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 Jamestown, NY 14701
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 FAA CRS# DKZR372X

FORM 107

WEIGHT & BALANCE AND EQUIPMENT LIST REVISION

Work Order #: 5835

Aircraft Make: Piper

Customer: Williamson Flying Club

Aircraft Model: PA28-140

Address: PO Box 148

Aircraft Serial #: 28-7125415

Williamson, NY 14589

FAA Registration #: N701DT

Supersedes: W&B Dated Gross Weight Empty Weight CG Moment
 10/2/06 2150 1360.84 87.29 118783.76

REMOVED EQUIPMENT

<u>Manufacturer</u>	<u>Description</u>	<u>Part Number</u>	<u>Serial#</u>	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Bendix King	KX155 Nav/Com	069-1024-31	2545	5.30	54.00	286.20
Bendix King	KI209 CDI	066-3056-01	52779	1.20	54.00	64.80
Bendix King	KR86 ADF	066-1038-00	30778	3.9	56	218.40
Northstar	M1 Loran	M1	N13706	4.2	62.2	261.24
Narco	AT150 Transponder	AT150	42210	2.30	62.20	143.06
Bendix King	KA42B ADF Antenna	071-1133-00	43580	4.70	122.00	573.40
Comant	comm antenna	CI121	NA	0.50	185.00	92.50

INSTALLED EQUIPMENT

<u>Manufacturer</u>	<u>Description</u>	<u>Part Number</u>	<u>Serial#</u>	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Garmin	GNS430W waas gps/nav/com	011-01060-40	97125896	6.50	63.00	409.50
Garmin	GTX330ES Transponder	011-00455-60	84150319	4.20	62.50	262.50
Garmin	GI106A CDI	013-00049-01	C05-11280	1.50	65.00	97.50
Garmin	GA35 waas gps antenna	013-00235-00	147203	0.50	75.00	37.50
RAMI	comm antenna	AV17	NA	1.25	185.00	231.25
RAMI	transponder antenna	AV74	NA	0.30	115.00	34.50

<u>New Useful Load</u>	<u>New Empty</u>	<u>Total Change</u>	<u>New CG</u>	<u>New Moment</u>
797.01	1352.99	-7.85	87.37	118216.91

Completed By:

Date: 6/26/18

Revision to Weight and Balance dated: 10/2/06

C. G. RANGE AND WEIGHT INSTRUCTIONS

1. Add the weight of all items to be loaded to the licensed empty weight.
2. Use the loading graph to determine the moment of all items to be carried in the airplane.
3. Add the moment of all items to be loaded to the licensed empty weight moment.
4. Divide the total moment by the total weight to determine the C. G. location.
5. By using the figures of Item 1 and Item 4, locate a point on the C. G. range and weight graph. If the point falls within the C. G. envelope, the loading meets the weight and balance requirements.

NOTE: With optional jump seats installed, aft passenger weight is restricted only by airplane weight and balance limitations (See Page 4 of this section). For baggage allowance, see Page 2A of this section.

SAMPLE LOADING PROBLEM (Normal Category)

