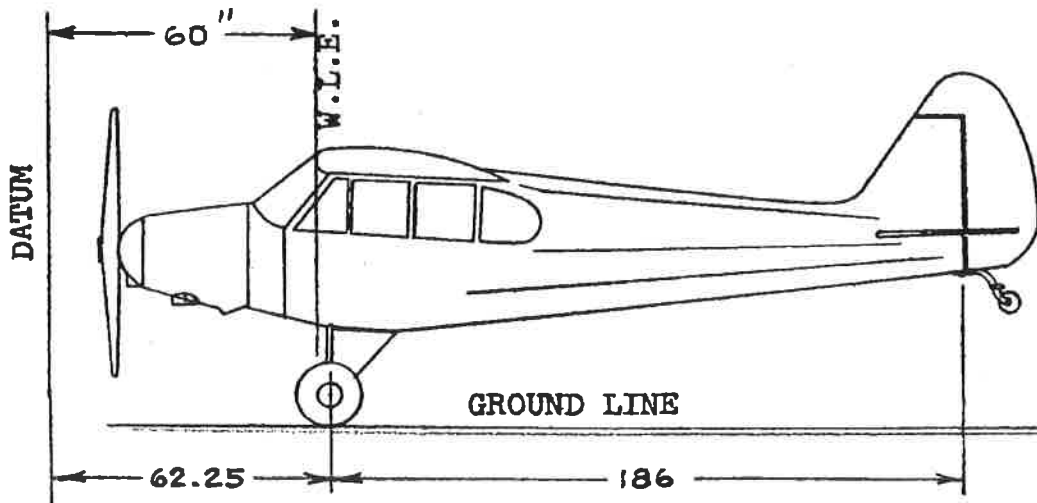


PIPER AIRCRAFT CORPORATION
 LOCK HAVEN, PENNA.

REPORT 834
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 PA-18"150"
 MODEL PA-18A"150"

PIPER AIRCRAFT CORPORATION
 LOCK HAVEN, PENNSYLVANIA
 ACTUAL WEIGHT AND BALANCE
 MODEL PA-18"150", MODEL PA-18A"150"

SERIAL NO. 18- CERTIFICATE NO. N DATE



AIRPLANE WEIGHING DIAGRAM

Empty Weight as Weighed (Includes items checked on Pages 7, 8, & 9.)

| | <u>Scale Reading</u> | <u>Tare</u> | <u>Net</u> |
|------------------|----------------------|-------------|------------|
| Left Wheel | _____ | _____ | _____ |
| Right Wheel | _____ | _____ | _____ |
| Tail Scale (N) | _____ | _____ | _____ |
| Total (T) | | | _____ |

Revised: June 21, 1960.
 November 15, 1960
 August 23, 1963
 August 28, 1963

PREPARED _____
 CHECKED _____
 APPROVED _____

580 820

August 12, 1974

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LOCK HAVEN, PENNA.

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Empty Weight C.G. Aft Main Wheel Centerline is:

A. $\frac{186 \times (N)}{(T)}$ = _____ In.

Empty Weight C.G. Aft of Datum is:

B. 62.25 + A _____ = _____ In.

MOST FORWARD C.G. (NORMAL CATEGORY AND UTILITY CATEGORY)

| Item | Weight | Arm | Moment |
|------------------------------|------------|-----------|--------------|
| Empty Weight | | | |
| Oil (8 Qts.) | 15 | 24 | 360 |
| Fuel (12.5 Gal.) Wing | 75 | 84 | 6300 |
| Pilot and Chute (Front Seat) | <u>190</u> | <u>71</u> | <u>13490</u> |

TOTAL

MOST FORWARD C.G. IS _____ IN. AFT OF WING L.E.

MOST REARWARD C.G. UTILITY CATEGORY

| Item | Weight | Arm | Moment |
|---------------------------------|------------|-----------|--------------|
| Empty Weight | | | |
| Oil (8 Qts.) | 15 | 24 | 360 |
| Fuel () Wing | | 84 | |
| Pilot and Chute (Front Seat) | 190 | 71 | 13490 |
| Passenger and Chute (rear Seat) | <u>190</u> | <u>97</u> | <u>18430</u> |

TOTAL 1500

MOST REARWARD C.G. IS _____ IN. AFT OF WING L.E.

