

C152 Performance

TAKEOFF DISTANCE

SHORT FIELD

CONDITION:

Flaps 10°

Full Throttle Prior to Brake Release

Paved, Level, Dry Runway

Zero Wind

NOTES:

1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

WEIGHT LBS	TAKEOFF SPEED KIAS		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF	AT 50 FT		GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
1670	50	54	S.L.	640	1190	695	1290	755	1390	810	1495	875	1605
			1000	705	1310	765	1420	825	1530	890	1645	960	1770
			2000	775	1445	840	1565	910	1690	980	1820	1055	1960
			3000	855	1600	925	1730	1000	1870	1080	2020	1165	2185
			4000	940	1775	1020	1920	1100	2080	1190	2250	1285	2440
			5000	1040	1970	1125	2140	1215	2320	1315	2525	1420	2750
			6000	1145	2200	1245	2395	1345	2610	1455	2855	1570	3125
			7000	1270	2470	1375	2705	1490	2960	1615	3255	1745	3590
			8000	1405	2800	1525	3080	1655	3395	1795	3765	1940	4195

Figure 5-4. Takeoff Distance

Safety Factor: x 1.33

LANDING DISTANCE

SHORT FIELD

CONDITIONS:

Flaps 30°

Power Off

Maximum Braking

Paved, Level, Dry Runway

Zero Wind

NOTES:

1. Short field technique as specified in Section 4.
2. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds up to 10 knots, increase distances by 10% for each 2 knots.
3. For operation on a dry, grass runway, increase distances by 45% of the "ground roll" figure.

WEIGHT LBS	SPEED AT 50 FT KIAS	PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
			GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS	GRND ROLL	TOTAL TO CLEAR 50 FT OBS
1670	54	S.L.	450	1160	465	1185	485	1215	500	1240	515	1265
		1000	465	1185	485	1215	500	1240	520	1270	535	1295
		2000	485	1215	500	1240	520	1270	535	1300	555	1330
		3000	500	1240	520	1275	540	1305	560	1335	575	1360
		4000	520	1275	540	1305	560	1335	580	1370	600	1400
		5000	540	1305	560	1335	580	1370	600	1400	620	1435
		6000	560	1340	580	1370	605	1410	625	1440	645	1475
		7000	585	1375	605	1410	625	1440	650	1480	670	1515
		8000	605	1410	630	1450	650	1480	675	1520	695	1555

Figure 5-10. Landing Distance

Safety Factor: x 1.43

C152 Weight & Balance

	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty			
Pilot		39.00	
Front Passenger		39.00	
Baggage 1 (Max 120 Lbs)		64.00	
Baggage 2 (Max 40 Lbs)		84.00	
Fuel (1 USG = 6 Lbs)		40.00	
TOTAL			

Aircraft	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
G-BOLV**	1234	31.49	38860
G-BYFA**	1237	31.55	39032
G-BGFX**	1211	29.50	35722

Figures current December 2011. Refer to aircraft tech log for latest data.

