305
14 CFR 23.337
14 CFR 23.341
14 CFR 23.397 (a)
14 CFR 23.473
14 CFR 23.561 (a), (b)(3), (e)
14 CFR 23.607
14 CFR 23.611
14 CFR 23.613
14 CFR 23.677 (b), (d)
14 CFR 23.773 (a)(l), (a)(2)
14 CFR 23.777 (a), (b), (d)
14 CFR 23.867
14 CFR 23.1141 (a), (b), (c), (d)
14 CFR 23.1303 (a), (b), (c), (f)
14 CFR 23.1305 (a)(1), (a)(2), (a)(3), (b)(2), (b)(4)(i), (b)(5), (b)(6)(i)
14 CFR 23.1307
14 CFR 23.1308 (a) (1), (a)(2), (a)(3), (b), (c)
14 CFR 23.1309 (a) (1), (a)(2), (b), (c), (e)
14 CFR 23.1311 (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(7), (b), (c)
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A25SO Page 16 of 22

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14 CFR 23.1321 (a), (c), (d)(5), (e)
14 CFR 23.1322 (a), (b), (c), (d), (e)
14 CFR 23.1323 (a), (c)
14 CFR 23.1325 (a), (b)(1), (b)(2)(i)
14 CFR 23.1326
14 CFR 23.1329 (a) (1), (b), (d), (e), (f), (g), (h),
14 CFR 23.1331 (a), (b), (c)
14 CFR 23.1337 (b)(1), (b)(4)
14 CFR 23.1351 (a)(l), (a)(2)(i), (b)(l)(i)
14 CFR 23.1353 (h)
14 CFR 23.1357 (a)(2), (b), (c), (d)
14 CFR 23.1359 (c)
14 CFR 23.1365 (a), (b), (d), (e), (f)
14 CFR 23.1431 (a), (b), (e)
14 CFR 23.1441 (b), (c), (e)
14 CFR 23.1507
14 CFR 23.1523
14 CFR 23.1525
14 CFR 23.1529
14 CFR 23.1543 (b)(c)
14 CFR 23.1545 (a), (b) (1), (b)(2), (b)(3), (b) (4)
14 CFR 23.1549 (a), (b), (c)
14 CFR 23.1553
14 CFR 23.1555 (a), (b), (d)(2)
14 CFR 23.1559 (c)
14 CFR 23.1563 (a) (b)
14 CFR 23.1567 (a)
14 CFR 23.1581
14 CFR 23.1583
14 CFR 23.1585
14 CFR 23.1589
Eligible Serial Numbers: 4692134 and up
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<u>PA-46-600TP</u>: The PA-46-600TP is a derivative product from the PA-46-500TP. As such, the regulations that were applicable to the basic PA-46-500TP that are not affected by the changed product (PA-46-600TP) remain at the original amendment levels. Those regulations that are affected by the change are FAR 23, effective February 1, 1965, as amended by 14 CFR Part 23 Amendment 23-62, effective January 31, 2012

The following regulations have been granted approval at the amendment levels specified herein:

14 CFR 23.562, 23.573, 23.701, 23.783, 23.785, 23.807 as amended by Amendment 23-25 effective March 6, 1980

14 CFR 23.1419 as amended by Amendment 23-43 effective May 10, 1993

14 CFR 23.251, 23.571, 23.572 as amended by Amendment 23-45 effective September 7, 1993

14 CFR 23.1353 as amended by Amendment 23-49 effective March 11, 1996

14 CFR 34.11 as amended by Amendment 34-4 effective June 29, 2009

14 CFR 36 as amended by Amendment 36-28 effective February 3, 2006

Aircraft is approved for Flight Into Known Icing.

This aircraft is approved for single pilot operation.

The following ELOS have been issued for this model:

ELOS #AT13893AT-A-P-1:

Equivalent Level of Safety Finding for Digital Display of Engine and Propeller Flight Data 14 CFR 23.1305(c)(2)(5), 23.1549

A25SO Page 17 of 22

ELOS #AT13893AT-A-F-1:

Equivalent Level of Safety Finding for Control Forces 14 CFR 23.145(b)(2)(4)

ELOS #AT13893AT-A-A-1:

Equivalent Level of Safety Finding for Material Design Values 14 CFR 23.613

ELOS #AT13893AT-A-G-9:

Amendment 23-62 Equivalent Level of Safety 14 CFR 23.45, 23.51, 23.63, 23.73, 23.77, 23.161, 23.181, 23.221, 23.251, 23.253, 23.831, 23.1527, 23.1545, 23.1583

