

Air Plains Services Corp.
P.O. Box 541
Wellington Airport
Wellington, Ks. 67152

Section 9
Supplements

Cessna Model 172P

PAGE 2-5 AIRSPEED INDICATOR MARKINGS, (cont.)

MARKING	KIAS VALUE OR RANGE
White Arc	40-85
Green Arc	50-127
Yellow Arc	127-158
Red Line	158

PAGE 2-4 AIRSPEED LIMITATIONS

VA Maneuvering Speed:	
2550 Pounds	105 KIAS
2150 Pounds	95 KIAS
1750 Pounds	85 KIAS

PAGE-2-5 POWER PLANT LIMITATIONS

Engine Model Number: O-360-A4A, A4M, A4N, A2F & A3A
Maximum Power: 180 BHP rating
Maximum Continuous RPM: 2540 RPM

PAGE 2-6 WEIGHT LIMIT

Maximum Takeoff Weight,	Normal	2550lbs.
	Utility	2100lbs.
Maximum Landing Weight,	Normal	2550lbs.
	Utility	2100lbs.

PAGE 2-7 CENTER OF GRAVITY LIMITS

NORMAL CATEGORY

Center of Gravity Range:

Forward: 35.0 inches aft of datum at 1950 lbs. or less, with straight line variation to 41.0 inches aft of datum at 2550 lbs.
Aft: 47.3 inches aft of datum at all weights.

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PAGE 2-7 CENTER OF GRAVITY LIMITS, (cont.)

UTILITY CATEGORY

Center of Gravity Range:

Forward: 35.0 inches aft of datum at 1950lbs. or less, with straight line variation to 36.5 inches aft of datum at 2100lbs.

Aft: 40.5 inches aft of datum at all weights.

PAGE 2-8 FLIGHT LOAD FACTORS

NORMAL CATEGORY

Flight Load Factors (Maximum Takeoff Weight -2550lbs):

Flaps UP +3.8g, - 1.52g
Flaps Down +3.0g

PAGE 2-12 PLACARDS

10. Near airspeed indicator: MANEUVER SPEED - 105 KIAS

SECTION 3. Emergency Procedures

PAGE 3-3 AIRSPEEDS FOR EMERGENCY OPERATION

Engine Failure after Takeoff:

Wing Flaps Up 70 KIAS
Wing Flaps Down 65 KIAS

Maneuvering Speed:

2550 lbs 105 KIAS
2150 lbs 95 KIAS
1750 lbs 85 KIAS

Maximum Glide

2550 lbs 65 KIAS
2150 lbs 62 KIAS
1750-lbs 56 KIAS

Precautionary Landing With Engine Power. 65 KIAS

Landing Without Engine Power:

Wing Flaps Up 70 KIAS
Wing Flaps Down 65 KIAS

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PAGE 3-4 ENGINE FAILURES

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Airspeed --70 KIAS (flaps UP)
65 KIAS (flaps DOWN)

PAGE 3-4 ENGINE FAILURE DURING FLIGHT

1. Airspeed -- 75 KIAS

PAGE 3-4 FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed -- 70 KIAS (flaps UP)
65 KIAS (flaps DOWN)
5. Wing Flaps -- AS REQUIRED (30 deg recommended)

PRECAUTIONARY LANDING WITH ENGINE POWER

2. Airspeed -- 65 KIAS
6. Airspeed -- 65 KIAS

PAGE 3-5 DITCHING

4. Wing Flaps -- 20-30 deg.

NOTE

If no power is available, approach at 70 KIAS with flaps up
or at 65 KIAS with 10 deg flaps.

PAGE 3-7 ICING

INADVERTENT ICING ENCOUNTER

11. Approach at 80 to 90 KIAS depending upon the amount of the
accumulation.

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SECTION 4. Normal Procedures

PAGE 4-3 NORMAL PROCEDURES

SPEEDS FOR NORMAL OPERATION

Unless otherwise noted, the following speeds are based on a maximum weight of 2550 pounds and may be used for any lesser weight.

Page 4-3

Takeoff

Normal Climb Out 75-85 KIAS
Short Field Takeoff, Flaps 10°, Speed at 50 Feet . 57 KIAS

Enroute Climb, Flaps Up:

Normal, Sea Level 75-85 KIAS
Normal, 10,000 Feet 70-80 KIAS
Best Rate of Climb, Sea Level 76 KIAS
Best Rate of Climb, 10,000 Feet 72 KIAS
Best Angle of Climb, Sea Level 62 KIAS
Best Angle of Climb, 10,000 Feet 67 KIAS

Landing Approach:

Normal Approach, Flaps Up 65-75 KIAS
~~Normal Approach, Flaps 30° 60-70 KIAS~~
Short Field Approach, Flaps 30° 62 KIAS

Balked Landing:

Maximum Power, Flaps 20° 60 KIAS

Maximum Recommended Turbulent Air Penetration Speed:

2550 Lbs 105 KIAS
2150 Lbs 95 KIAS
1750 Lbs 85 KIAS

PAGE 4-8 SHORT FIELD TAKEOFF

Climb Speed -- 57 KIAS (until all obstacles are cleared)

PAGE 4-9 ENROUTE CLIMB

Airspeed -- 75-85 KIAS

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PAGE 4-9 LANDING

NORMAL LANDING

1. Airspeed -- 65-75 KIAS (flaps UP)
2. Wing Flaps -- AS DESIRED (0-10 deg below 110 KIAS, 10-30 deg. below 85 KIAS).
3. Airspeed -- 60-70 KIAS (flaps DOWN)

PAGE 4-10

SHORT FIELD LANDING

1. Airspeed 65-75 KIAS (flaps UP)
3. Airspeed 62 KIAS (until flare)

BALKED LANDING

5. Wing Flaps --10 deg. (until obstacles are cleared) RETRACT SLOWLY after reaching a safe altitude and 65 KIAS.

Section 5

PAGE 5-21 LANDING DISTANCE - SHORT FIELD

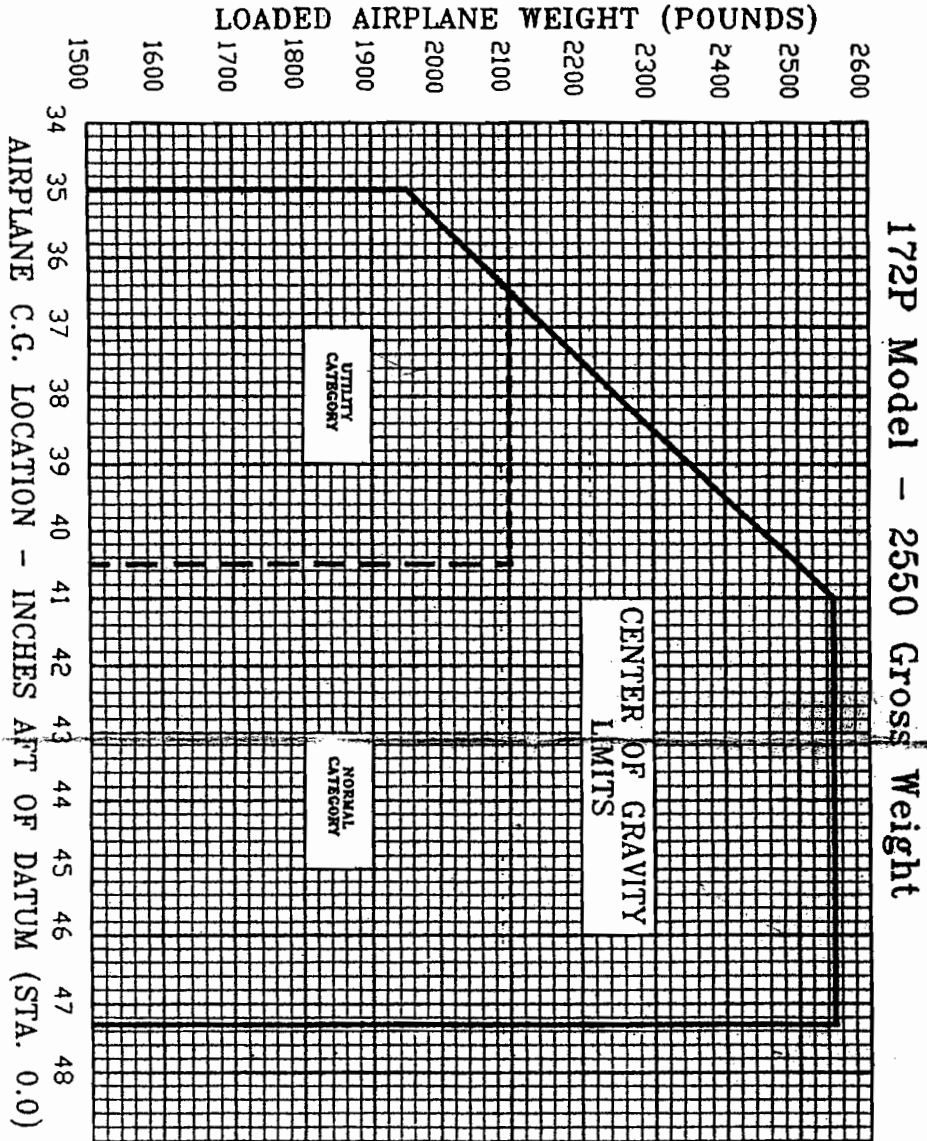
NOTES:

4. If a landing with flaps up is necessary, increase approach speed by 9 KIAS and allow for 35% longer distance.

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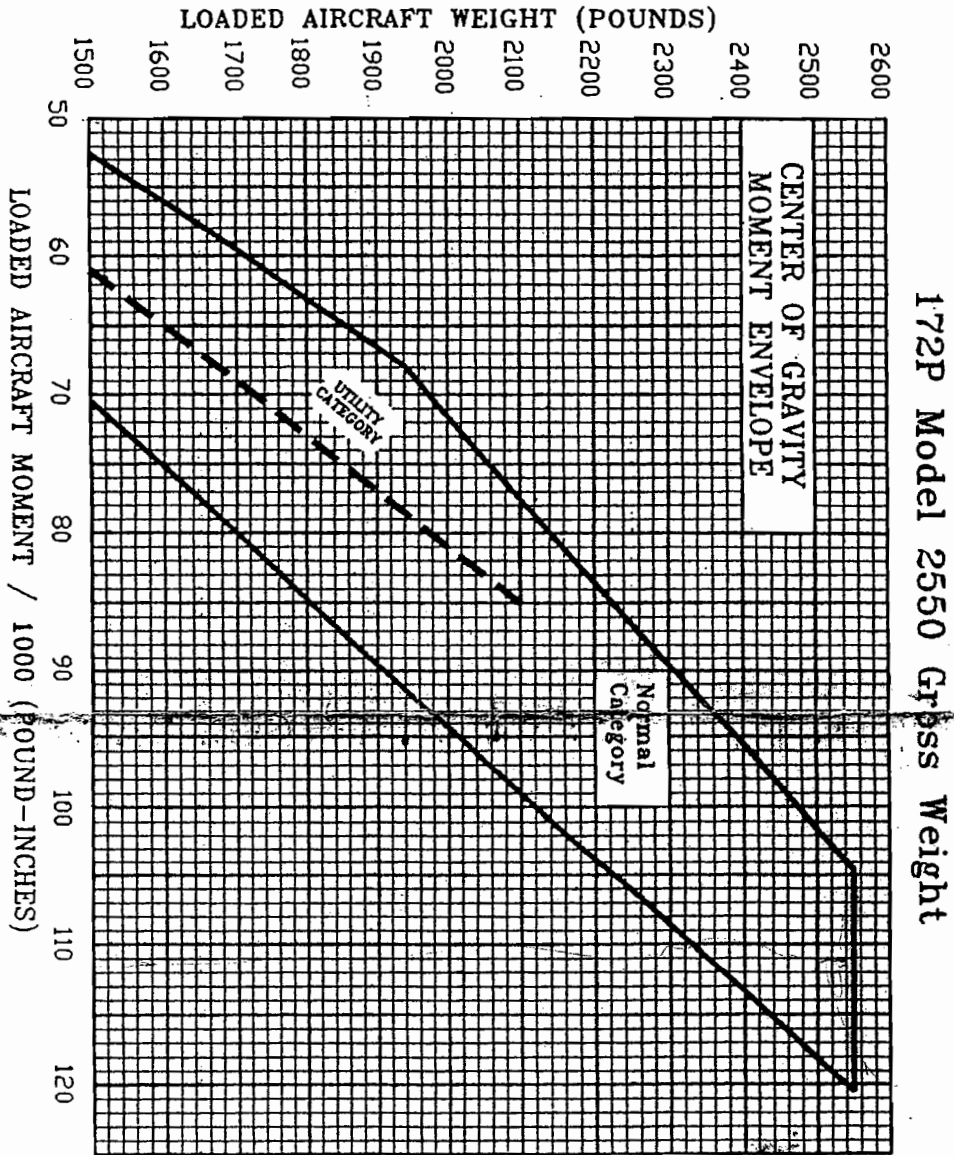
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Howard Aviation, Inc.
 1401 Fairplex Drive
 La Verne, CA 91750
 C.R.S. TO3R874L



Additional Equipment List / Revised Weight and Balance

Reg No.:	N54678	Date:	4/18/2008
A/C Make:	Cessna	Tach/Hobbs:	189.10
A/C Model:	172P	Work Order #:	19006
A/C S/N:	17275034	Superceded Date:	6/2/2006

	Weight (lbs)	Arm	Moment
Previous A/C Empty	1497.80	38.26	57307.65
<u>Removed Items</u>			
ARC IN 346A Indicator	1.00	15.00	15.00
ARC IN 385A Converter Indicator	2.10	14.80	31.08
ARC R546E Receiver	3.20	14.00	44.80
ARC RT-385A Rec-Transmitter with Mounting	5.70	14.30	81.51
	12.00		172.39
<u>Installed Items</u>			
Comant Industries CI-1125 Dual VOR/Dual GS Diplexer	0.25	12.00	3.00
Garmin GI 106A Course Deviation Indicator	1.40	15.00	21.00
Garmin GNS 530W GPS WAAS Navigation System	7.00	14.20	99.40
Garmin GA 35 GPS WAAS Antenna	0.47	42.00	19.74
	9.12		143.14
New A/C Empty	1494.92	38.32	57278.40
New A/C E.W.:	1494.92		
New A/C C.G.:	38.32		
New Useful Load:	905.08		


 Robin Howard

Above installation performed in accordance with the manufactures specifications and is approved for return to service.

Authorized Signature
 Howard Aviation, Inc.
 1401 Fairplex Drive
 La Verne, CA 91750
 C.R.S. TO3R874L