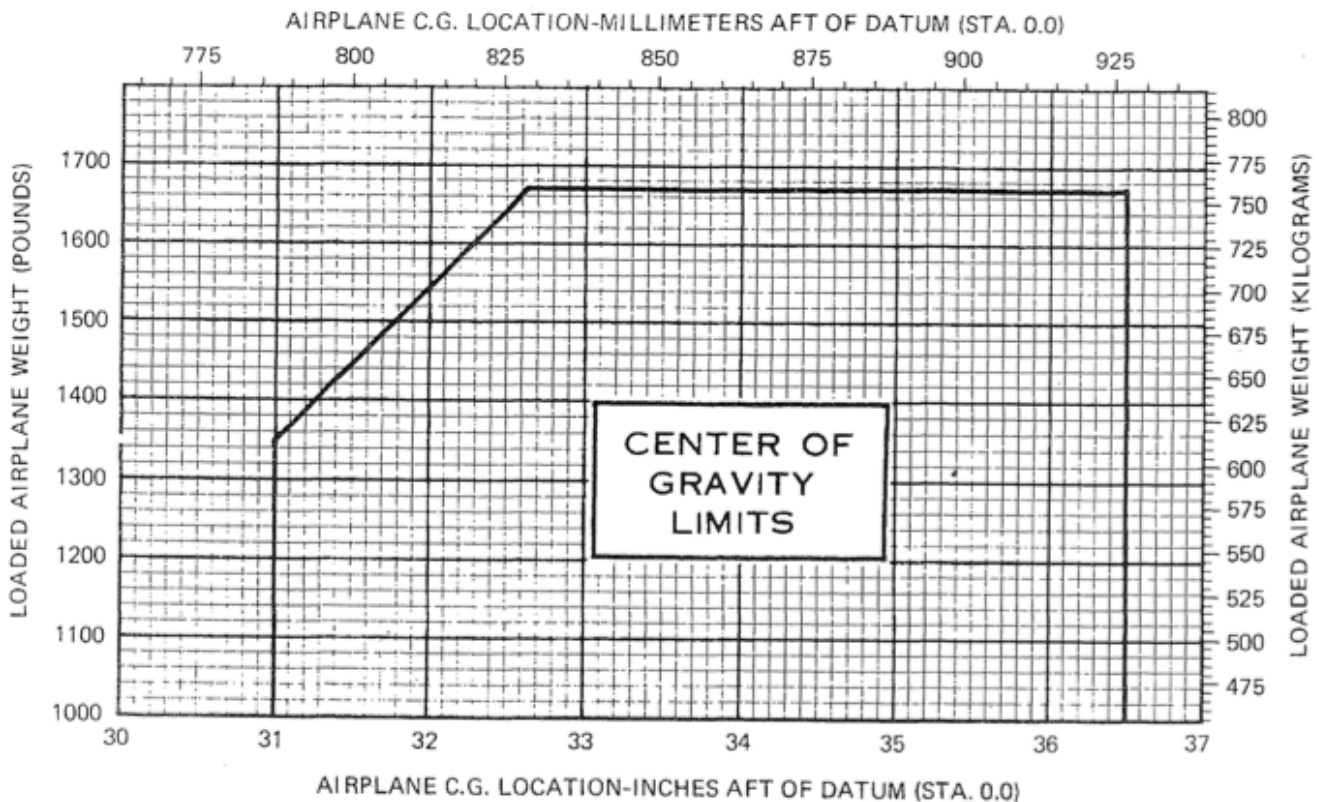
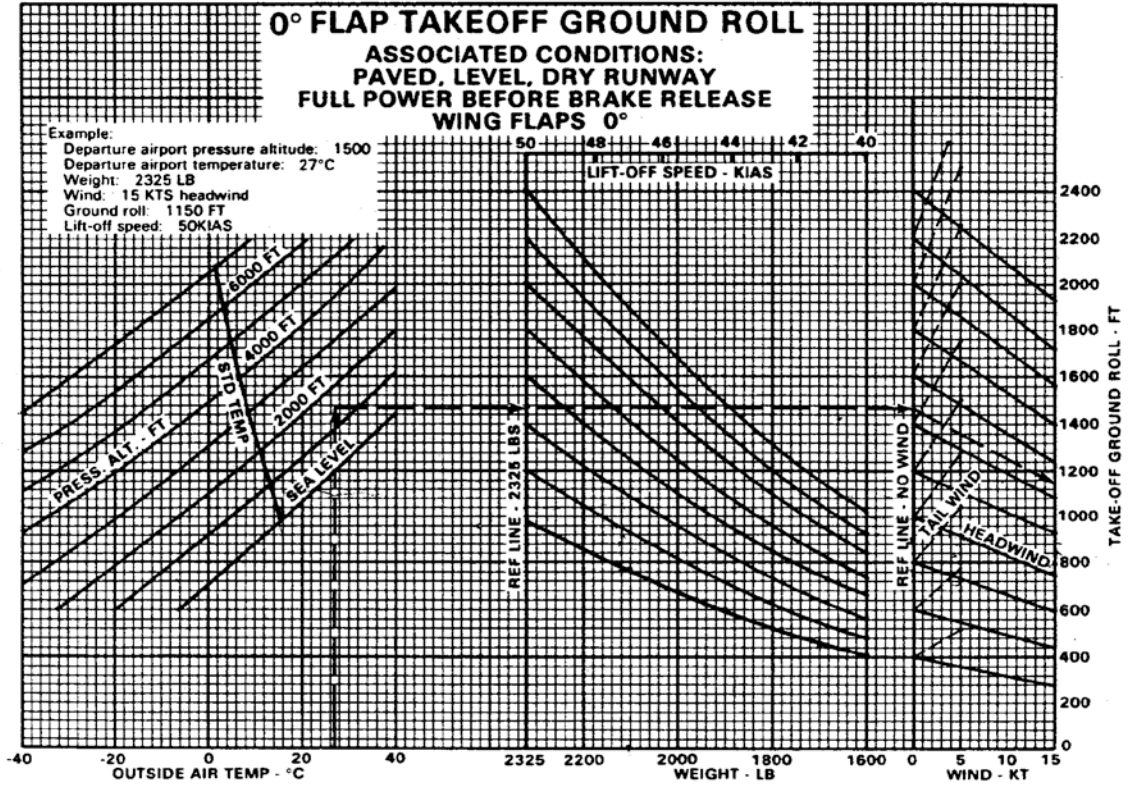


