DUPLICATE

AIRPLANE FLIGHT MANUAL

MODEL PA-32-260

SERIAL NUMBER EFFECTIVITY: 32-1111 thru 32-7200045

FAA IDENTIFICATION NO. N4864S

SERIAL NO. 32-1288

THIS DOCUMENT MUST BE KEPT IN AIRPLANE AT ALL TIMES.

FAA DOA SO-1
APPROVED [redacted]
H. M. Toomey

DATE 12/17/68

FAA DOA SO-1 APPROVED

Log of Revisions

DUPLICATE

REVISION NO.	PAGE	DESCRIPTION	APPROVED	DATE
1	3	Added Nose Wheel Fairing Limitations	[redacted] H. M. Toomey FAA DOA SO-1	12/9/69
2	1	Limitations Section: Added Static RPM to McCauley Propeller.	[redacted] H. M. Toomey FAA DOA SO-1	12/17/69
3	3	Placards Section: Added Items 7 and 8	[redacted] G. C. Stephen FAA DOA SO-1	9/11/70
	6	Procedures Section: Added Item 8		
	6, 7	Added Pages 6 and 7.		
4	6, 7	Procedures Section: Added Item 9	[redacted] G. C. Stephen FAA DOA SO-1	9/1/71
5	Title	Added Serial Numbers	[redacted] H. W. Barnhouse FAA DOA SO-1	9-18-72
6	1	Changed oil pressure gauge markings	[redacted]	7-25-75

Piper Model PA-32-260
Normal Category Only

AIRPLANE FLIGHT MANUAL

1. Limitations Section — The following limitations must be observed in the operation of this airplane:

Engine	Lycoming 0-540-E4B5
Engine Limits	For all operations, 2700 rpm, 260 hp.
Fuel	100/130 minimum aviation grade fuel
Propeller	McCauley 1P235PFA82, blade pitch 60 through 66. Maximum diameter 82 inches, minimum diameter 80.5 inches. Static rpm at maximum permissible throttle setting, not over 2480, not under 2270.
	Hartzell HC-C2YK-1/8477-2, low pitch stop 12.0° ± .2°, high pitch stop 32° ± 2°, maximum diameter 82 inches, minimum diameter 80.5 inches.
Power Instruments	Oil temperature: GREEN arc (normal operating range) 75°F to 245°F; RED line (maximum) 245°F.
	Oil pressure: GREEN arc (normal operating range) 60 psi to 90 psi; YELLOW arc (caution range) 25 psi to 60 psi; RED line (minimum) 25 psi when installed or 60 psi when installed; RED line (maximum) 90 psi.
	Fuel pressure: GREEN arc (normal operating range) .5 to 8 psi; RED line (minimum) .5 psi; RED line (maximum) 8 psi.
	Tachometer: GREEN arc (normal operating range) 500 to 2700 rpm; RED line (maximum continuous power) 2700 rpm.

Airspeed Limits (Calibrated Airspeed) (Miles per Hour)		
	Never exceed	212
	Maximum structural cruise	168
	Maneuvering	149
	Flaps extended	125
	Maximum positive load factor	3.8
	Maximum negative load factor	No inverted maneuvers approved.

Maximum Weight — 3400 lbs.

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C. G. Range

The datum used is 78.4 inches ahead of the wing leading edge at the intersection of the straight and tapered section.

Weight (Pounds)	Forward Limit (In. Aft of Datum)	Rearward Limit (In. Aft of Datum)
3400	91.4	95.5
3300	89.0	96.2
2900	80.0	96.2
2400	76.0	96.2

Straight line variation between points given.

Note: It is the responsibility of the airplane owner and the pilot to insure that the airplane is properly loaded. See weight and balance section for proper loading instructions.

Maneuvers

No acrobatic maneuvers including spins approved.

Placards

1. In full view of the pilot:

"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."

