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APPROVED		PAGE

AIRPLANE FLIGHT MANUAL

MODEL PA-28-180

FAA IDENTIFICATION NO. N7775N SERIAL NO. __28-5223

THIS DOCUMENT MUST BE KEPT IN AIRPLANE AT ALL TIMES.

FAA APPROVED: Original signed by Walter R. Haldeman * Walter R. Haldeman

Chief, Engineering & Manufacturing Branch Southern Region - - - Atlanta, Georgia

August 3, 1962 DATE:

FAA APPROVED:

Gene Dearing Aerospace Engineer For Retype Only.

August 12, 1964

DATE:

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Airplane Flight Manual Model PA=28-180

PAGE II

Log of Revisions

REVISION	PAGE	DESCRIPTION	APPROVED DATE
<u>NO.</u>	1	Deleted Propeller Pitch Information. Added Static R.P.M.	H. E. Waterman Supervisor SO-EMDO-42 5/25/64
2	2	Placards Section: Added Placard No. 5	H. E. Waterman Supervisor 7/8/64 SO-EMDO-42
3	2	Added to Placard No. 3: "BAGGAGE, MAX. 200 LBS., SEE WEIGHT AND BALANCE DATA FOR BAGGAGE LOADINGS BETWEEN 150 LBS. AND 200 LBS	
	1	Added Sensenich M76EMMS	
4	3	Item 5 added to Procedures Section.	Super visor S0-EMD0-43
5	1	Limitations Section: Revised Oil Temperature and Fuel Pressure Range	H. C. Faller 6/23/65 Supervisor, SO-EMDO-43
6	1	Limitation Section: Add note to Engine Limits	H.C. Paller 1/5/66 Supervisor, SO-EMDO-43
7	2	C. G. Range: 1975 lbs. 85.9 In. 95.9 In. 1650 lbs. 84.0 In. 95.9 In. Was 18.50 lbs. 85.1 In. 95.9 In.	
	4	Added Procedures Section And Item 6	1/1/1/10
	2	Added Placard No. 6	Faller 5/20/66 Supervisor
FAA APPROVED	8/3/62		SO-EMDO-43

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PAGE_

Log of Revisions

Revision		
No.	Page	Description Approved Date
8	1	Revised Oil Temperature, Oil Pressure and Fuel Pressure Limitations
	2,3	Revised Placards No. 3 and No. 5
	5	Added Page 5
		Procedures Section - Added Item 7
	6	Added Page 6 for Henry C. Faller 7/15/66 Supervisor SO-EMDO-43
9	1	Limitations Section Add "or 0-360-A4A Limitations Section Add "or 0-360-A4A Limitations Section Supervisor SO-EMDO-43
10	2,3	C.G. Range - Placard No. 1 and Placard No. 3 revised to include utility category operations. Added utility category max. wt. and approved maneuvers
	4	Procedures Section - Added to Item 3 "For Normal Category Operation". Added Placard No. 7.
	3	Placards Section - Added utility category operation to Item 4.
	1	Added Utility Category
	2	Added maximum positive load factor for Utility Category. Added Baggage Capacity. Added Baggage Capacity. Added Baggage Capacity. Category. Added Baggage Capacity.

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PAGE IV

Log of Revisions

REVISION NO.	PAGE	DESCRIPTION	APPROVED DATE
11	3	Placards Section: Revised Placard No. It to read, "In Full View of the Pilot"	falle 5/12/67 H. G. Faller Supervisor SO-EMDO-43
12	2	Revised C. G. Range	Supervisor SO-EMDO-43
13	3, 4	Revised Placard No. 4 and No. 7 to read: "In full view of the pilot"	Haller 4/2/68 Supervisor SO-EMDO-43
14	1	Added Aircraft Serial Numbers 1571 and 1573 to Engine and Propeller Limitations	H.C. Faller 6/3/68 Supervisor SO-EMDO-43
15	1	Added Propeller Designations	H. c. Faller 6/24/68 Supervisor SO-EMDO-43

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Piper Model PA-28-180

Normal and Utility Categories

AIRPLANE FLIGHT MANUAL

1. Limitations Section

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

Engine

Lycoming 0-360-A3A or 0-360-A4A

Engine Limits

Maximum permissible RPM for takeoff, 2475. For all other operations, 2700 rpm, 180 hp, (A/C S/N 28-671 to 1760A). For all operations, 2700 rpm, 180 hp, (A/C S/N 28-1571, 1573, 1761 and up).

Fuel

91/96 minimum octane aviation fuel.

Propeller

Sensenich M76 EMM or 76EM8 (S/N 671 to 1760A)
Sensenich M76 EMMS or 76EM8S5 (S/N 1571,1573, 1761 & up)
Maximum diameter 76 inches, minimum diameter 76 inches.
Static RPM at maximum permissible throttle setting. Not over 2450, not under 2275. No additional tolerance permitted.

Power Instruments

Oil temperature: GREEN arc (normal operating range) 120° F to 245° F; YELLOW arc (caution range) 60° F to 120° F; RED line (maximum) 245° F (S/N 671 to S/N 1760A)

Oil Temperature: GREEN arc (Normal operating range) 75° F to 245° F; RED line (maximum) 245° F (S/N 1571, 1573, 1761 & up)

Oil Pressure: GREEN arc (normal operating range) 60 psi to 90 psi; YELLOW arc (caution range) 25 psi to 60 psi; RED line (minimum) 60 psi; RED line (maximum) 90 psi.

Fuel Pressure: GREEN arc (normal operating range) .5 psi to 5 psi; RED line (minimum) .5 psi; RED line (maximum) 5 psi (S/N 671 to S/N 1760A)

Fuel Pressure: GREEN arc (normal operating range) .5 psi to 8 psi; RED line (minimum) .5 psi; RED line (maximum) 8 psi (S/N 1571, 1573, 1761 and up)

Tachometer: GREEN arc (normal operating range) 500 to 2700 rpm; RED line (maximum continuous power) 2700 rpm.

