

PIPER AIRCRAFT CORPORATION
 LOCK HAVEN, PENNA.

REPORT 941 SEPT
 PAGE 3
 MODEL PA-22 "16"

PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNA.

WEIGHT AND BALANCE SUPPLEMENT

UTILITY CATEGORY

MODEL PA-22 "160"

TRI-PACER

SERIAL NO.

CERTIFICATE NO.

DATE

MOST FORWARD C.G. (UTILITY CATEGORY)

ITEM	WEIGHT	ARM	MOMENT
Empty Weight			
Oil (8 qts.)	15	31	465
Fuel (Gal.) Wing		84	
Pilot (Front Seat)	<u>170</u>	<u>81</u>	<u>13770</u>

TOTAL

MOST FORWARD C.G. IS IN. AFT W.L.E.

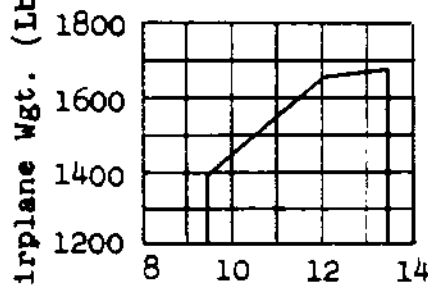
MOST REARWARD C. G. (UTILITY CATEGORY)

ITEM	WEIGHT	ARM	MOMENT
Empty Weight			
Oil (8 qts.)	15	31	465
Fuel (Gal.) Wing		84	
Pilot and Chute	190	81	15390
Passenger and Chute	<u>190</u>	<u>81</u>	<u>15390</u>

TOTAL

MOST REARWARD C.G. IS IN. AFT W.L.E.

APPROVED C.G. RANGE Vs. WEIGHT



C. G. Range (In. Aft W.L.E.)

PREPARED _____

CHECKED _____

APPROVED _____

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LOCK HAVEN, PENNA.

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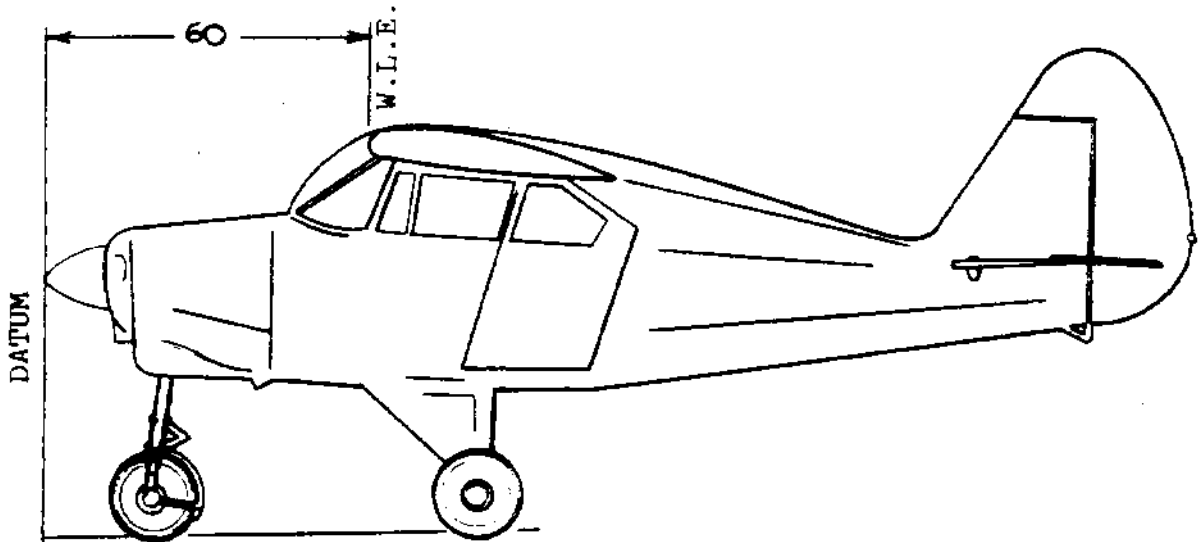
MODEL PA-22"160"

PIPER AIRCRAFT CORPORATION
LOCK HAVEN, PENNSYLVANIA
ACTUAL WEIGHT AND BALANCE
MODEL PA-22"160" TRI-PACER

SERIAL NO. 22-

CERTIFICATE NO. N

DATE



AIRPLANE WEIGHING DIAGRAM

Empty Weight as Weighed (Includes items checked on Pages 7 and 8.)