Eligible Serial Numbers:

4698001 and up

For the PA-46-600TP M600 aircraft equipped with Hartzell propeller model 5D3-N338A1/78D01B the additional certification basis for installation specific items only is: 14 CFR 23.25(a)(b), 23.29(a)(b), 23.33(a)(d)(1)(2)(ii), 23.45((a)(1)(2)(b)(1)(3)(d)(1)(2)(e)(1)(2)(f)(g)(1)(4),23.49(a)(2)(3)(4)(5)(6)(b)(c)(1)(2)(d), 23.51(a)(2)(b)(2)(i)(ii), 23.53(a)(b)(1)(2)(3), 23.65(b)(1)(2)(3)(4), 23.69(a)(1)(2)(3)(4), 23.71, 23.75(a)(1)(b)(c)(d)(e),23.77(b)(1)(2)(3)(4), 23.143, 23.145(b)(2)(4), 23.201(a)(b)(1)(3)(c)(d)(e)(f(1)(2)(5)(i)((iii)(6)(7),23.203(a)(1)(2)(b)(1)(2)(3)(4)(4)(5)(6)(c)(1)(2)(5)(i)(iii)(6)(7), 23.251(a)(b)(c)(d),23.301(a)(b)(c), 23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.629(a)(c)(e), 23.901(a)(b)(1)(2)(e), 23.903(e)(3)(f)(g), 23.905(a)(b)(c)(d), 23.907(a)(2)(b)(c), 23.925(a)(d), 23.929, 23.933(b), 23.1027, 23.1041, 23.1043(a)(1)(2)(3)(b)(c), 23.1045, 23.1153, 23.1301(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d), 23.1501(a)(b), 23.1521(a)(b)(1)(4)(c)(1)(e),23.1529, 23.1541(a)(1)(2), 23.1549, 23.1581(a), 23.1583(b)(m), 23.1585(a)(b)(j), 23.1587(a) as amended by Amendment 23-62, effective December 2, 2011; 14 CFR 23.1419 as amended by Amendment 23-43 effective May 10, 1993:

Eligible Serial Numbers: 4698001 & up

For the PA-46-600TP M600 aircraft equipped with Garmin G3000 installed per Piper Drawing 46F34A000-002 the additional certification basis for installation specific items only is:

14 CFR 23.23(a)(b)(3), 23.25(a)(b), 23.29, 23.301(a)(b)(c),

23.303, 23.305, 23.307, 23.337, 23.341(a)(c), 23.473, 23.561(a)(b)(3)(e)

21.93 as amended by Amendment 21-97, effective January 8, 2013.

23.601, 23.603, 23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627,

23.699(b)(1)(2), 23.729(e)(f), 23.771(a), 23.773(a)(1)(2), 23.777(a)(b), 23.867,

23.1301(a)(b)(c), 23.1303(a)(b)(c)(f), 23.1305(a)(1)(2)(3)(c)(1)(2)(3)(4)(5)(6)(8)(e),

23.1306, 23.1308(a)(b)(c), 23.1309(a)(1)(2)(b)(c)(d), 23.1310(a)(1)(2)(4)(b),

23.1311(a)(1)(2)(3)(4)(5)(6)(7)(b)(c), 23.1321(a)(c)(d)(5)(e), 23.1322(a)(b)(c)(d)(e),

23.1323(a)(c), 23.1325(a)(b)(1)(2)(ii), 23.1326, 23.1327(a),

23.1329(a)(1)(b)(c)(d)(e)(f)(g)(h), 23.1335, 23.1337(b)(1)(4),

23.1351(a)(1)(2)(i)(c)(4)(d)(1), 23.1357(a)(b)(c)(d), 23.1359(c), 23.1365,

23.1367(a)(b)(c)(d), 23.1381(a)(b)(c), 23.1431(a)(b)(e), 23.1501, 23.1523, 23.1525,

23.1529, 23.1541(a)(b), 23.1543(b)(c), 23.1545(a)(b)(4)(d), 23.1549(a)(b)(c), 23.1553,

 $23.1555(a)(b)(e)(1), \ 23.1563(a)(b), \ 23.1567(a), \ 23.1581(a)(c), \ 23.1583(g)(h)(m), \ 23.1583(g)(h)$

23.1585(j), 23.1589(a) as amended by Amendment 23-62, effective January 31, 2012;

23.1353(h) as amended by Amendment 23-49, effective March 11, 1996;