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Airspeed Limits	Never exceed	171 mph 140 129 115 3.8 Normal Category 4.4 Utility Category No inverted maneuvers approved
Maximum Weight	2400 lbs Normal Category; 1950 lbs U	Jtility Category.
Baggage Capacity	200 lbs.	
C. G. Range	The datum used is 78.4 inches ahead of the intersection of the straight and tapered sect	
	1. Normal Category	
	Weight Forward Limit (Pounds) (In. aft of datum)	Rearward Limit (In. aft of datum)
	2400 92. 1 2200 89. 2 1975 85. 9 1650 84. 0	94.5 95.9 95.9 95.9
	2. Utility Category	
	2 2 2 11 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Rearward Limit (In. aft of datum)
	1950 85. 8 1650 84. 0	86. 5 86. 5
	Straight line variation between points given	
	NOTE: It is the responsibility of the airpla to insure that the airplane is proper and balance section for proper loa	erly loaded. See weight
Maneuvers	1. Normal Category - All acrobatic maneuver	s including spins prohibited.
	2. Utility Category - Approved maneuvers for	r Utility Category only.
		Speed
	Spins (Flaps Up) Sta	11 9 mph
	Lazy Eights 12	
	Chandelles 12	9
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Placards

1. In full view of the pilot:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL OR UTILITY CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS.

ALL MARKINGS AND PLACARDS ON THIS AIRPLANE APPLY TO ITS OPERATION AS A UTILITY CATEGORY AIRPLANE. FOR NORMAL AND UTILITY CATEGORY OPERATIONS, REFER TO THE AIRPLANE FLIGHT MANUAL.

FOR SPIN RECOVERY, USE FULL RUDDER AGAINST SPIN, FOLLOWED IMMEDIATELY BY FORWARD WHEEL.

NO ACROBATIC MANEUVERS (INCLUDING SPINS) ARE APPROVED FOR NORMAL CATEGORY OPERATIONS."

2. Adjacent to upper door latch:

"ENGAGE LATCH BEFORE FLIGHT."

3. On the inside of the baggage compartment door:

"MAXIMUM BAGGAGE 125 LBS." (S/N 671 to 1760A)
(MAXIMUM BAGGAGE MAY BE INCREASED TO 200 LBS. IN ACCORDANCE WITH PIPER SERVICE SPARES LETTER NO. 242)

UTILITY CATEGORY OPERATION - NO BAGGAGE OR AFT PASSENGERS ALLOWED. NORMAL CATEGORY OPERATION - SEE AIR-PLANE FLIGHT MANUAL WEIGHT AND BALANCE SECTION FOR BAGGAGE AND AFT PASSENGER LIMITATIONS.

4. In full view of the pilot:

"ROUGH AIR OR MANEUVERING SPEED 129 MPH."

"UTILITY CATEGORY OPERATION - NO AFT PASSENGERS ALLOWED."

5. On the instrument panel in full view of the pilot when the oil cooler winterization kit is installed:

"OIL COOLER WINTERIZATION PLATE TO BE REMOVED WHEN AMBIENT TEMPERATURE EXCEEDS 50° F."

6. 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.

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PIPER AIRCRAFT CORP. PREPARED Airplane Flight Manual DEVELOPMENT CENTER; VERO BEACH, FLA. Model PA-28-180 CHECKED APPROVED PAGE 4 of 6 In full view of the pilot: "UTILITY CATEGORY ONLY." Placards (Cont'd) 7. Acrobatic maneuvers are limited to the following: Entry Speed Stall Spins (Flaps Up)..... 129 mph. Steep Turns..... Lazy Eights..... 129 Chandelles.... 129 Never exceed 17.1 mph (148 knots) Airspeed RED radial line Instrument 140 to 171 mph (121 Caution Range YELLOW arc Markings (Smooth Air Only) to 148 knots) 67 to 140 mph (58 Normal Operating GREEN arc to 121 knots) Range 57 to 115 mph (50 Flap Down Range WHITE arc to 100 knots) The stall-warning system is inoperative with the master switch off. 2. Procedures 1. Section Electric fuel pump must be on for both landing and takeoff. 2. The PA-28-180 airplane is approved under FAA Regulation CAR 3 which. prohibits intentional spins for normal category operation. The following information is noteworthy: The stall characteristics of the PA-28-180 are normal with the nose pitching down moderately following the stall, occasionally with a moderate roll which can be corrected by normal use of ailerons and rudder against the roll. Prolonged use of full rudder during stall practice may result in a rapid roll followed by a spin and should be avoided. Recovery from an incipient spin may be effected in less than one additional turn by use of opposite rudder followed by full forward control wheel. In the event that a fully developed spin is inadvertently experienced, C. recovery is best made by using full opposite rudder followed by full forward wheel and full opposite aileron. The control positions against the spin should be maintained during the entire recovery, which may

require several turns and a substantial loss of altitude if the airplane

is loaded heavily with a rearward center of gravity.

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

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normal.

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Procedures Section (Cont'd.)

- 5. (Electric Pitch Trim Installation Only)
 The following emergency information applies in case of electric pitch trim malfunction:
 - a. In case of malfunction, disengage electric pitch trim by pulling out circuit breaker on instrument panel.
 - b. In emergency, electric pitch trim may be overpowered using manual pitch trim.
 - c. In cruise configuration, malfunction results in 10° pitch change and 30 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 60° bank, and 100 Ft. altitude loss.
 - e. In approach configuration malfunction, 1 second delay results in 10° bank and 0 Ft. altitude loss.
- 7. (AutoControl III Installation Only)
 - I. Limitations:Pilot off during take off and landing.
 - II. Procedures:
 - Normal Operation
 Refers to Manufacturer's Operation Manual.
 - b. Emergency
 - 1. In case of malfunction, disengage manual controls.
 - 2. In emergency, pilot may be overpowered manually.
 - 3. In cruise configuration malfunction, 3 seconds delay results in 60° bank and 100 Ft. altitude loss.
 - 4. In approach configuration malfunction, 1 second delay results in 10° bank and 0 Ft. altitude loss.

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3. Performance Section

The following performance figures were obtained during FAA Type tests and may be realized under conditions indicated with the airplane and engine in good condition and with average piloting technique. All performance is given for 2400 pounds.

Loss of altitude during stalls varied from 125 to 200 feet, depending on configuration and power.

Stalling speeds, in mph, power off, versus angle of bank (Calibrated Airspeed):

Angle of bank	0	20	40	50	60
Flaps Up	67	69	76	83	94
Flaps Down	57				

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Weight and Balance Data
Model PA-28-180 D

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PAGE 1 Section 1

WEIGHT AND BALANCE DATA MODEL PA-28-180 D CHEROKEE

Airplane Serial Number 28 - 5223

Registration Number N7775N

Date NOV 1 4 1968

AIRPLANE EMPTY WEIGHT

July 10	Weight >	C. G. Arm (Inches Aft =	- Moment
Item	(Lbs)	of Datum)	(In-lbs)
Standard Empty Weight * Computed	1298.0	85.4	110918
Optional Equipment	65.1	98.0	6383
Unusable Fuel (3 Pints)	2.2	103.0	227
Licensed Empty Weight = Total of Above Items	1365.3	86.1	117528

^{*} Standard Empty Weight includes paint, hydraulic fluid and undrainable engine oil.