Figure 6-9. Center of Gravity Limits

PA28-161 Cadet Performance

SECTION 5
PERFORMANCE

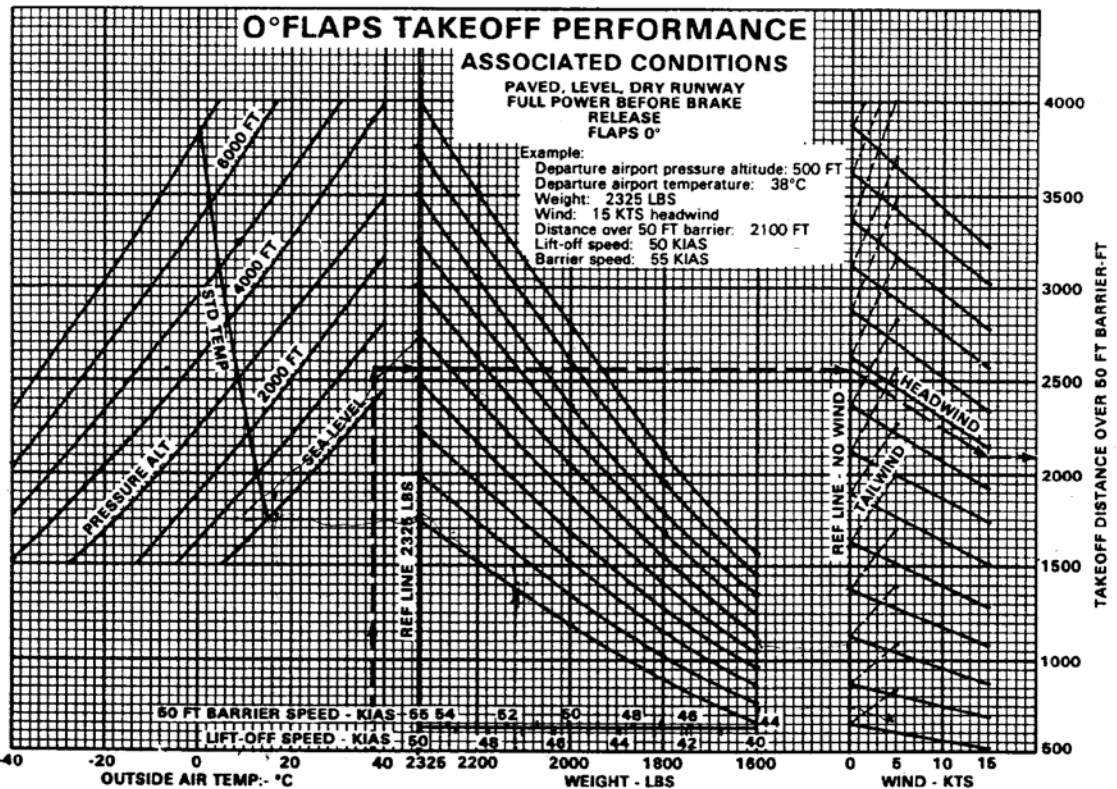
PIPER AIRCRAFT CORPORATION
PA-28-161, CADET



0° FLAPS TAKEOFF GROUND ROLL
Figure 5-7

REPORT: VB-1360
5-14

ISSUED: SEPTEMBER 9, 1988



0° FLAPS TAKEOFF PERFORMANCE
Figure 5-9

ISSUED: SEPTEMBER 9, 1988
REVISED: NOVEMBER 27, 1989

REPORT: VB-1360
5-15

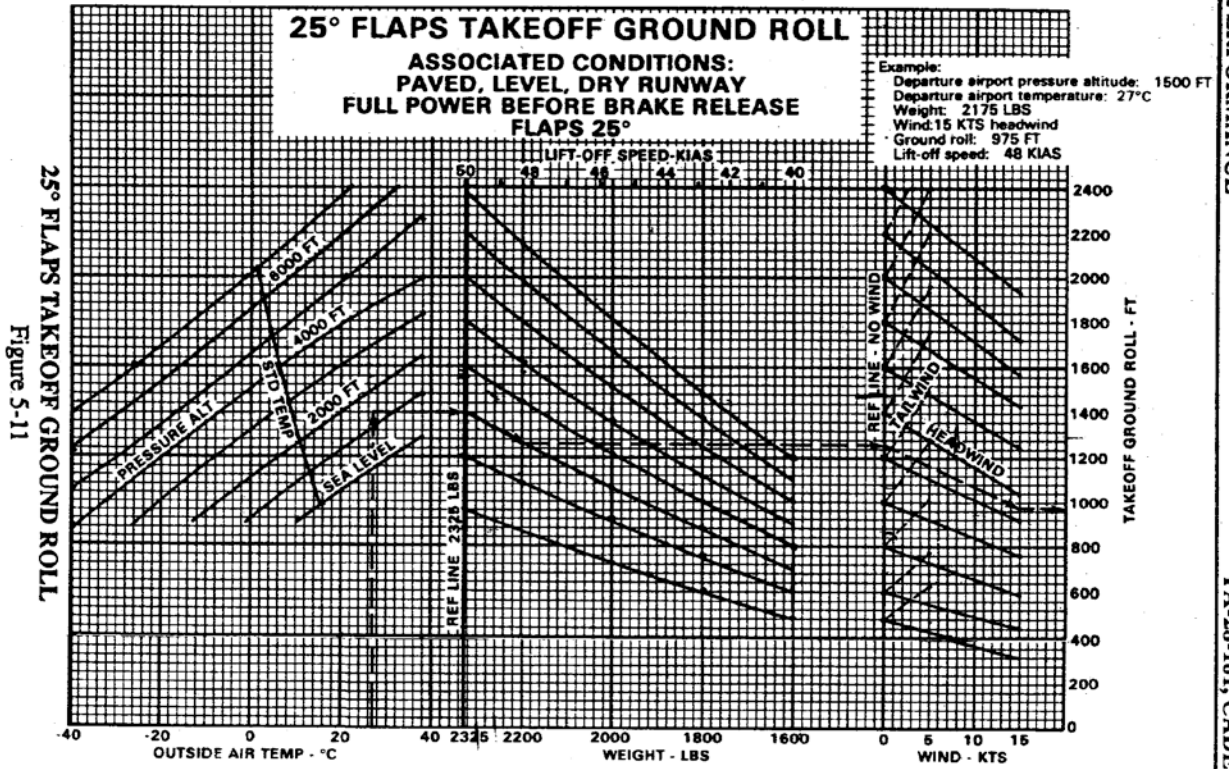
PIPER AIRCRAFT CORPORATION
PA-28-161, CADET