Eligible Serial Numbers: 4698061, 4698081 & up

For the PA-46-600TP M600 aircraft equipped with the Emergency Autoland (HALO) option installed by Piper Drawing 46G00A000-002 and 46G22A000-001 the additional certification basis for installation specific items only is:

14 CFR 23.251 as amended by Amendment 23-45, effective September 7, 1993;

14 CFR 23.1353(h) as amended by Amendment 23-49, effective March 11, 1996;

14 CFR 23.21(b), 23.23(a)(b)(3), 23.25(a)(b), 23.29, 23.301(a)(b)(c), 23.303, 23.305,

23.307, 23.337, 23.341(a)(c), 23.405, 23.473, 23.561(a)(b)(3)(e), 23.601, 23.603,

23.605(a), 23.607, 23.609, 23.611, 23.613, 23.625, 23.627, 23.671(a), 23.681, 23.683,

23.685, 23.697(a), 23.729(e), 23.735(a)(b)(c)(d), 23.771(a), 23.777(a)(b),

23.779(a)(2)(b)(1)(2), 23.867, 23.905(b), 23.951(a)(b)(c), 23.954, 23.955(a)(f)(1),

23.961, 23.991(b), 23.993(a)(b)(c)(d)(e), 23.994, 23.995(b)(1)(c)(d), 23.1141(c)(e)(g)(2), 23.1155, 23.1189(c), 23.1301(a)(b)(c), 23.1303,

23.1305(a)(1)(2)(3)(5)(c)(1)(2)(3)(4)(5)(6)(8)(e)(1)(2), 23.1306, 23.1308(a)(b)(c),

23.1309(a)(1)(2)(b)(c)(1)(2)(3)(d), 23.1310(a)(1)(2)(4)(b), 23.1311(a)(1)(2)(3)(6)(7)(b),

23.1321(a)(c)(e), 23.1322(a)(b)(c)(d)(e), 23.1326, 23.1327(a)(1),

23.1329(a)(1)(b)(c)(e)(f)(g), 23.1335, 23.1337(b)(1), 23.1351(a)(1)(2)(i),

23.1357(a)(b)(c)(d), 23.1359(c), 23.1365, 23.1367(a)(b)(c)(d), 23.1381(a)(b)(c),

23.1431(a)(b)(e), 23.1501, 23.1521(a)(b)(1)(3)(4)(c)(1)(3), 23.1523, 23.1525, 23.1529,

23.1541(a)(b), 23.1555(a)(b)(e)(1)(2), 23.1581(a)(c), 23.1583(g)(h)(m), 23.1585(j),

23.1589(a) as amended by Amendment 23-62, effective January 31, 2012;

Eligible Serial Numbers: 4698061, 4698081 & up

For the PA-46-600TP M600 aircraft equipped with the Normal Use Autothrottle option installed by Piper Drawing 46G00A000-003 and 46F76A020-003 the additional certification basis for installation specific items only is:

14 CFR Part 21, 21.93 (b) as amended by Amendment 21-97 effective March 11, 2013; 14 CFR Part 23, 23.1353 (h) as amended by Amendment 23-49 effective March 11,

14 CFR Part 23, 23.21 (b), 23.23 (a)(b)(3), 23.25 (a)(1)(iii), 23.143 (a)(1)(2)(3)(4)(5)(b)(c), 23.145 (b)(2)(4), 23.771 (a), 23.777 (a)(b), 23.779 (b), 23.781 (b), 23.1141 (c)(e), 23.1301 (a)(b), 23.1306, 23.1308 (a)(b)(c), 23.1309 (a)(1)(2)(b)(c)(1)(2)(3)(d), 23.1310 (a)(1)(2)(4)(b), 23.1311 (a)(2)(6)(7), 23.1321 (a)(6)(7), 23.1321 (a)(7)(7), 23(a)(c)(e), 23.1322 (a)(b)(c)(d)(e), 23.1327 (a)(1), 23.1335, 23.1351 (a)(1)(2)(i)(b)(1), 23.1357 (a)(b)(c)(d), 23.1359 (c), 23.1365, 23.1367 (a)(b)(c)(d), 23.1381 (a), 23.1431 (a)(b)(e), 23.1501 (a)(b), 23.1521 (a), 23.1523 (a)(b)(c), 23.1525, 23.1529, 23.1541 (a)(b), 23.1543 (b), 23.1555 (a)(b), 23.1581 (a)(c), 23.1583 (b)(1)(2)(m), 23.1585(j) as amended by Amendment 23-62 effective January 31, 2012; 14 CFR Part 23, 23.2010 (a)(b), 23.2500 (a)(1)(2)(b), 23.2510 (a)(b)(c), 23.2600 (a)(b), 23.2605 (a)(b)(c) as amended by Amendment 23-64 effective August 30, 2017;