Left Wheel

Right Wheel

Nose Wheel (N) _____

Total (T)

Revised: June 21, 1960.
November 15, 1960

PREPARED _____
CHECKED _____
APPROVED _____

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PIPER AIRCRAFT CORPORATION
 LOCK HAVEN, PENNSA.

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

A. $\frac{67.5 \times (N)}{(T)} = A$ _____ In.

Empty Weight C.G. Aft Wing Leading Edge is:

B. $31.5 - A = B$ _____ In.

Empty Weight C.G. Aft of Datum is:

C. $60.0 + B =$ _____ In.

MOST FORWARD C.G. (NORMAL CATEGORY)

Item	Weight	Arm	Moment
Empty Weight			
Oil (8 Qts.)	15	31	465
Fuel(13.4 Gal.) Wing	80	84	6720
Pilot (Front Seat)	<u>170</u>	<u>81</u>	<u>13770</u>

TOTAL

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

MOST FORWARD C.G. (ALTERNATE) NORMAL CATEGORY

Item	Weight	Arm	Moment
Empty Weight			
Oil (8 Qts.)	15	31	465
Fuel (18 Gal.) Wing	108	84	9072
Pilot (Front Seat)	170	81	13770
Passenger (Front Seat)	<u>170</u>	<u>81</u>	<u>13770</u>

TOTAL

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

PREPARED _____
 CHECKED _____
 APPROVED _____

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LOCK HAVEN, PENNSA.

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MODEL PA-22"160"

MOST REARWARD C. G. NORMAL CATEGORY

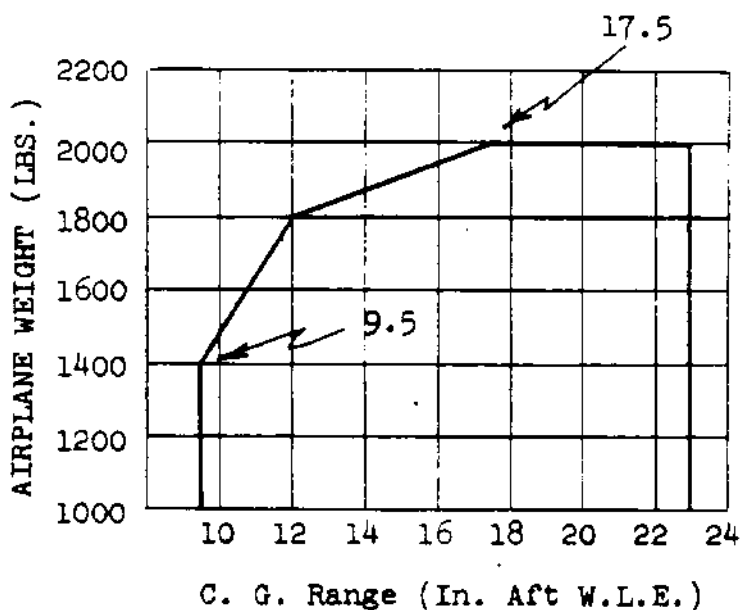
Item	Weight	Arm	Moment
Empty Weight			
Oil (8 qts.)	15	31	465
Fuel (36 Gal.) Wing	216	84	18144
Fuel, Auxiliary (* <u> </u> Gal.)		106	
Pilot (Front Seat)	170	81	13770
Passenger (2 Rear Seat)	340	109	37060
Baggage	<u>100</u>	<u>127</u>	<u>12700</u>

TOTAL

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

* Auxiliary Fuel Tank Total Capacity - 8 Gal.

APPROVED C. G. RANGE VS. WEIGHT



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CHECKED _____

APPROVED _____

PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PENNSA.