AIRPLANE USEFUL LOAD

(Gross Weight) - (Licensed Empty Weight) = Useful Load

Normal Category: (2400 lbs) - (1365.3 lbs) = 1034.7 lbs.

Utility Category: (1950 lbs) - (1365.3 lbs) = 584.7 lbs.

THIS LICENSED EMPTY WEIGHT, C.G. AND USEFUL LOAD ARE FOR THE AIRPLANE AS DELIVERED FROM THE FACTORY. REFER TO FORM FAA-337 WHEN ALTERATIONS HAVE BEEN MADE.

Inspection Representative

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CHECKED	DEVELOPMENT CENTER, VERO BEACH, FLA.	Model PA-28-180 D
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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.

SAMPLE LOADING PROBLEM (Normal Category)

	Weight (1bs)	Arm Aft Datum (Inches)	Moment (In - Lbs)
Licensed Empty Weight	1365.3	86.1	117528
Oil (8 quarts)	15	32.5	488
Pilot and Front Passenger	340	85.5	29070
Passengers, Aft * (Rear Seat)	340	118.1	40154
Fuel (50 Gal. Maximum)	300	95.0	28500
Baggage *	39.7	142.8	5669
Total Loaded Airplane	2400	92.3	221409

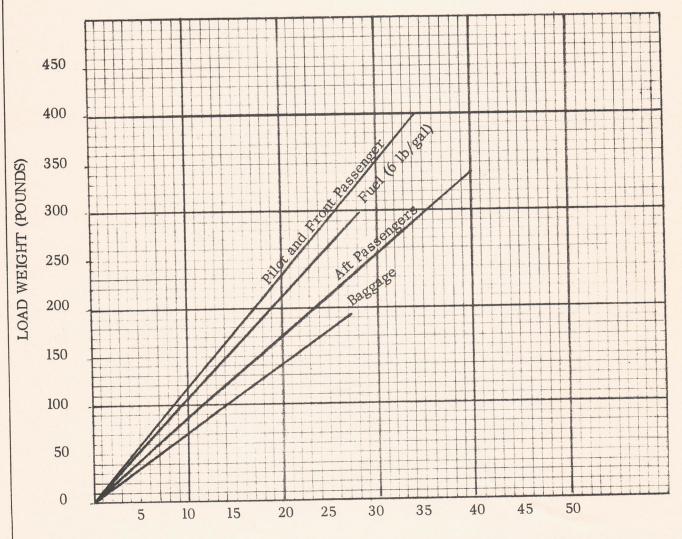
The center of gravity (C. G.) of this sample loading problem is at 92.3 inches aft of the datum line. Locate this point (92.3) on the C. G. range and weight graph. Since this point falls within the weight - C. G. envelope, this loading meets the weight and balance requirements.

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.

PREPARED CHECKED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Weight & Balance Data Model PA 28-180D
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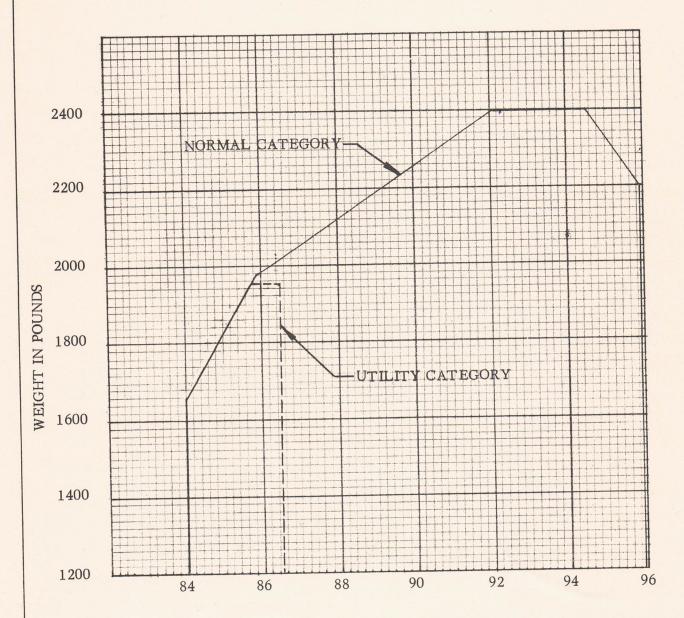
LOADING GRAPH



MOMENT/1000 (POUND INCHES)

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C. G. RANGE AND WEIGHT



INCHES AFT OF DATUM

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WEIGHT AND BALANCE DATA WEIGHING PROCEDURE

At the time of delivery, Piper Aircraft Corporation provides each airplane with the licensed empty weight and center of gravity location. This data is on Page 1, Section 1 of this Flight Manual.

The removal or addition of an excessive amount of equipment or excessive airplane modifications can affect the licensed empty weight and empty weight center of gravity. The following is a weighing procedure to determine this licensed empty weight and center of gravity location:

1. PREPARATION

- a. Be certain that all items checked in the airplane equipment list are installed in the proper location in the airplane.
- b. Remove excessive dirt, grease, moisture, foreign items such as rags and tools from the airplane before weighing.
- c. Defuel airplane. Then open all fuel drains until all remaining fuel is drained. Operate engine on each tank until all undrainable fuel is used and engine stops.
- d. Drain all oil from the engine, by means of the oil drain, with the airplane in ground attitude. This will leave the undrainable oil still in the system. Engine oil temperature should be in the normal operating range before draining.
- e. Place pilot and co-pilot seats in fourth (4th) notch, aft of forward position. Put flaps in the fully retracted position and all control surfaces in the neutral position. Tow bar should be in the proper location and all entrance and baggage doors closed.
- f. Weigh the airplane inside a closed building to prevent errors in scale readings due to wind.

2. LEVELING

- a. With airplane on scales, block main gear oleo pistons in the fully extended position.
- b. Level airplane (see diagram) by deflating nose wheel tire, to center bubble on level.

