

PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

REPORT 1545

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MODEL PA-24-260

THIS DOCUMENT MUST BE KEPT IN
THE AIRPLANE AT ALL TIMES

APPROVAL BASIS CAR 3 AND
PART 21, SUBPART J
PIPER MODEL PA-24-260
NORMAL CATEGORY ONLY
APPROVAL DATE - April 11, 1969

SERIAL NO. 24-
FAA IDENTIFICATION NO.

AIRPLANE FLIGHT MANUAL

LIMITATIONS:

This aircraft must be operated in observance of the following limitations:

Engine	Lycoming Model IO-540-N1A5
Engine Limits	For all operations - 2700 RPM, 260 HP
Fuel Grade	Aviation Gasoline - 91/96 Minimum Octane
Propeller	Hartzell Constant Speed Controllable; Hub Model HC-E2YR-1B, Blade Model 8467-7R, Pitch Settings at 30 inch Station: Low 15°, High 32° - 34° Diameter: Not over 77 inches, not under 75 inches
Engine Instruments	<u>Oil Temperature:</u> Green ARC (Normal Operating Range) 120°F to 245°F; Yellow ARC (Caution) 60°F to 120°F; Red Line (Max.) 245°F. <u>Oil Pressure:</u> Green ARC (Normal Operating Range) 60 to 90 PSI; Yellow ARC (Caution 25 to 60 PSI and 90 to 100 PSI; Red Line (Min.) 25 PSI; Red Line (Max.) 100 PSI. <u>Tachometer:</u> Green ARC (Normal Operating Range) 500 to 2700 RPM; Red Line (Max. Continuous) 2700 RPM. <u>Fuel Flow:</u> Green ARC (Normal Operating Range) 0 to 27.20 GPH; Red Line (Maximum Pressure at Sea Level) 27.20 GPH (9.20 PSI). <u>Cylinder Head Temperature:</u> Green ARC (Normal Range) 200 to 500°F, Red Line (Maximum permissible) 500°F.

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Cowl Flaps

Cowl flaps are provided to allow manual control of engine temperature. The cowl flaps should be open during ground operations and in climbs. In no case should the cylinder head temperature be allowed to exceed 500°F. and the oil temperature allowed to exceed 245°F.

Airspeed Limits (Calibrated Airspeed)

	<u>Normal Category</u>
Never Exceed	227 MPH (Red Line)
Caution Range (Smooth air only)	180 to 227 MPH (Yellow ARC)
Normal Operating Range	77 to 180 MPH (Green ARC)
Flap Extended	67 to 125 MPH (White ARC)
Max. Structural Cruising	180 MPH
Max. Gear Extended Speed	150 MPH
Maneuvering Speed	150 MPH
Stalling Speed - Power Off	
Gear and Flaps UP	77 MPH
Gear and Flaps DOWN	67 MPH

Flight Load Factors

Maximum Positive	3.8g
Maximum Negative	No inverted maneuvers approved.

Maneuvers

All intentional acrobatic maneuvers, (including spins), are prohibited.

Wing Flap Settings

Take-Off 0 to 15° Landing 32°

The flaps are electrically operated and the deflection is displayed on a flap position indicator. The take-off range is indicated by a White ARC on the flap position indicator.

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Maximum Weight IT IS THE RESPONSIBILITY OF THE AIRPLANE OWNER AND THE PILOT TO ASSURE THAT THE AIRPLANE IS PROPERLY LOADED. MAXIMUM ALLOWABLE GROSS WEIGHT 3200 POUNDS. MAXIMUM LANDING WEIGHT 3040 POUNDS. SEE WEIGHT AND BALANCE SECTION FOR PROPER LOADING INSTRUCTIONS.

C.G. Range Datum is 79" ahead of wing leading edge at Station 65.5 (point of intersection of straight and tapered sections).

WEIGHT POUNDS	FORWARD LIMIT IN. AFT OF DATUM	REARWARD LIMIT IN. AFT OF DATUM
3200	89.6	93
2600	82.5	93
2000 or less	80.5	93

Straight line variation between the points given.

Fuel Usable Fuel
Main - Two Tanks - 28 gal. each
Auxiliary - Two Tanks (if installed) level flight only - 15 gal. each

Unusable Fuel
The unusable fuel in this aircraft has been determined as 2 gal. in each main (inboard) tank in critical flight attitudes. This fuel, marked as unusable is available in level flight.

- Placards
1. On the instrument panel in full view of the pilot: "THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE AIRPLANE FLIGHT MANUAL. ACROBATIC MANEUVERS (INCLUDING SPINS) PROHIBITED."
 2. On the instrument panel:
"MANEUVERING SPEED 150 MPH."
 3. On instrument panel:
"MAXIMUM GEAR DOWN SPEED 150 MPH."
 4. On instrument panel:
"STALL WARNING"
 5. On the floor (on landing gear operating motor access door) "EMERGENCY GEAR EXTENSION. REMOVE COVER. EXTENSION INSTRUCTIONS ON REVERSE SIDE."

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Placards

6. On baggage compartment: "MAXIMUM BAGGAGE AND/OR PASSENGER WEIGHT 250 LBS. IN BAGGAGE AREA, INCLUDING SEATS. SEE WEIGHT AND BALANCE."
7. On Emergency Door: "EMERGENCY EXIT"
"HOLD KNOB UP" "TURN LATCH CLOCKWISE".

PROCEDURES :

Instructions for Emergency Extension of Landing Gear

1. Reduce power-airspeed not to exceed 100 M.P.H.
2. Place Landing Gear Selector Switch in "GEAR DOWN LOCKED" position.
3. Disengage motor. Raise motor release arm and push forward through full travel.
4. Remove gear extension handle from stowage. If left socket is not in clear position, place handle in right socket. Engage slot and twist clockwise to secure handle. Extend handle and rotate forward until left socket is in clear position. Remove handle and place in left socket and secure. Extend handle. Rotate handle FULL forward to extend landing gear and to engage emergency safety lock.
5. Handle locked in full forward position indicates landing gear is down and emergency safety lock engaged. Gear "DOWN LOCKED" indicator light should be "ON".

NOTE: Reducing power and rocking gear extension handle will aid in manually extending the landing gear. DO NOT RETRACT WITH HANDLE IN SOCKET. DO NOT RE-ENGAGE MOTOR IN FLIGHT.

The use of 15° flap deflection during take-off has been approved for this aircraft.

The Stall Warning System is inoperative with the master switch off.

The alternator circuit breakers should not be opened under any circumstances without consulting the service manual for detailed procedures.

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Landing Gear Down Light

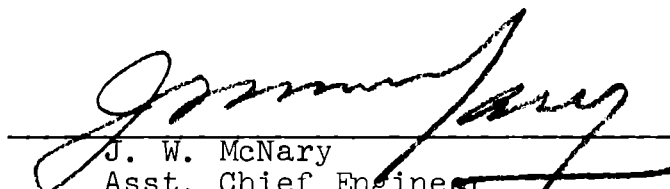
The green gear down light on the instrument panel indicates the landing gear is down and locked. When the instrument panel lights are turned on the intensity of the gear indicator lights is reduced. The green light may be invisible with instrument lights on during daylight.

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

PERFORMANCE:

Loss of altitude from a power off stall, gear and flaps extended - 325 feet.

Other normal stall configurations result in less loss of altitude.



J. W. McNary
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D.O.A. EA-1
April 11, 1969