"THIS AIRCRAFT APPROVED FOR NIGHT IFR NON-ICING FLIGHT WHEN EQUIPPED IN ACCORDANCE WITH FAR 91 OR FAR 135."

2. On the instrument panel in full view of the pilot:

"ROUGH AIR OR MANEUVERING SPEED 149 MPH."

3. On the instrument panel in full view of the pilot:

"DEMONSTRATED CROSS WIND COMPONENT 20 MPH."

4. (For operation with the rear door removed)

In full view of the pilot:

"FOR FLIGHT WITH THE DOOR REMOVED, SEE THE LIMITATIONS AND PROCEDURES SECTIONS OF THE AIRPLANE FLIGHT MANUAL.

5. On the instrument panel in full view of the pilot when the autoflite is installed:

"FOR HEADING CHANGES: PRESS DISENGAGE SWITCH ON CONTROL WHEEL. CHANGE HEADING. RELEASE DISENGAGE SWITCH."

Placards (Cont'd)

6. On the fuel selector valve cover when the seventh seat is installed:

"FOR 7-PASSENGER OPEATION, ALL WEIGHT IN EXCESS OF 3112 POUNDS MUST BE FUEL WEIGHT ONLY, FILL TIP TANKS FIRST, USE MAIN TANKS FIRST."

7. On the instrument panel in full view of the pilot when the AutoFlite II is installed:

"TURN AUTOFLITE ON. ADJUST TRIM KNOB FOR MINIMUM HEADING CHANGE. FOR HEADING CHANGE, PRESS DISENGAGE SWITCH ON CONTROL WHEEL, CHANGE HEADING, RELEASE SWITCH. ROTATE TURN KNOB FOR TURN COMMANDS. PUSH TURN KNOB IN TO ENGAGE TRACKER. PUSH TRIM KNOB IN FOR HI SENSITIVITY. LIMITATIONS AUTOFLITE OFF FOR TAKEOFF AND LANDING."

8. On the instrument panel in full view of the pilot when the supplementary white strobe lights are installed:

"WARNING - TURN OFF STROBE LIGHTS WHEN TAXIING IN VICINITY OF OTHER AIRCRAFT, OR DURING FLIGHT THROUGH CLOUD, FOG OR HAZE."

Airspeed Instrument

RED radial line	Never Exceed	212 mph (184 knots)
YELLOW arc	Caution Range Smooth Air Only	168 to 212 mph (146 to 184 knots)
GREEN arc	Normal Operating Range	71 to 168 mph (62 to 146 knots)
WHITE arc	Flap Down Range	63 to 125 mph (55 to 109 knots)

Rear Cabin Door or Rear Cabin Door and Cargo Door Removal Limitations

The following limitations must be observed in the operation of this airplane with the rear cabin door or rear cabin door and cargo door removed:

1. The airplane may be flown with the rear cabin door or rear cabin door and cargo door removed. Flight with the front door removed is not approved.
2. Maximum speed - 165 mph.
3. No smoking.
4. All loose articles must be tied down and stowed.
5. Jumper's static lines must be kept free of pilot's controls and control surfaces.
6. Operation approved VFR flight conditions only.

Seven-Passenger Operating Limitations

The following limitations must be observed in the operation of this airplane with seven passengers:

1. Fill tip tanks first; use main tanks first.
2. This airplane must not be operated at gross weights in excess of 3112 pounds unless the weight over 3112 pounds is fuel weight only.
3. Remove fuel from the main tanks first when required for proper weight and balance.

Nose Wheel Fairing Limitations

When the nose wheel fairing is removed, two nose wheel centering springs (Part No. 67168) must be installed.

2. Procedures Section

1. The stall-warning system is inoperative with the master switch off.

2. Electric fuel pump must be on for both landing and takeoff.

3. Except as noted above, all operating procedures for this airplane are normal.

4. When operating with the rear cabin door removed, it is recommended that all occupants wear parachutes.

5. (Electric Pitch Trim Installation Only)

The following emergency information applies in case of electric pitch malfunction:

a. In case of malfunction, disengage electric pitch trim by operating push button trim switch on instrument panel.

b. In emergency, electric pitch trim may be overpowered using manual pitch trim.

c. In cruise configuration, malfunction results in 10^{o} pitch change and 50 ft. altitude variation.