PREPARED		Weight and Balance Data
CHECKED	DEVELOPMENT CENTER, VERO BEACH, FLA.	Model PA-28-180 D
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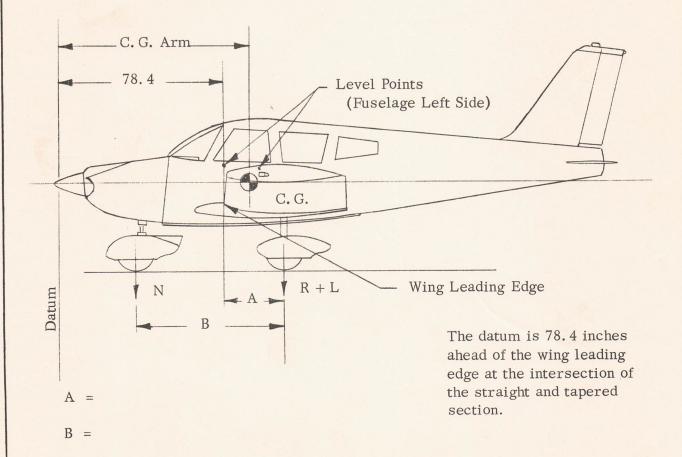
3. WEIGHING - AIRPLANE EMPTY WEIGHT

a. With the airplane level and brakes released, record the weight shown on each scale. Deduct the tare, if any, from each reading.

Scale Position and Symbol	Scale Reading	Tare	Net Weight
Nose Wheel (N)			
Right Main Wheel (R)			
Left Main Wheel (L)			
Airplane Empty Weight, as Weighed (T)			

4. EMPTY WEIGHT CENTER OF GRAVITY

a. The following geometry applies to the PA-28-180D airplane when airplane is level (See Item 2).



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- b. Obtain measurement "A" by measuring from a plumb bob dropped from the wing leading edge, at the intersection of the straight and tapered section, horizontally and parallel to the airplane centerline, to the main wheel centerline.
- c. Obtain measurement "B" by measuring the distance from the main wheel centerline, horizontally and parallel to the airplane centerline, to each side of the nose wheel axle. Then average the measurements.
- d. The empty weight center of gravity (as weighed including optional equipment and undrainable oil) can be determined by the following formula:

C. G. Arm =
$$78.4 + A - B(N)$$

5. LICENSED EMPTY WEIGHT AND EMPTY WEIGHT CENTER OF GRAVITY

	Weight	Arm	Moment
Empty Weight (as weighed)			
Unusable Fuel (3 pints)	+ 2.2	103.0	+ 227
Licensed Empty Weight			

PREPARED		PIPER AIRCRAFT			Weight and E Model PA-	
APPROVED		DEVELOPMENT CENTER, VERO BEACH, FLA.				
		STANDARD EQUIPME WEIGHT AND BAL STANDARD EQUIPME MODEL PA-28-18	ANC	EE	PAGE 8 Sect	10n 1
		ITEM		WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES
Check if Installed	Engine	Accessories				
	Engine - L	ycoming Model 0-360-A3A		274.4	26. 1	7162
X	Engine - L	ycoming Model 0-360-A4A		282.4	26. 1	7371
X	Fuel Pump, Electric Auxiliary, Bendix Model 478360			1.8	41.8	75
X	Fuel Pump, Engine Drive, Lycoming Dwg. No. 73297, 74082, 75148 or 75246			1.6	41.3	66
X	Oil Cooler	, Piper Dwg, Harrison C-8526	250	2.6	18. 1	47
X	Carlo de la companya del companya de la companya de la companya del companya de la companya de l	am Model CA-161 PL or AC N urolator AFP-2	0.	. 9	20, 1	18
	Alternator	, 35 Amp, Chrysler #2098615		12.5	19.0	238
X	Alternator or #26429	, 60 Amp, Chrysler #2642210 97		12.5	19.0	238
-	Starter-L; 1109511)	ycoming 74092 (Delco-Remy	妆	18. 0	19.5	351
X	Starter-L MZ4206)	ycoming 76211 (Prestolite	水	18.0	19. 5	351
	<u>Propell</u>	er and Propeller Acce	SSO	ries		
	Propeller 76EM8	, Sensenich M76EMM or		34.5	10. 1	348
X	Propeller or 76EM8	, Sensenich M76EMMS60 S5-0-60		38.5	8, 8	339
X	Spinner a	nd Attachment Plates		4.3	8.0	34
* Includ	ed in Engine	e Weight.				

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO	CORP. BEACH, FLA.	Weight and Model PA	Balance Data -28-180 D
APPROVED		STANDARD EQUIPMENT		PAGE 9 Sec	tion 1
		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)
Check if Installed	Landing	Gear and Brakes			
	Two Main V	Wheel Assemblies 6.00-6	32.0	109.6	3507
	Whee	land Aircraft Products l Assembly No. 40-28 e Assembly No. 30-18			
	, ,	Main 4-Ply Rating Tires 6 with Regular Tubes			
X	Two Main V	Wheel Assemblies	32.3	109.6	3540
	Whee	eland Aircraft Products 1 Assembly No. 40-86 2 Assembly No. 30-55			
		Main 4-Ply Rating Tires -6 with Regular Tubes			
X	One Nose V	Wheel 6.00-6	12.5	34.8	435
	Whee	eland Aircraft Products el Assembly No. 38501 s Brake Drum)			
		Nose Wheel 4-Ply Rating 6.00-6 with Regular Tubes			
	Electric	al Equipment			
X		ing Device, Safe Flight Inst. on No. C52207-4	. 2	80.2	16
	Voltage Re	egulator, Delco-Remy #118704	1.5	168.5	253
	Voltage Re	egulator, Chrysler #2098613	. 5	57.8	29
X	Voltage Re	gulator, Wico Electric #X-16300	. 5	57.8	29
	Battery 12	V, 25 A. H., Rebat Model S-25	21.5	168.0	3612

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO	0011.	Weight and Balance I Model PA-28-180 I		
APPROVED		STANDARD EQUIPMEN		PAGE 10 Sec	PAGE 10 Section 1	
Check if		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)	
Installed	Instrume	<u>nt</u>				
X	Compass -	Piper Drawing 67462	. 9	65.7	59	
-	Airspeed Indicator, Piper Dwg. 63205-2 .6			66.8	40	
X	Tachometer	, Piper Drawing 62177-3	. 7	66.2	46	
X	Altimeter,	Piper Drawing 67467	1.0	65.9	66	
	Engine Cluster, Piper Drawing 65852-2		. 8	67.4	54	
	Engine Cluster, Piper Drawing 67441-2		. 8	67.4	54	
X	Engine Clus	ster, Piper Drawing 95241-4	. 8	67.4	54	
X	Engine Clus	ster, Piper Drawing 95241-2	. 8	67.4	54	
	Miscella	neous				
X	Forward Se	at Belts (2)	1.5	86.9	130	
X	Aft Seat Bel	ts (2)	1.4	123.0	172	
X	Flight Manu	ial				
X	Tow Bar		1.3	133.0	173	