SECTION 5
PERFORMANCE

PA28-161 Cadet Performance

SECTION 5 PERFORMANCE

PIPER AIRCRAFT CORPORATION PA-28-161, CADET

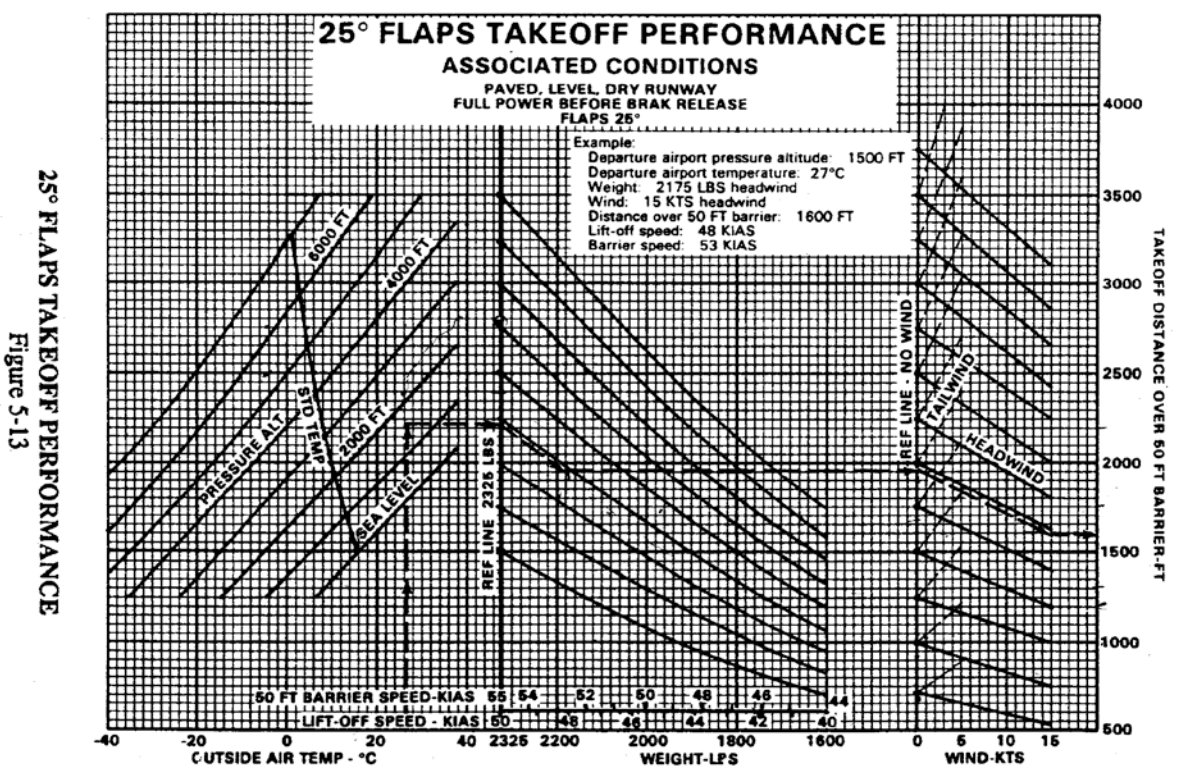


REPORT: VB-1360
5-16

ISSUED: SEPTEMBER 9, 1988
REVISED: NOVEMBER 27, 1989

PIPER AIRCRAFT CORPORATION PA-28-161, CADET

SECTION 5 PERFORMANCE



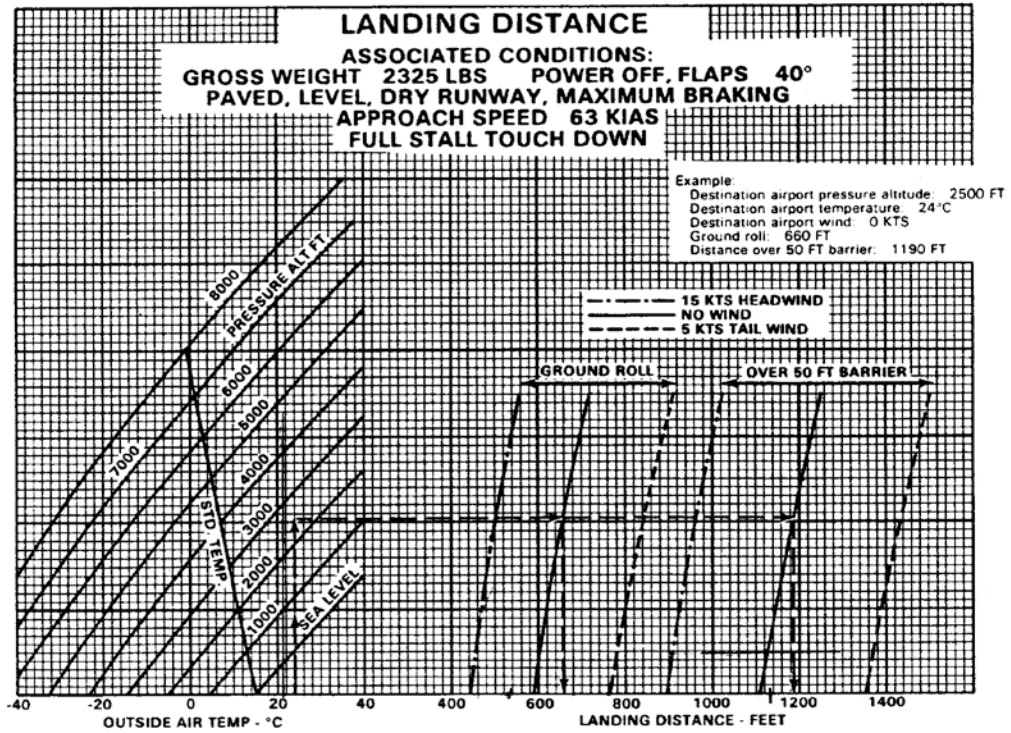
ISSUED: SEPTEMBER 9, 1988
REVISED: NOVEMBER 27, 1989

REPORT: VB-1360
5-17

PA28-161 Cadet Performance

SECTION 5
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PIPER AIRCRAFT CORPORATION