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PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

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 MODEL PA-18A"150"

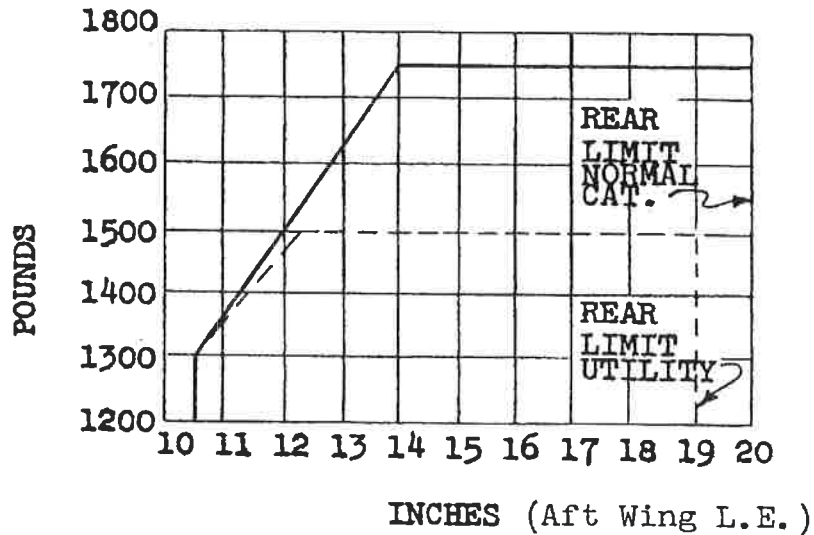
MOST REARWARD C. G. NORMAL CATEGORY

| Item | Weight | Arm | Moment |
|---------------------|--------|-----|--------|
| Empty Weight | | | |
| Oil (8 Qts.) | 15 | 24 | 360 |
| Fuel (36 Gal.) Wing | 216 | 84 | 18144 |
| Pilot (Rear Seat) | 170 | 97 | 16490 |
| Baggage | 50 | 117 | 5850 |

TOTAL

MOST REARWARD C. G. IS _____ IN. AFT WING L.E.

APPROVED C. G. RANGE VS. WEIGHT



Normal Category _____

Utility Category-----

PREPARED _____
 CHECKED _____
 APPROVED _____

PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

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MODEL..... PA-18"150"
 PA-18A"150"

Revised:
11/6/61
8/23/63
9/10/65
2/21/66
11/12/68
8/20/76
9/17/76
10/14/77

ACTUAL WEIGHT AND BALANCE

MODEL PA-18"150", AND MODEL PA-18A"150"

EQUIPMENT LIST

| <u>Item</u> | <u>Weight</u> | <u>Arm About W. L.E.</u> |
|--|---------------|------------------------------|
| <u>Propellers and Propeller Accessories</u> | | |
| Propeller - Sensenich M74DM or 74DM6 Fixed Pitch Metal | 30 lbs. | (-57) |
| a. Spinner Dome PAC Dwg. 14422 and Bulkhead Adaptors PAC Dwg. 14425 and 14424 | 2 lbs. | (-59) |
| <u>Engine and Engine Accessories</u> | | |
| Vacuum Pump - Pesco Model 3P-194-F, Type B-11 | 4 lbs. | (-30) |
| Starter, Delco Remy 12V. | 17 lbs. | (-48) |
| Starter Prestolite Model MZ-4204 | 17 lbs. | (-48) |
| Oil Cooler - Harrison No. AP13SJO3-01 or AP12CUO3-01 PAC Dwg. 13724 or 14368 | 6 lbs. | (-53) |
| Vacuum Pump - Airborne Mechanisms 113A5 or 200CC | 4 lbs. | (-30) |
| Vacuum Pump - Airborne Mechanisms 211CC | 2 lbs. | (-30) |
| <u>Landing Gear</u> | | |
| Two Main Wheel-Brake Assemblies 8.00 - 4, Type III | 10 lbs. | (+2) |
| a. Goodrich Model No. 841A Wheel Assembly No. D-3-13A-1 Brake Assembly No. D-2-113 | | |
| Two Main 4-Ply Rating Tires, 8.00 - 4 Type III with regular tubes | 21 lbs. | (+2) |
| Two Main Wheel-Brake Assemblies 6.00 x 6 Type III Cleveland Model 20-119 | 17.4 lbs. | (+2) |
| Two Main 6.00 x 6 4 ply Type III Tires with regular tubes | 17 lbs. | (+2) |
| Two Main 7.00 x 6 6 ply Type III Tires with regular tubes | 21 lbs. | (+2) |
| Two Main 8.00 x 6 4 ply Type III Tires with regular tubes | 26 lbs. | (+2) |
| <u>Tail Wheels</u> | | |
| a. Scott Model 3-24B 6.00 | 6 lbs. | (+200) |
| b. Scott Model 3200 8.00 | +3 lbs. | (+200) |
| c. Maule Model SFS-1-4 6.00 | 6 lbs. | (+200) |