PREPARED CHECKED		PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.		Weight and Balance Data Model PA-28-180 D	
APPROVED		OPTIONAL EQUIPMENT		PAGE 11 Section 1	
				PAUL	
		OPTIONAL EQUIPMENT MODEL PA-28-180 D	LIST		
		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)
Check if Installed	Engine A	ccessories			
X	Vacuum Pun	np, Airborne Mechanisms			
	Model No. 1 and Drive	.0-113A1, 113A5 or 200 cc	5.0	37.0	185
X		Lycoming No. 74911 No. 6437032)	3. 3	40.5	134
X	X Vacuum Regulator and Filter		2.2	57.0	125
X	STATES STATES STATES STATES STATES STATES STATES STATES STATES	al Equipment acon, Grimes #40-0101-7-12 or Grimes #40-0101-15-12	1.5	263. 4	395
X	Landing Lig	ht, G. E. Model 4509	. 5	18. 1	9
X	Navigation 2064 (Whit	Light (Rear)(1) Grimes Model e)	. 2	281. 0	56
X	Navigation (Red and G	Lights (2) Grimes Model A1285 reen)	. 4	106, 6	43
X	Battery 12V (Weight 27.	7, 35 A. H., Rebat R-33 or R-35 0 lbs)	5.5 *	168.0	924
<u>X</u>	Cabin Ligh	t	. 3	104, 0	31
X	Cabin Spea	ker	. 8	104.0	83
Parameter State of St	Rotating Be	eacon, Whelen Model WRM L-12	1.6	263. 4	421

^{*} Weight and moment difference between standard and optional equipment.

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO	CORP. BEACH, FLA.	1	Balance Data -28-180 D
APPROVED		OPTIONAL EQUIPMENT LIST		PAGE 12 Section 1	
Check if	Electrica	ITEM 1 Equipment (Cont'd)	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)
	Charge demand column represe Column consule comme designer 1	wer Receptacle, PAC 62355-3	2.7	168.0	454
Emplicandonegappidates branchus spicares .	External Pov	ver Cable, PAC 62355-2	4.6	142.8	657
Diffire Contraction of the Professional State St	Piper Pitch	rim	4.0	158, 0	632
X	Heated Pitot	Head	. 4	100.0	40
	Instrume	nts			6
	Suction Gau	ge - Piper Drawing 67481	. 5	67.2	34
X	Suction Gau	ge - U.S. Gauge AW1821AFO3	. 5	67.2	34
	Suction Gau IG3-4	ge - Airborne Mechanisms	.5	67.2	34

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO	CORP. BEACH, FLA.		Balance Data -28-180 D	
APPROVED		OPTIONAL EQUIPMEN	T LIST	PAGE 13 Section 1		
	and the state of the state of	ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)	
Check if Installed	Instrume	nts (Cont'd)				
	Turn and Bar	nk, Piper Drawing 41711-2	2.2	64.9	143	
	Rate of Clim	nb, Garwin #22-201-01-1A	1.0	65.9	66	
Committee and the Committee of the Commi	Directional	Gyro, Garwin (3")	2.4	64.7	155	
	Directional	Gyro, AIM (3")	3, 1	64.0	198	
X	Artificial Horizon, Garwin (3")		1.8	64.9	117	
	Artificial Horizon, AIM (3")		2.2	64. 4	142	
X	Air Temperature Gauge, Rochester Manufacturing Co., No. 1592-C2 or NHM-70 (Manning, Maxwell & Moore)		. 2	82. 6	17	
X	Clock, 8-Da	ay, MIL-C-7939	. 4	67.4	27	
X	Tru-Speed I	indicator, PAC 62143-2	Same as S	Same as Standard Equipment Weigh		
X	Pictorial Ra	te of Turn, Mitchell 52D69	1. 3	65.3	85	
	Brittain Tur	n Coordinator TC-100(12)	2.6	64.7	168	
	Exhaust Gas	Temperature	. 7	60, 4	42	
	Attitude Gyr	ro, R.C. Allen (3")	2.2	65.6	144	
X	Directional	Gyro, R.C. Allen (3")	3. 3	64.8	214	
-	Manifold Pr	essure Gauge, PAC 21962	1.1	65.8	72	
	Rate of Clir SP-1403-(1)	mb, Standard Precision	.5	65.9	33	
X	Rate of Clin	mb, Karnish #AC-135-3	1.0	65.9	66	

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO	CORP. BEACH, FLA.		Balance Data A-28-180 D
APPROVED		OPTIONAL EQUIPMENT	LIST	PAGE 14 Section 1	
		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)
Check if Installed	AutoPilot	s			
	AutoControl	III			
DESCRIPTION OF THE PROPERTY OF	Roll Serv	70, Mitchell #1D363-183R	2.5	122.2	306
Extractionary payof-mark/marks recovered parent.	Console,	Mitchell #1C338	1.2	65, 1	78
	Cables		. 7	95.5	67
	Attitude (Garwin)	Gyro, Mitchell #52D66	1.9	64. 9	123
	Attitude (AIM)	Gyro, Mitchell #52D66	2.3	64.4	148
	Directio (Garwin)	nal Gyro, Mitchell #52D54P	2.5	64.7	162
	Directio (AIM)	nal Gyro, Mitchell #52D54P	3. 2	64.0	205
	Omni Coup	ler	. 9	64.3	58
×	AIRES	RUARTZ CHRONOGRAPH (REMOVED 8-27-77			
X	AutoFlite				
X	Roll Ser	rvo, Mitchell #1D363-183R	2.6	122. 2	318
X	Gyro Ar	mplifier, Mitchell #1C359	1.8	111.8	201
X	Cables		1.0	95.5	96
X	Panel U	nit	. 3	67.9	20

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO					
APPROVED		OPTIONAL EQUIPMEN	IT LIST	PAGE 15 Section 1			
Check if		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)		
Installed	Radio						
	PM-1 Marke	er Beacon					
	Receiver		1.1	121.3	133		
Party Language Chapter Control	Panel Un	it	. 3	68.1	20		
	Cable		. 3	85.0	26		
	Piper Radio	Compass PRC-3	4.5	64.4	290		
	Piper VHF	Transceiver PTR-1	5.0	64.8	324		
	Piper Omni	Convertor 0-1	2.5	65.3	163		
	King KX150	В	9.1	61.9	563		
X	Omni Recei	ving Antenna, Narco VRP-37	1.4	203.0	284		
X	VHF Anteni	na, Transmitting VHF-1	. 3	157.8	47		
	VHF Anten	na, Transmitting VHF-2	. 3	192.8	58		
X	Cable,	VHF-1	. 4	118.0	47		
	Cable,	VHF-2	. 5	135.0	68		
	Low Frequ	ency Antenna	. 5	167.0	84		
	Loop Anter	nna (PRC-3)	. 3	54.5	16		
	Omni Trac	ker (#1D482)	. 5	54.9	27		
	Narco Mar						
		eiver, Single	6.0	61.9	371		
		eiver, Dual	12.0	61.9	743		
		tor-Power Unit, Single	4.0	186.0	744		