PA-28-161, CADET



LANDING DISTANCE
Figure 5-35

REPORT: VB-1360
5-28

ISSUED: SEPTEMBER 9, 1988

PA28-161 Cadet Weight & Balance

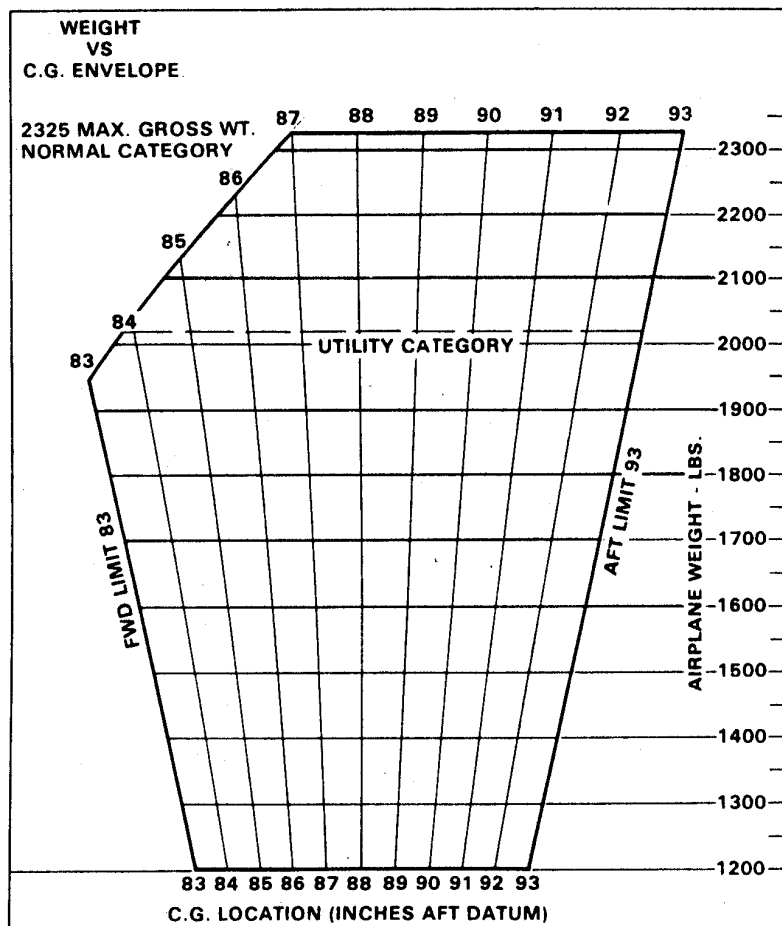
	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty			
Pilot		80.50	
Front Passenger		80.50	
Rear Passengers		118.10	
Baggage (Max 50 Lbs)		142.80	
Fuel (1 USG = 6 Lbs)		95.00	
TOTAL			

Aircraft	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
G-BPJS**	1502.5	85.16	127952.8

Figures current May 2012. Refer to aircraft tech log for latest data.