Eligible Serial Numbers: 4698061, 4698081 & up

Production Basis

Production Certificate No. 206. Production Limitation Record issued and the manufacturer authorized to issue airworthiness certificate 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, one of the following items of equipment are required:

1 DOA No. SO-1 approved Airplane Flight Manual Piper Report FT 157, Appendix D or Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1200 for Model PA-46-310P, S/N 46-8408001 through 46-8608067, and 4608001 through 4608007.

A25SO Page 19 of 22

- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1300 for Model PA-46-310P, S/N 4608008 through 4608140.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1332 for Model PA-46-350P, S/N 4622001 through 4622200.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1609 for Model PA-46-350P, S/N 4636001 through 4636020.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1602 for Model PA-46-350P, S/N 4636021 through 4636131.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1446 for Model PA-46-350P, S/N4636132 through 4636195. For S/N 4636160 special supplement VB-1855 is required.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1710 for Model PA-46-350P, S/N 4636196 through 4636374.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1689 for Model PA-46-500TP, S/N 4697001, 4697003 through 4697156.
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1751 for Model PA-46-500TP, (1999 kg) S/N 4697001, 4697003 through 4697156
- DOA No. SO-1 approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1835 for Model PA-46-500TP (5092 lb. MTOGW) S/N 4697157 through 4697173 and earlier airplanes having Kit 767-360 installed.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1888 for Model PA-46-500TP S/N 4697174 and up.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1912 for Model PA-46-500TP S/N's 4697198, 4697216 and up equipped with standard Avidyne Entegra System.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1948 for Model PA-46-500TP, (1999 kg) S/N's 4697198, 4697216 and up.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report No. VB-1950 for PA-46-350P S/N's 4636375 and up.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2007 for PA-46R-350T S/N's 4692001 and up.
- DOA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-1993 for PA-46-500TP S/N's 4697340, 4697399 and up equipped with Garmin G1000 System and GFC700 FCS.
- 17. ODA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2121 for PA-46-350P S/N's 4636460, 4636463 and up equipped with Garmin G1000 System and GFC700 AFCS.
- ODA No. 510620-CE approved Pilot's Operating Handbook and FAA approved Airplane Flight Manual Report VB-2122 for PA-46R-350T S/N's 4692134 and up equipped with Garmin G1000 System and GFC700 AFCS.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2543 for PA-46-500TP S/N's 4697549, 4697569, 4697582 and up equipped with Garmin G1000 Phase III System and Enviro Cabin Pressure Control System.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2561 for PA-46-350P S/N's 4636633, 4636652 and up when equipped with Garmin G1000 Phase III System and Enviro Cabin Pressure Control System.

- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2366 for PA-46-600TP S/N's 4698001 and up.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2747 for PA-46-350P S/N's 4636716, 4636720 and up.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2748 for PA-46-500TP S/N's 4697626, 4697631 and up.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2872 (1999 KG) for PA-46-500TP S/N's 4697626, 4697631 and up.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2793 for PA-46-600TP S/N's 4698061, 4698081 and up.
- ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2793 Rev 4 for PA-46-600TP when equipped with the optional Emergency Autoland (HALO) system S/N's 4698061, 4698081 and up.
- 27. ODA No. 510620-CE approved Pilots Operating Handbook and FAA approved Airplane Flight Manual Report VB-2793 Rev 10 for PA-46-600TP when equipped with the optional Normal Use Autothrottle system S/N's 4698061, 4698081 and up.

Noise Characteristics

The corrected noise level of the Model PA-46-310P is 74.8 dB(A) at the Maximum Normal Operating Power at 2600 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P is 74.7 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level test flights conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P equipped with the optional 3 blade propeller is 79.7 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46-350P equipped with the optional 3 blade propeller HC-I3Y1R-1N/N7605C+2 or HC-I3Y1R-1N/N7605CK+2 is 81.0 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46-500TP equipped with the standard 4 blade propeller is 73.7 dB(A) at 4850 lbs. takeoff weight and 76.8 dB(A) at 5092 lbs. takeoff weight at the Maximum Normal Operating Power at 2000 RPM. This noise level has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46R-350T is 81.3 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the Model PA-46R-350T equipped with the optional 3 blade propeller HC-I3Y1R-1N/N7605+2 or HC-I3Y1R-1N/N7605K+2 or HC-I3Y1R-1N/N7605C+2 or HC-I3Y1R-1N/N7605CK+2 is 81.0 dB(A) at the Maximum Normal Operating Power at 2500 rpm. The noise level stated above has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46-600TP equipped with the standard 4 blade propeller is 75.8 dB(A) at 6000 lbs. takeoff weight at the Maximum Normal Operating Power at 2000 RPM. This noise level has been approved by the Federal Aviation Administration in noise level flight tests conducted in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