⊗ These figures superseded - see new wt & balance latest

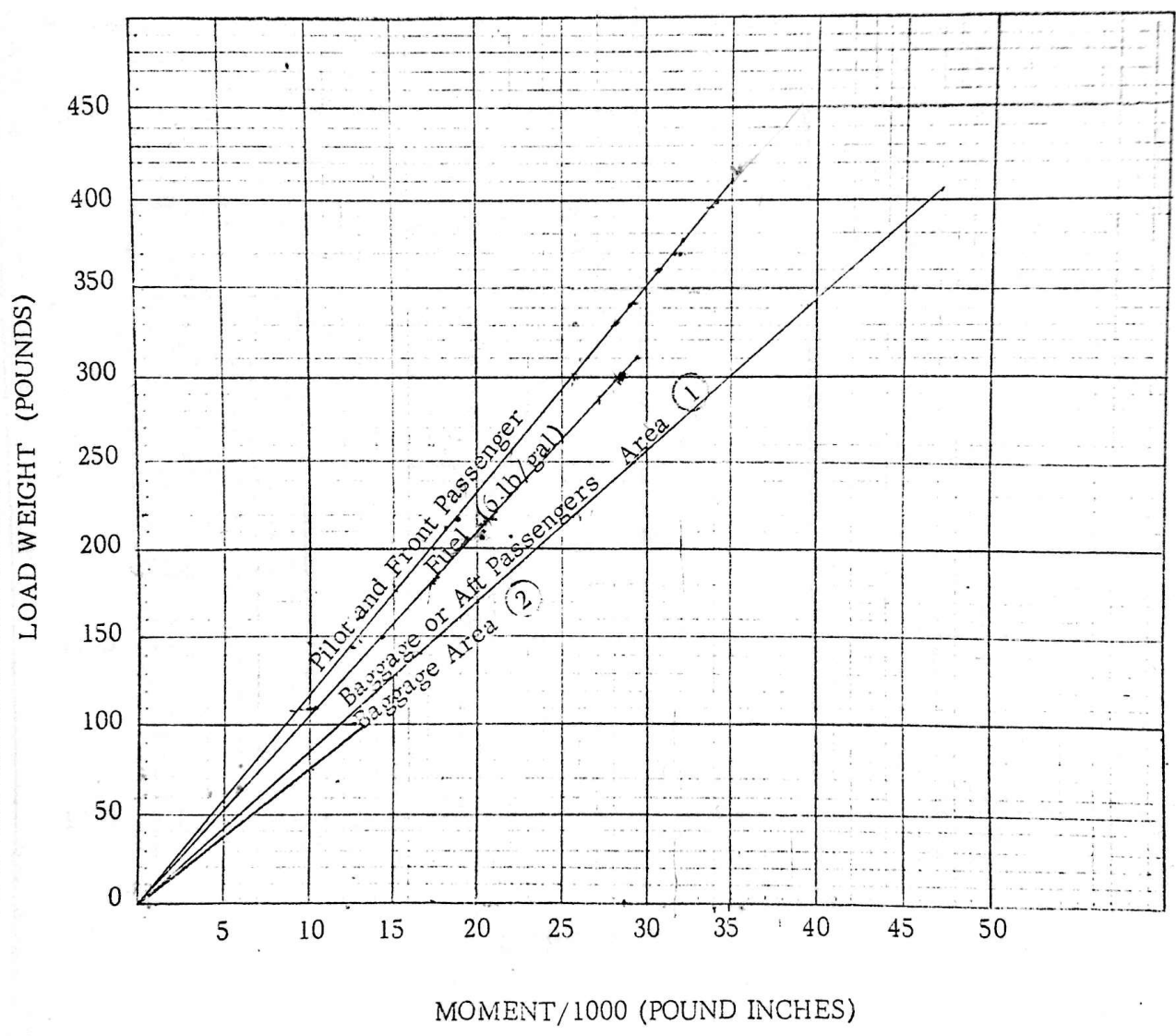
	Weight (lbs)	Arm Aft Datum (Inches)	Moment (In - lbs)
Licensed Empty Weight	1317.1 1324.5	86.6 85.4	114374.7 113072
Oil (8 quarts) <i>7.5 lb. gal</i>	15	32.5	488
✓ Pilot and Front Passenger	340	85.5	29070
✓ Passengers, Aft *	340	117.0	39780
21.8 gallons <i>6 lb.</i>			
✓ Fuel (50 Gal. Maximum)	130.5	95.0	12398 <i>28000.50 gal</i>
✓ Baggage * Area ①		117.0	
✓ Baggage * Area ②		133.3	
Total Loaded Airplane	2150	90.6	194808

The center of gravity (C. G.) of this sample loading problem is at 90.6 inches aft of the datum line. Locate this point (90'6) on the C. G. range and weight graph. Since this point falls within the weight - C. G. envelope, this loading meets the weight and balance requirements.

IT IS THE RESPONSIBILITY OF THE PILOT AND AIRCRAFT OWNER TO INSURE THAT THE AIRPLANE IS LOADED PROPERLY.

* Utility Category Operation - No baggage or aft passengers allowed.
 Normal Category Operation - See Page 2A of this section.

LOADING GRAPH



PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Weight and Balance Data Model PA-28-140
CHECKED		
APPROVED	REPORT VB-266	PAGE 4 Section 1

C.G. RANGE AND WEIGHTS