**PIPER AIRCRAFT CORPORATION
PA-28-161, CADET**

**SECTION 6
WEIGHT AND BALANCE**



PA28-161 Performance

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

PA-28-161

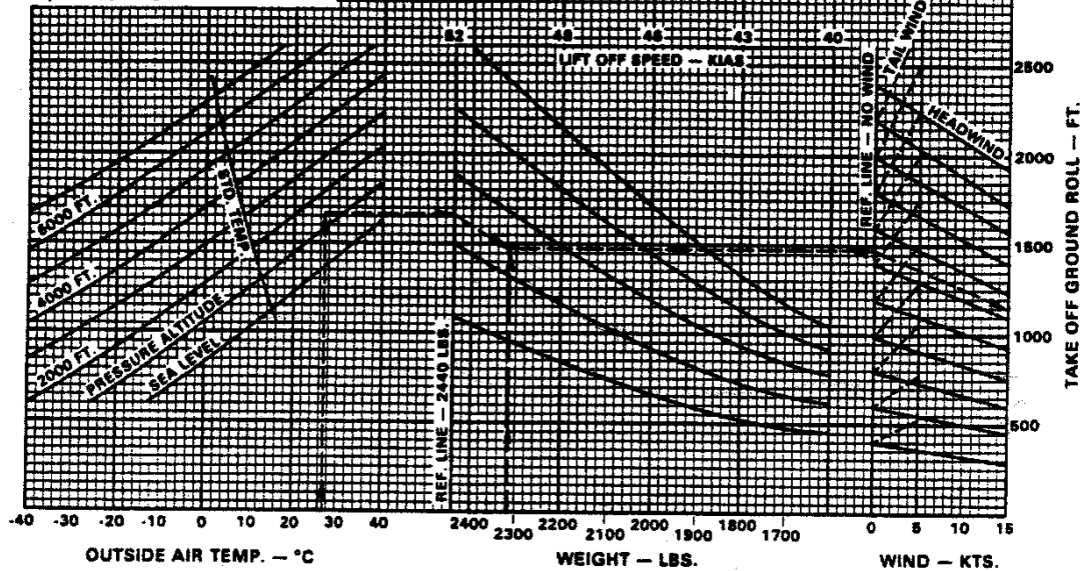
0° FLAPS TAKEOFF GROUND ROLL

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2316 lbs.
Wind: 15 KTS headwind
Ground roll: 1150 ft.
Lift-off speed: 50 KIAS

ASSOCIATED CONDITIONS:
PAVED, LEVEL, DRY RUNWAY
FULL POWER BEFORE BRAKE RELEASE
FLAPS 0°

0° FLAPS TAKEOFF GROUND ROLL
Figure 5-7



Safety Factor: x 1.33

REPORT: VB-1180
5-14

ISSUED: AUGUST 13, 1982

PA-28-161

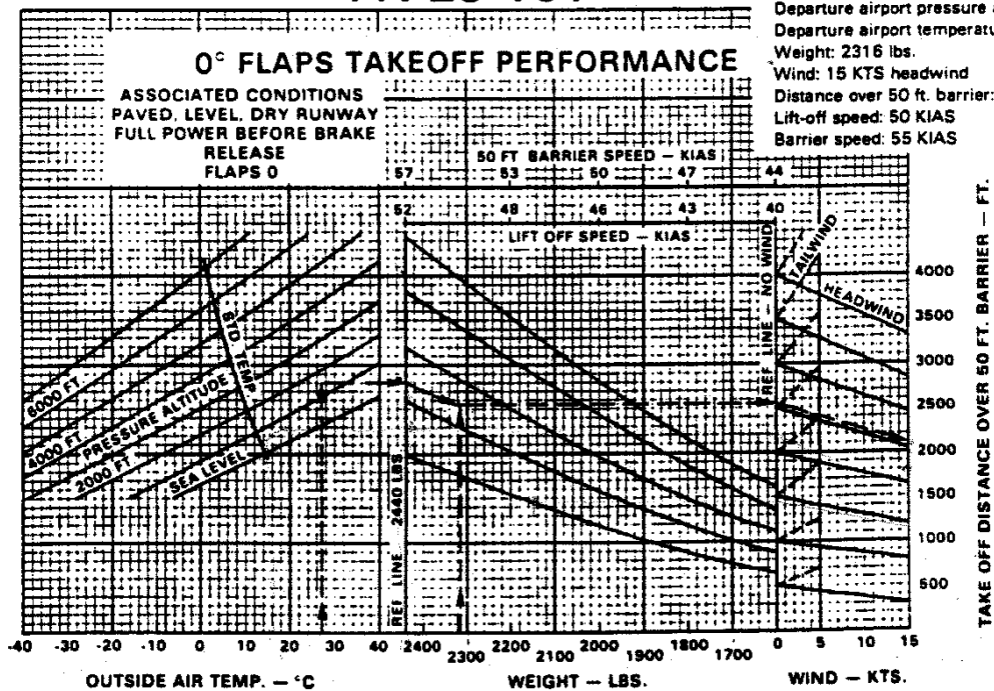
0° FLAPS TAKEOFF PERFORMANCE

ASSOCIATED CONDITIONS
PAVED, LEVEL, DRY RUNWAY
FULL POWER BEFORE BRAKE
RELEASE
FLAPS 0°

Example:

Departure airport pressure altitude: 1500 ft.
Departure airport temperature: 27°C
Weight: 2316 lbs.
Wind: 15 KTS headwind
Distance over 50 ft. barrier: 2100 ft.
Lift-off speed: 50 KIAS
Barrier speed: 55 KIAS