The corrected noise level of the model PA-46-600TP equipped with the optional 5 blade propeller is 75.8 dB(A) at 6000 lbs. takeoff weight at the Maximum Normal Operating Power at 2000 RPM. This noise level has been evaluated and approved by the Federal Aviation Administration by analysis in accordance with FAR 36, "Noise Standards: Aircraft Type and Airworthiness Certification." The aircraft noise is in compliance with FAR 36 noise standards applicable to this type.

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 certified empty weight and corresponding center of gravity locations must include undrainable system oil (not included in oil capacity) and unusable fuel as noted below:

(a) PA-46-310P

Fuel: 12 lb. at (+152.37) Oil: 2.8 lb. at (+53.5)

(b) PA-46-350P & PA-46R-350T

Fuel: 12 lb. at (+152.37) Oil: 3.8 lb. at (+61.0)

(c) PA-46-500TP

Fuel: 20.1 lbs. at (+144.37) Oil: 5.55 lbs. at (+77.76)

(d) PA-46-600TP

Fuel: 20.1 lbs. at (+148.9) Oil: 5.55 lbs. at (+77.76)

NOTE 2

All placards required in the POH and AFM must be installed in the appropriate locations. The following placard must be displayed in clear view of the pilot:

PA-46-310P and PA-46-350P:

"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Airplane Flight Manual. No aerobatics maneuvers, including spins, approved."

PA-46-500TP and PA-46R-350T:

"This aircraft 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 are approved. This aircraft is approved for VFR, IFR day and night icing flight when equipped in accordance with the airplane flight manual."

PA-46-600TP:

"This aircraft 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 are approved. This aircraft is approved for VFR, IFR day and night icing flight when equipped in accordance with the airplane flight manual."

- NOTE 3 The life limits on components are contained in Chapter 4 of the appropriate Airplane Maintenance Manual for the models listed below:
 - (a) PA-46-310P Airplane Maintenance Manual 761-783.
 - (b) PA-46-350P Airplane Maintenance Manual 761-783 for Serial Numbers 4622001 through 4622200, Airplane Maintenance Manual 761-876 for Serial Numbers 4636001 and Up.
 - (c) PA-46-500TP Airplane Maintenance Manual 767-005 for Serial Numbers 4697001, 4697003 through 4697398 less 4697340. Airplane Maintenance Manual 767-072 for Serial Numbers 4697340, 4697399 and Up.
 - (d) PA-46R-350T Airplane Maintenance Manual 761-876.
 - (e) PA-46-600TP Airplane Maintenance Manual 767-617.
- NOTE 4 PA-46-350P serial numbers 4636196 and up incorporate additional structural strengthening of the wing landing gear that affects the maximum weights and C.G. range. This accounts for differences with respect to serial numbers 4622001 through 4622200 and 4636001 through 4636195.
- NOTE 5 Model PA-46-500TP and PA-46-600TP

The maximum propeller shaft overspeed limit for the PT6A-42A is 100% (2205 r.p.m.) of all ratings. 91% propeller shaft speed is defined as 2000 r.p.m. and is the normal steady state operating limit. Gas generator speeds up to 104.1% are permissible for 10 seconds and 101.7% for unlimited periods subject to applicable temperature and other limits. 100% gas generator speed is defined as 37,468. For M600 aircraft with normal use Autothrottle, the G3000 software will allow display of an over-torque condition between 1575 and 1600 ft-lbs for a maximum of 30 seconds before alerting the crew.

NOTE 6 Model PA-46-500TP:

Minimum propeller speed (Np) corresponding to minimum idle gas generator speed (Ng) is 1200 RPM.

Model PA-46-600TP:

Minimum propeller speed (N_p) corresponding to minimum idle gas generator speed (N_g) is 1180 RPM.

NOTE 7 PA-46-500TP serial numbers 4697131, 4697137, and 4697666 were never manufactured.

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