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PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

REPORT..... 834
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MODEL..... PA-18"150"
PA-18A"150'

| <u>Item</u> | <u>Weight</u> | <u>Arm About W. L.E.</u> |
|---|-----------------------|------------------------------|
| <u>Landing Gear (Continued)</u> | | |
| Skis | | Use Actual Wt. Change |
| a. Federal A-2000A Skis, Per Federal Dwg. 11R262 | | |
| EDO Model 89-2000 Floats with Water Rudder Installed in Accord- ance with EDO Dwg. No. 14390 and PAC Dwg. 14512 | | Use Actual Wt. Change |
| Scott Parking Brake Installation (Scott Aviation Corp., Lancaster, New York, Kit No. 2715 BK In- stallation in Accordance with their Bulletin I-169 | | |
| Wheel Streamlines | Neglect Wt. 6 lbs. | Change (+2) |
| Tandem Gear Model GW-100 In- stalled in Accordance with A.W. Whitaker, 5001 N.E. Union Ave., Portland, Oregon, Dwg. T-10 and Installation In- structions Dated June 8, 1949. | +46 lbs. | (+2) |
| <u>Electrical Equipment</u> | | |
| Two Landing Lights, GE Model 4509 in W. L.E. PAC Dwg. 14442 | 4 lbs. | (+5) |
| a. Battery Reading R33 or R35 12 V. (PAC Dwg. 14241) | 28 lbs. | (+84) |
| b. Battery Reading R33-12V (PAC Dwg. 14229) | 28 lbs. | (+59) |
| Generator, Delco Remy. 12V., 20 Amp with Mounting Bracket | 10.6 lbs. | (-49) |
| Generator, Delco Remy. 12V., 50 Amp with Mounting Bracket | 16.6 lbs. | (-49) |
| Navigation Lights - Grimes | 3 lbs. | (+65) |
| Alternator, Alco (PAC Dwg. 15500-2) | 11 lbs. | (-49) |
| <u>Interior Equipment</u> | | |
| <u>Flight Manual and Supplements</u> | | |
| q. DMCR Approved Airplane Flight Manual Dated October 1, 1954, for Airplanes Equipped with Lycoming O-320 Engines. | | |
| r. DMCR Approved Airplane Flight Manual Dated October 1, 1954, for Seaplanes Equipped with Lycoming O-320 Engines and EDO Model 89-2000 Floats. | | |
| <u>Miscellaneous</u> | | |
| Shoulder Harness Installation on Front and Rear Seats Per Piper Dwg. No. 12615 | | Use Actual Wt. Change |

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PIPER AIRCRAFT CORPORATION
LOCK HAVEN, PENNA.

REPORT 834
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PA-18"150"
MODEL PA-18A"150"

| <u>Item</u> | <u>Weight</u> | <u>Arm About W. L.E.</u> |
|--|---------------|------------------------------|
| <u>Miscellaneous Equipment</u> | | |
| Primary Group | 5.0 lbs. | (-9) |
| NARCO Super Homer | 8.1 lbs. | (-13) |
| NARCO Omnigator and Power Supply | 15.6 lbs. | (-5) |
| NARCO Simplexer and Power Supply | 11.4 lbs. | (-5) |
| NARCO LFR-3L and Power Supply | 6.2 lbs. | (-5) |
| Lear LTRA-6 | 11.6 lbs. | (-13) |
| Omni Antenna | 1.9 lbs. | (+173) |
| Whip Antenna | .2 lbs. | (+15) |
| Marker Beacon Antenna | .5 lbs. | (+40) |
| Low Frequency Receiver Antenna | 1.25 lbs. | (0) |
| LTRA-6 Dynamotor | 7.25 lbs. | (+7) |
| Fire Extinguisher (With Bracket) Type A-20 | 8.0 lbs. | (+21) |
| Fire Extinguisher (With Bracket) #2 1/2 DCK | 5.0 lbs. | (+21) |
| Venturi 4" | 2.0 lbs. | (-12) |
| Venturi 2" | .5 lbs. | (-12) |
| Turn and Bank | 2.0 lbs. | (-8) |
| Directional Gyro | 4.0 lbs. | (-8) |
| Piper PTR-1 Installation | 6.3 lbs. | (-12) |
| Piper PTR-1 and O-1 Omni Installation | 8.8 lbs. | (-12) |
| Full Gyro Panel Inst. | 10.1 lbs. | (-9) |
| Narco Mark III Installa- tion | 8.0 lbs. | (-12) |
| Narco Mark VIII Installa- tion | 8.0 lbs. | (-12) |
| Emergency Locator Installa- tion per PAC Dwg. #15319 | 2.0 lbs. | (+100) |
| Genave Alpha 200A or 300 Nav/Comm Installation per PAC Dwg. #15308 | 8.8 lbs. | (+26.8) |
| Tow Hook Installation per PAC Dwg. #60721 | 4.2 lbs. | (+128.5) |
| KS-2-SC Avionics Group Instl. per PAC Dwg. 09060 | 13.0 lbs. | (-0.3) |