0° FLAPS TAKEOFF PERFORMANCE
Figure 5-9



Safety Factor: x 1.33

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

SECTION 5
PERFORMANCE

ISSUED: AUGUST 13, 1982

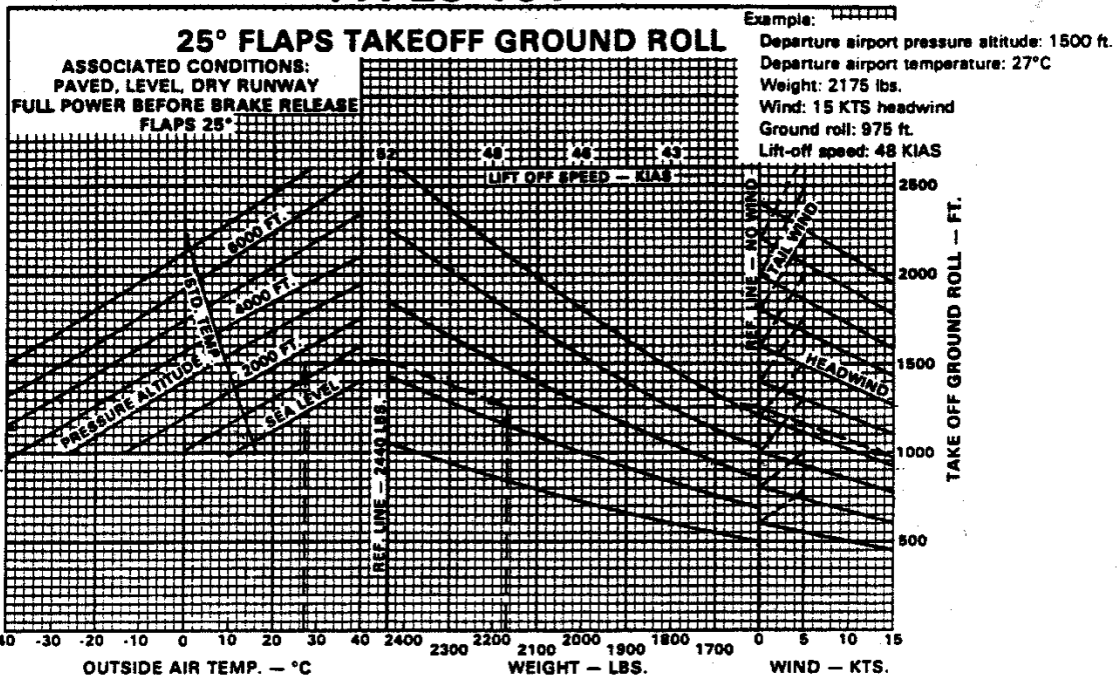
REPORT: VB-1180
5-15

PA28-161 Performance

SECTION 5
PERFORMANCE

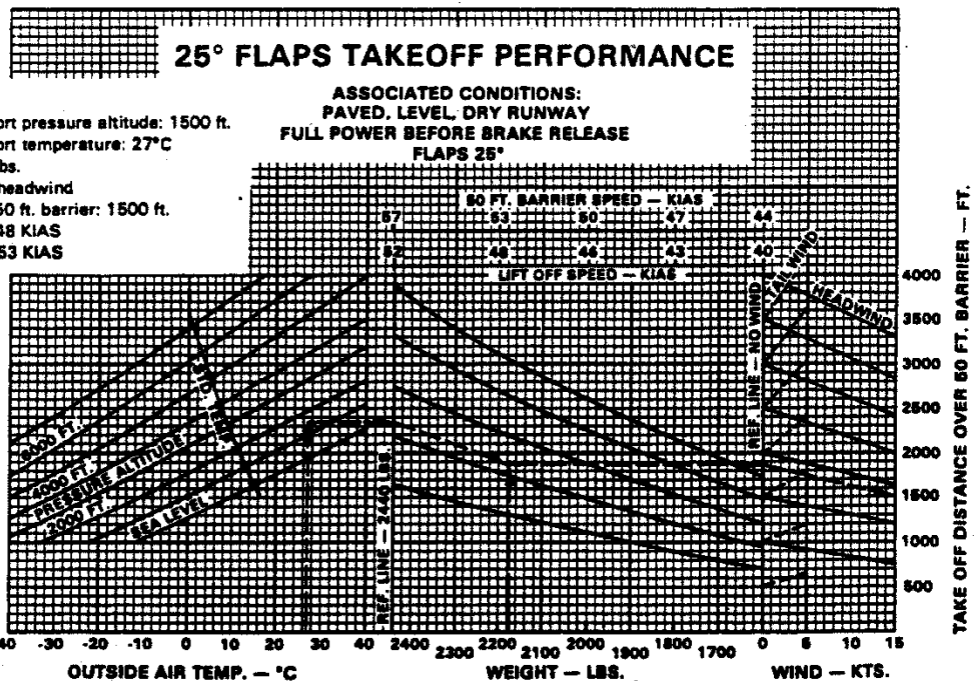
PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