PREPARED		PIPER AIRCRAFT			Balance Data	
CHECKED		DEVELOPMENT CENTER, VER	Model PA	Model PA-28-180 D		
APPROVED		OPTIONAL EQUIPME	PAGE 16 Section 1			
Check if		ITEM	WEIGHT (LBS)	ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)	
Installed	Radio	(Cont°d)				
	Modulator	c-Power Unit, Dual	8.0	186.0	1488	
7	Cable, Si	ngle	1. 7	120.0	204	
	Cable, D	ual	3.4	120.0	408	
	Narco VOA-	6 Omni Convertor	1.8	64.4	116	
Principles Control of the Control of	Narco VOA-	5 Omni Convertor	3.1	64.4	200	
	Narco VOA-	4 Omni Convertor	3.0	64, 4	193	
	Narco VOA-	4 Omni Convertor	3.0	64.4	193	
X	Narco ADF-	31A, Piper Drawing 67456				
X	Panel Uni	t	4.8	63.5	305	
X	Sensor U	nit and Doublers	2.2	162.7	358	
X	Sensor C	able	2.3	105, 6	243	
×	Sense An	tenna and Cable	. 4	150.0	60	
	Bendix ADF	-T-12				
	Receiver		3.8	65.8	250	
	Audio An	nplifier	. 8	56.0	45	
	Radio Co	mpass	1.7	66, 4	113	
Districtions (Citing Company) and Charles propagations	Loop Antenna			160, 8	193	
	Cable, A	ntenna	1.5	108.0	162	
±6.	Narco VOA-	-8 Omni Convertor	3, 3	64.4	213	
	Narco VOA	-9 Omni Convertor	3.4	64.4	219	

PREPARED		PIPER AIRCRAFT DEVELOPMENT CENTER, VERO		Weight and Balance Data Model PA-28-180 D			
APPROVED		OPTIONAL EQUIPMEN		PAGE 17 Section 1			
		ITEM	WEIGHT (LBS)	ADDED ARM AFT DATUM (INCHES)	MOMENT (POUND- INCHES)		
Check if Installed	Radio	(Cont'd)					
	Narco - UDI	-111 DME	8. 6	62.6	538		
· Despuis	Narco Mark	ш	7.5	62.7	470		
-	Narco UDI-4	4 DME					
	Receiver		8.5	61.7	524		
	Antenna		. 3	113.9	34		
	Cable, A	ntenna	. 4	100. 0	40		
X	EBC	ELT	1,9	72.2			
	UGR-2 Glide	e Slope					
4	Receiver		2.4	173.8	417		
	Cable		2.1	128.0	269		
*	Antenna		. 4	92.4	37		
	Cable, A	ntenna	. 5	145.0	73		
					THE STATE OF THE S		
	Transmitter	Selector (Dual VHF Only)	. 7	66.3	46		
X	Microphone		. 5	75.0	38		
X	Headset		. 5	65.0	33		
X	Junction Box		. 6	66.3	40 REMOVED 		
X	BERTEA	ML-100, KECEIVER	2.0	66.4	PEMOTA		
X		OLC-20, UMNI-CONU.	1.7	. 66.4	-58-19-1		
X		ML-200, KANSCEIVER	- 3.5	65,8			
X	11	OLL 20 - ORAL CONK	1.7	66.4			
X	7. A.A.D.C.O	ATTO TRANSPONDER	3,0	63.0	184		
	10/1/200	7110		EMOVE TH	ISLINE		

WT & BAL DATA
MODEL PA-28-180D
PAGE 17A
SECTION 1

OPTIONAL EQUIP LIST

CHECK IF INSTALLED	RADIO WT DATU (LBS) (INCH	M	MOMENT (POUND INCHES)
×	NARCO COM II 3,5	62.7	
×	NARCO COM 10 3.7	62,7	
×	NARCO NAVIZ 3.7	62,7	
X	NARLO NAVIO 1,9	62,7	
×	NARCO UGR-3A G/S Z,3	59.2	
×	NARCO CPIZS PANEL 1.Z	65,0	
×	NARIO MBT-R BCH 1.1	66.6	
×	NARLO UDI-4 DME 013	61,9	
×	& ANT	=	
×	DAVCO ADF PREQ ENTR .3	67,2	
X	OMNI TRACKER 15	54.9	27
×	EGT SYSTEM (ALGOR) -		
X	COLLINS DCE-400 2.1 DIST COMPUTING UNIT	62.	7
	DIST COMPOTING ONLY		

PREPARED AIRCRAFT CORP. PIPER Weight and Balance Data DEVELOPMENT CENTER, VERO BEACH, FLA. Model PA-28-180 D CHECKED APPROVED OPTIONAL EQUIPMENT LIST PAGE 18 Section 1 ARM AFT MOMENT WEIGHT DATUM (POUND-ITEM (LBS) (INCHES) INCHES) Check if Installed Miscellaneous X Nose Wheel Fairing, Piper Drawing 65348 3.8 34.8 132 Main Wheel Fairing, Piper Drawing 65237 7.0 109.6 767 X 1.8 156.0 Assist Step 281 Toe Brakes (Dual) 10.5 54.6 573 Toe Brakes (Single) 5.0 54.6 273 93.0 Fire Extinguisher-Stop Fire #A-20 7.5 698 279 Inertia Safety Belt, PAC 65766 (Set of 2) 2.5 111.6 109.5 22 Assist Strap and Coat Hooks . 2 X . 2 67.9 14 X Lighter Fire Extinguisher, Kidde Kompact VI 5.3 85.0 451 (With Brackets) 98.0 6383 TOTAL OPTIONAL EQUIPMENT 65.1

EXTERIOR FINISH

Base Color Ju	ineau White
1st Trim Color	Beaumont Blue
2nd Trim Color _	Dakota Black
Registration No.	Color Beaumont Blue
Type Finish L	acquer