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PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

REPORT 834
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 PA-18 "150"
 PA-18A "150"
 MODEL

| <u>Item</u> | <u>Weight</u> | <u>Arm About W. L. E.</u> |
|--|---------------|-------------------------------|
| <u>Miscellaneous Equipment (Continued)</u> | | |
| _____ NC-1-SC Avionics Group Instl. per PAC Dwg. 09062 | 10.0 lbs. | (+5.7) |
| _____ KS-1-SC Avionics Group Instl. per PAC Dwg. 09066 | 7.3 lbs. | (+10.1) |
| _____ KS-2-SC Avionics Group Instl. (with KT-78A Transponder) per PAC Dwg. 09060-2 | 17.0 lbs. | (-0.7) |
| _____ R.C.Allen A2475-2 Electric Turn and Bank | 2.0 lbs. | (-11.0) |
| _____ KS-1-SC Avionics Group Instl. (with KT-78A Transponder) per PAC Dwg. 09066-2 | 10.8 lbs. | (+11.6) |
| _____ Emergency Locator Installa- tion per PAC Dwg. 66081-2 | 4.2 lbs. | (+100) |
| _____ Artificial Horizon (Air) | 1.8 lbs. | (-14.5) |
| _____ Outside Air Temp. Gauge | .2 lbs. | (-11.0) |
| _____ Eight Day Clock | .3 lbs. | (-11.0) |
| _____ Vertical Speed Ind. | .7 lbs. | (-11.0) |
| _____ Electric Fuel Gauge | .2 lbs. | (-12.0) |
| _____ Control Stick Lock | .5 lbs. | (-10.0) |
| _____ Dome Light | .2 lbs. | (+24.0) |
| _____ CTM-1-SC Avionics Group Instl. per PAC Dwg. 09370 | 9.8 lbs. | (+ 1.6) |
| _____ KS-2-SC Avionics Group Instl. per PAC Dwg. 09353-2 | 12.0 lbs. | (+10.4) |
| _____ KS-2-SC Avionics Group Instl. (with transponder) per PAC Dwg. 09353-3 | 15.0 lbs. | (+ 5.0) |

| | | |
|----------|----------------------|---|
| PREPARED | PIPER AIRCRAFT CORP. | Airplane Flight Manual Model PA-18 "150" PA-18A "150" |
| CHECKED | | |
| APPROVED | | Report 834 |

| <u>Item</u> | <u>Weight</u> | <u>Arm About W. L.E.</u> |
|--|---------------|------------------------------|
| <u>Miscellaneous Equipment (Continued)</u> | | |
| Narco NTC-1-18 Avionics Group Instl. per PAC Dwg. 06170-2 | 14.7 lbs. | (+14.5) |
| King KTS-1-18 Avionics Group Instl. per PAC Dwg. 06180-2 | 14.5 lbs. | (+14.0) |
| Narco Escort IIA Radio per PAC Dwg. 06192 | 7.0 lbs. | (+35.3) |
| King KY-97A Communications Transceiver per PAC Dwg. 06193-2 | 5.3 lbs. | (-1.02) |
| King KT-76A Transponder per PAC Dwg. 06194-2 | 4.3 lbs. | (-3.14) |
| Narco AT-150 Transponder per PAC Dwg. 06195-2 | 3.8 lbs. | (+1.3) |
| Narco AR-850 Altitude Reporter per PAC Dwg. 06179-2 | 0.9 lbs. | (-23.0) |
| Sigtronics Intercom Syst. per CA Dwg. 18-3-071 | 0.28 lbs. | (-8.5) |
| Northstar Loran M1 per CA Dwg. 18-2-095 | 5.18 lbs. | (-8.5) |