6. (AutoFlite Installation Only)

The following emergency information applies in case of autoflite malfunction:

a. In case of malfunction, PRESS disconnect switch on pilot's control wheel.

b. Rocker switch on instrument panel - OFF.

c. Unit may be overpowered manually.

d. In cruise configuration malfunction, 3 seconds delay results in 32^{o} bank and 40 ft. altitude loss.

e. In approach configuration malfunction, 1 second delay results in 6^{o} bank and 0 ft. altitude loss.

7. (AutoControl III Installation Only)

I. Limitations

Automatic Pilot off during takeoff and landing.

2. Procedures Section (Cont'd)

II Procedures

a. Normal Operation - Refer to Manufacturer's Operation Manual.

b. Emergency

1. In case of malfunction, disengage manual controls.
2. In emergency, automatic pilot may be overpowered manually.
3. In cruise configuration malfunction, 3 second delay results in 32° bank and 40 ft. altitude loss.
4. In approach configuration malfunction, 1 second delay results in 6° bank and 0 ft. altitude loss.

8. (AutofFlite II Installation Only)

I Limitations

a. AutoFlite off for takeoff and landing.

b. AutoFlite use prohibited above 195 mph CAS.

II Procedures

a. Normal Operation - Refer to Manufacturer's Operation Manual.

b. Emergency

1. In case of malfunction PRESS disconnect switch on pilot's control wheel.
2. Rocker switch on instrument panel - OFF.
3. Unit may be overpowered manually.
4. In cruise configuration malfunction, 3 seconds delay results in 35° bank and 80 ft. altitude loss.
5. In approach configuration malfunction, 1 second delay results in 10° bank and 50 ft. altitude loss.

9. Fuel System Pre-Flight Procedure

The fuel system should be drained daily prior to first flight and after refueling to avoid the accumulation of water or sediment. Each fuel tank is equipped with an individual quick drain located at the lower inboard rear corner of the tank. The fuel strainer and a system quick drain valve are located in the fuselage at the lowest point of the fuel system. It is important that the fuel system be drained in the

2. Procedures Section (Cont'd)

following manner:

a. Drain each tank through its individual quick drain located at the lower inboard rear corner of the tank, making sure that enough fuel has been drained to insure that all water and sediment is removed.

b. Place a container under the fuel sump drain outlet, which is located under the fuselage.

c. Drain the fuel strainer by pressing down on the lever located on the right-hand side of the cabin below the forward edge of the rear seat. The fuel selector must be positioned in the following sequence: off position, left tip, left main, right main, and right tip while draining the strainer to insure that the fuel lines between each tank outlet and fuel strainer are drained as well as the strainer. When the fuel tanks are full, it will take approximately 11 seconds to drain all the fuel in one of the lines between a tip tank and the fuel strainer and approximately six seconds to drain all the fuel in one of the lines from a main tank to the fuel strainer. When the fuel tanks are less than full, it will take a few seconds longer.

d. Examine the contents of the container placed under the fuel sump drain outlet for water and sediment and dispose of the contents.

CAUTION: When draining any amount of fuel, care should be taken to insure that no fire hazard exists before starting engine.

After using the under-seat quick drain, it should be checked from outside to make sure it has closed completely and is not leaking.

3. Performance Section

All performance is given for a weight of 3400 pounds.

Loss of altitude during stalls can be as great as 350 ft. depending on configuration and power.

Stall speed, in mph (Calibrated Airspeed):

Flaps Up 71
Flaps Down..... 63

Flap deflection versus handle position is:

1st notch - 10 degrees
2nd notch - 25 degrees
3rd notch - 40 degrees