	PIPER CHEROKEE		8-19-7	4
	PA 28-1800			
	N 7775 N			
	S/N Z8-5ZZ3		7 14445	
	WT & BAL D	ATA	EHANGE	
	4 LBS ADDED			
	REMOVED MOM MI 87 0,805	2) = 2'98	7-8-14-81	
			104	
	= 1372,9 + 19,4 = Maris	WT YTA	RM WISIM	OMENT
			INCHES) (LI	
	[T. 1027, 1 - 19, 4 = 1007, 7			
	BERTEA ML-200	3,5	65,8	230,3
2.5	REPTEN MILTOR SOTT	37513M	165,813 M	250,3
	REPTEA OLL-20	1.7	66.4	112,8
	BERTEA OLE-20	41,00	W.66,43M	
		10,4		686,2
			T	
	SUPERSEDES WTE DENDA	JA8 3	THIS WT	
	EBC ELT MODEL 302B	1.9-9-	72120	137.2
	MARIO COM II		62.7	219,4
	NARCO COM 10		62,7	232,0
	NARCO WAVEZ 3A	3.7	62,7	232,0
	NARCO NAV 10	1.9	62.7	119,1
	NARCO UGR-3A GIS RCVR	2,3	59.2	136,2
	NARCO CPIZS CONTROL PNL	1.12	65,0	78,0
	NARCO MBT-R MKR BCN RC	VRII	66.6	73,3
	NARCO UDI-4 DME	8,5	61,9	526,1
	OMNI TRACKER	15	54,9	27,5
	DAVCO ADF PREQ COUNTER	13	67.2	20;
	DAVES HOLLING COOK		-	-
		THERE		
	SUCTION GAUGE	15	67,2	33,0
	HEATED PITOT HEAD	,4	100,0	40,1
	MEATEURITO	29.8		1894.
		(OVER	(5)	
				s contraction

DES MOINES FLYING SERVICE

SUPPLEMENT TO AIRCRAFT WEIGHT AND BALANCE REPORT

LIST OF REVISIONS

	N7775					SERIAL NO. 28-5223	
	DATE	NEW EMPTY WT.	NEW E.W.C.G.	NEW USEFUL LOAD	NEW MOMENT	MAX. CONTINUOUS ELECTRICAL LOAD	
	6-6-69 8-28-69 9-9-69 6-8-70 4-9-71 8-19-74 3-11-87	1366.3 1350.3 1357.5 1360.2 1372.9 1392.3	86.0 85.9 85.7 85.7 85.6 85.45	1033.7 1049.7 1042.5 1039.8 1027.1 1007.7	117578.0 115996.0 116471.9 116471.9 11764,9 118830.5 118830.5	N/A ,,) 10.8	
				Superedad S			
1							

DEPARTMENT OF TRANSPORTATION CHEELS YES VILLYCHED FEDERAL AVIATION ADMINISTRATION

MAJOR REPAIR AND ALTERATION

Form Approved Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION

(Airframe, Powerplant, Propeller, or Appliance)

	MAKE	0.00			MODEL Cherokee 180						
AIRCRAFT	Pig SERIAL NO.				NATIONALITY AND REGISTRATION MARK						
OWNER	NAME (As shown on Garrett,	registration certifica George R. Harriett N	Ι.	ADDRESS (As shown on registration certification 215 Reading Maryland Heights, Mc							
		4 1181						5. 1	YPE		
		4. UNI	I IVEN	TIFICATION		SERIAL NO	2		ALTER-		
TINU	MAN	(E		MODEL		SERIAL NO	J.	REPAIR	ATION		
AIRFRAME		(As desc	ribed in item 1 a	bove)	•••••	•		X		
OWERPLAN	Т										
PROPELLER											
APPLIANCE	MANUFACTURER										
			6 (ONFORMITY STAT	EMENT						
A	AGENCY'S NAME	AND ADDRESS	0. (B. K	IND OF AGE			RTIFICATE	NO.		
Cha	arles T. Lar	nsden		FOREIGN CER	CATED MECHANIC	ANIC	1922	.038			
432 Bri	23 Grundy Di idgeton, Mo	63044		CERTIFICATED	REPAIR STATION						
D. I certi	fy that the repair ar nents hereto have be at the information f	nd/or alteration m	ade to lance v	the unit(s) ide vith the requirer nd correct to the	entified in item ments of Part 2 e best of my k	1 4 above and of 43 of the U.S. Fanowledge.	described ederal Avi	on the rea	verse or gulations		
DATE	Aug 27, 7	TONE TO E		SIGNATURE O	F AUTHORIZED	INDIVIDUA!	nage	len			
	San	7.	APPRO	VAL FOR RETURN	TO SERVICE	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1		.,		
Pursuant the Admir	to the authority give	en persons specified ral Aviation Admin	l belov istratio	v, the unit ident	ified in item 4 PPROVED		n the man	ner presci	ribed by		
	FAA FLT. STANDARDS	MANUFACTURER	X	INSPECTION AUTH		OTHER (Specify)					
B. DECEMBER	NSPECTOR			CANADIAN DEPA		The second second second second					

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

	MAKE Piper			-28-180				
. AIRCRAFT	SERIAL NO. 28-5223		NATIONALITY AND REGISTRATION MARK N7775N					
2. OWNER	NAME (As shown on registration certification carried Garrett George R. Garrett Harriett	M.	215 Re Maryla	as shown on registro eading and Height			.3	
		3. FOI	R FAA USE ONLY					
		IT IDENTIF	ICATION			5. T	TYPE	
UNIT MAKE			MODEL	SERIAL NO.			ALTER- ATION	
AIRFRAME	***************************************	(As described in item 1 above)					Х	
POWERPLANT								
PROPELLER								
	ТҮРЕ							
APPLIANCE	MANUFACTURER							
		6. CON	FORMITY STATEMENT	ENCY	C. CE	RTIFICATE	NO.	
A. AGENCY'S NAME AND ADDRESS C. T. Lansden 4323 Grundy Dr. Bridgeton, Mo. 63044			B. KIND OF AGENCY			2038		

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED OTHER (Specify) INSPECTION AUTHORIZATION FAA FLT. STANDARDS MANUFACTURER INSPECTOR CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR FAA DESIGNEE REPAIR STATION OF AIRCRAFT SIGNATURE OF AUTHORIZED INDIVIDUAL CERTIFICATE OR DATE OF APPROVAL OR