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MODEL PA-22"160

Revised:
11/15/60

ACTUAL WEIGHT AND BALANCE

MODEL PA-22"160 TRI-PACER

EQUIPMENT LIST

<u>Item</u>	<u>Weight</u>	<u>Arm About</u> <u>W. L.E.</u>
<u>Propellers and Propeller Accessories</u>		
Propeller - Sensenich M74DM Fixed Pitch Metal	30 lbs.	(-50)
a. Spinner Dome PAC Dwg. 14422 and Bulkhead Adaptors PAC Dwg. 14426 and 14424.	2 lbs.	(-52)
<u>Engine and Engine Accessories</u>		
Oil Cooler - Harrison No. AP13SJO3-01 or AP12CU03-01 PAC Dwg. 13724 or 14368.	6 lbs.	(-46)
Reserve 8 Gal. Fuel Tank with Electric Transfer Pump. PAC Dwg. 14454	12 lbs.	(+46)
Vacuum Pump - Pesco Model 3P-194-F, Type B-11	4 lbs.	(-25)
Starter, Delco Remy 12 V.	17 lbs.	(-40)
<u>Landing Gear</u>		
Two Main Wheel - Brake Assemblies 6.00 - 6, Type III	14 lbs.	(+31.5)
a. Cleveland Aircraft Products Model 6:00 DHB-3 Wheel Assembly No. C-38500H Brake Assembly No. C-2000H		
Two Main 4-Ply Rating Tires, 6.00-6 Type III with regular tubes	17 lbs.	(+31.5)
One Nose Wheel 6.00-6 Type III		
a. Cleveland Aircraft Products Wheel Assembly No. C-38500H (Less Brake Drum)	5 lbs.	(-36)
One Nose Wheel 4-Ply Rating Tire 6.00-6 Type III with regular tube	9 lbs.	(-36)

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REVISED:

11/16/59

11/15/60

	<u>Item</u>	<u>Weight</u>	<u>Arm About W. L.E.</u>
	<u>Electrical Equipment</u>		
_____	Two Landing Lights, GE Model		
	4509 in W. L.E. PAC Dwg. 12534	4 lbs.	(+5)
_____	Battery Reading R33-12V	28 lbs.	(+21)
_____	Generator, Delco Remy. 12 V.,		
	20 Amp with Mounting Bracket	10.6 lbs.	(-20)
_____	Navigation Lights - Grimes	3 lbs.	(+65)
	<u>Interior Equipment</u>		
	Flight Manual and Supplements		
_____	(s) DMCR Approved Airplane Flight Manual		
	Dated August 27, 1957 for Airplanes		
	Equipped with Lycoming O-320-Series		
	Engines.		
	(t) DMCR Approved Supplement No. 1 to		
	Flight Manual dated August 27, 1957.		
	(Required with Item 407.)		
	(x) DMCR Approved Supplement No. 3 to		
	Airplane Flight Manual dated August 7,		
	1958. (Required with Item 408 Piper		
	Autocontrol, (Mitchell Model AK064)		
	(Auto-Pilot) Model PA-22"160" serial		
	numbers 22-6328, 22-6344, 22-6352, and up.		
_____	Piper Autocontrol (Mitchell AK064)	4.5 lbs.	(-9.75)
	<u>Miscellaneous Equipment</u>		
_____	Tow Bar Assembly	1.5 lbs.	(+90)
_____	Advanced Inst. Panel	10.2 lbs.	(0)
_____	NARCO VTLR-2	7.2 lbs.	(0)
_____	NARCO Super Homer	8.1 lbs.	(0)
_____	NARCO Omnigator and Power Supply	15.6 lbs.	(-5)
_____	NARCO Simplexer and Power Supply	11.4 lbs.	(-5)
_____	NARCO LFR-3 and Power Supply	6.2 lbs.	(-5)
_____	Lear LTRA-6	11.6 lbs.	(0)
_____	Lear ADF-12 and Indicator	6.7 lbs.	(0)
_____	Omni Antenna	1.9 lbs.	(+150)
_____	Whip Antenna	.2 lbs.	(+15)
_____	ADF Loop Antenna	3.0 lbs.	(+125)
_____	Marker Beacon Antenna	.5 lbs.	(+55)
_____	Low Frequency Receiver Antenna	1.25 lbs.	(0)
_____	ADF-12 Amplifier	11.0 lbs.	(+85)
_____	LTRA-6 Omni Pack	10.0 lbs.	(-9)
_____	LTRA-6 Dynamotor	7.25 lbs.	(-9)

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MODEL PA-22-160

Revised:
11/15/60

<u>Item</u>	<u>Weight</u>	<u>Arm About W. L.E.</u>
<u>Miscellaneous Equipment (Continued)</u>		
LTRA-6 Course Indicator	1.2 lbs.	(0)
NARCO VTA3 Kit & Power Supply	8.4 lbs.	(-5)

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CHECKED.....
APPROVED.....