7. APPROVAL FOR RETURN TO SERVICE

REJECTION Aug 28, 79

Aug 28, 79

DESIGNATION NO. 1922038

SIGNATURE OF AUTHORIZED INDIVIDUA

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

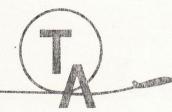
MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

	ms and disposition of					MODEL	PA-28-18	0		
ALDCDAFT	Pipe	r				NATIONALITY AND REGISTRATION MARK				
AIRCRAFT	SERIAL NO.				NATIONALITY	N7775N	ATION MAI	NN.		
	28-5223					ADDRESS /Ac	shown on registr	ation certific	ate)	
	NAME (As shown on re	egistration certifica	te) D			215 Readi	nq			
OWNER	Garr	ett George ett Harriet	+ M			Maryland	Heights, N	10. 630	43	
	Garr	ett narriet	3	FOR	FAA USE ON					
		4. UNI	T IDEN	TIFI	CATION				5. 1	YPE
UNIT	MAKE				MODEL		SERIAL N	10.	REPAIR	ALTER- ATION
IRFRAME	FRAME (As described in item 1 above)					*************	•		X	
337-15	to underpart	Christian Chris	1002		5505250	to sares	106 Jugs	nt of t	ris fo	.10
OWERPLANT	TA TE accordan	ce with Act	3113		1 +58 ED	d manufac	turers ins	eruceso	13° W	s suc
ROPELLER	recount Hone by	31								
NOT ELLEN	TACO MEL	sterneuch co	aure	1						
	TYPE									
APPLIANCE	the Maint 1	AE and ensi								
APPLIANCE	MANUFACTURER	START DOD 1								
<u> </u>	1444 6515E 1	NO SCAL	6 (ONE	ORMITY STATI	MENT				
Δ	AGENCY'S NAME A	ND ADDRESS		0111		ND OF AGE	VCY	C. CE	RTIFICATE	NO.
C.T. Lai		124 USA		X		ATED MECHANIC			19220	38
	undy Dr.				FOREIGN CER	IFICATED MECHA	ANIC			
Bridget					CERTIFICATED	REPAIR STATION				
	me cri model				MANUFACTUR					
D. I certify attachm and tha	that the repair and ents hereto have been t the information fur	or alteration man made in accordance herein is	ade to ance w true an	the	the requirement to the	ntified in item ents of Part 4 best of my k	14 above and 143 of the U.S. I nowledge.	described of Sederal Avia	on the rev	ulations
DATE	Aug 29, 1979	C-20 NHP Rad	Mo Mo	SI	GNATURE OF	AUTHORIZED	INDIVIDUA!			
			APPRO	VAI	FOR RETURN					
Pursuant to	o the authority given istrator of the Federal	specified	below	, +1	ne unit identi	fied in item 4	was inspected REJECTED	in the man	ner prescr	ibed by
FA	AA FLT. STANDARDS	MANUFACTURER	X	100	SPECTION AUTHO		OTHER (Specify)	ate Ada		
- DY	AA DESIGNEE	REPAIR STATION		0	ANADIAN DEPAR F TRANSPORT IN F AIRCRAFT	ISPECTOR	rente courte		e gradina	
DATE OF A	PPROVAL OR	CERTIFICATE OR DESIGNATION	10	SI	GNATURE O	AUTHORIZE	ns len			



MAKE PIPER

MODEL_PA-28-180

TOMLINSON AVIONICS OF MO., INC.

AVIONICS SALES AND SERVICE

Municipal Airport P.O. Box 1458 Cape Girardeau, MO 63701 Phone (314) 334-8599

SERIAL NO. 28-5223

REG NO. N7775N

SUPPLEMENTAL WEIGHT & BALANCE DATA AND EQUIPMENT LIST

E. IOML INSUN	UATE 3-11-07				
	an maga anan ang ang ata ang a	netanajvana, og vassin servicio, osmico, osmico, osmico, of		v Market have per and decided a spring range (spring to see For the	
DESCRIPTION		WEIGHT	ARM	MOMENT	
UDI-4 DME		-8.5	61.7	524	
•					
R15B LORAN C		3.1	62.5	193.75 60.16	
C MATERIAN					
			The accumulations of the second secon		
	USEFUL LOAD	EMPTY WEIGHT	EMPTY WT. C.G.	TOTAL MOMENTS	
NORMAL	1012.56	1387.44	85.45	118560.41	
	DESCRIPTION UDI-4 DME R15B LORAN C C ANTENNA	DESCRIPTION UDI-4 DME R15B LORAN C C ANTENNA USEFUL LOAD	DESCRIPTION WEIGHT UDI-4 DME -8.5 R15B LORAN C C ANTENNA USEFUL LOAD EMPTY WEIGHT	DESCRIPTION WEIGHT ARM UDI-4 DME -8.5 61.7 R15B LORAN C 3.1 62.5 111.4 C ANTENNA 0.54 111.4 USEFUL LOAD EMPTY WEIGHT C.G.	

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

MAJOR REPAIR AND ALTERATION

Form Approved Budget Bureau No. 04-R060.1 FOR FAA USE ONLY

	(Airframe, Powerplan	it, Propel	ler, or Appliant	ce)	10	OFFICE IDENTIF	ICATION	.0		
INSTRUCT	TIONS: Print or type all entries, ons and disposition of this for	See FAR	43.9, F4R 43 Apper	ndix B, and	AC 43.9-1	(or subsequent	revision t	hereof)		
	MAKE PIPER	Palatinaterory and palaticum a summar completion as and		MODEL	РА	-28-180	Total Carrows Carrows	Man mineral a cetric		
1. AIRCRAFT	SERIAL NO. 28-5223	997 (1974) 1 (1984) 14.4 (1984) 1984, 1884 (1974) 1974 (1974)		NATIONALITY AND REGISTRATION MARK N7775N						
2. OWHER	NAME (As shown on registration WAYNE FOSTER	certificate)	CHANGE THE SOUTHERN THE STATE HE STATE THE STATE OF THE STATE STATE OF THE STATE OF		S. BELL (EStration certificate)					
ggester-film state (side -47.64) z sp. werker v-44.00	JEFFREY BOST	les est est m anifeliation, aut algorithme n les cours		WATER COMPANY OF A STREET WATER CANADA WATER	VILLE, I	L 62220	- ANT - ANT CANADA THE STREET OF THE STREET			
Lynn Amerika (1800) kits Milyan peter menya in un matan-ban in d	anne server animal et an A. anne segge i des pas i restruigementation relative renormalisation — and annew al	PRODUCTION OF THE PARTY OF THE	3. FOR FAA USE ONL	Y	or and the contract of the contract of the contract of	the set of the form the substitute of the substi	New region of a region of the same page			
					4. 2.			1		
ORD ON THE DOTAGE ROWN THE BUT CONTROL OF THE PERSON		4. UNIT ID	ENTIFICATION				5.	TYPE		
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