PA-28-161



Safety Factor: x 1.33

PA-28-161



Safety Factor: x 1.33

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

SECTION 5
PERFORMANCE

25° FLAPS TAKEOFF GROUND ROLL

Figure 5-11

25° FLAPS TAKEOFF PERFORMANCE

Figure 5-13

REPORT: VB-1180
5-16

ISSUED: AUGUST 13, 1982

ISSUED: AUGUST 13, 1982

REPORT: VB-1180
5-17

PA28-161 Performance

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

PA-28-161

LANDING DISTANCE

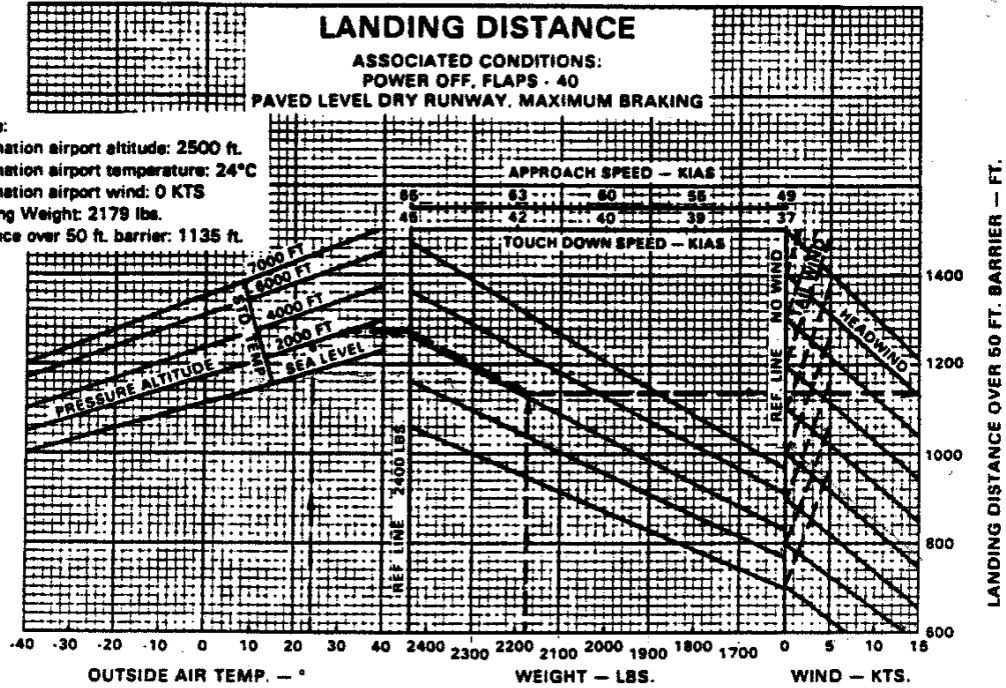
ASSOCIATED CONDITIONS:

POWER OFF, FLAPS - 40

PAVED LEVEL DRY RUNWAY, MAXIMUM BRAKING

Example:

Destination airport altitude: 2500 ft.
Destination airport temperature: 24°C
Destination airport wind: 0 KTS
Landing Weight: 2179 lbs.
Distance over 50 ft. barrier: 1135 ft.



LANDING DISTANCE
Figure 5-35

Safety Factor: x 1.43

PA-28-161

LANDING GROUND ROLL DISTANCE

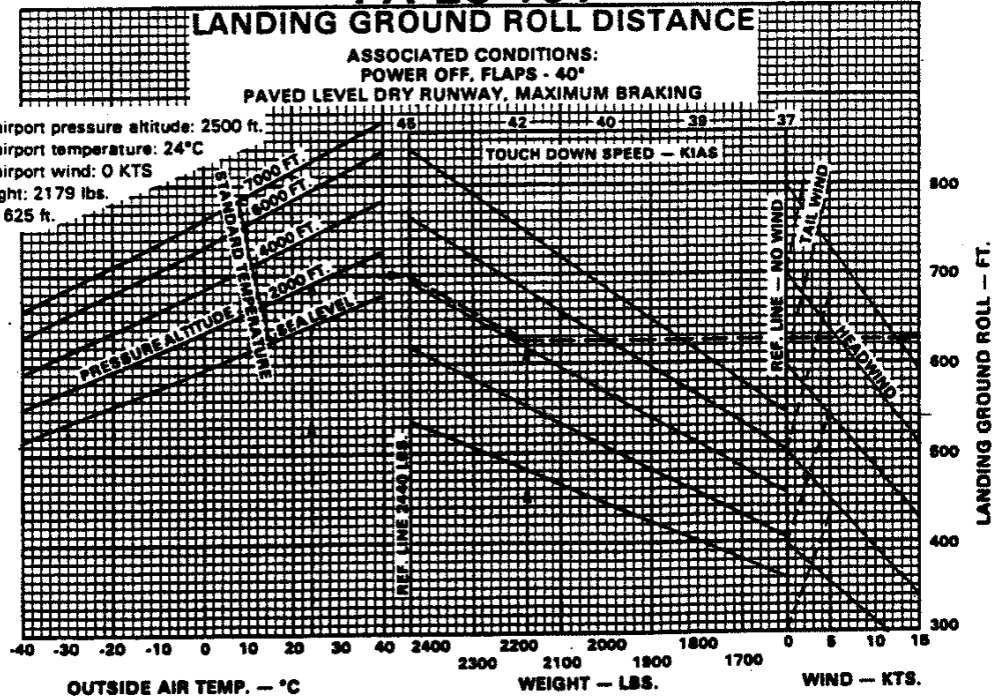
ASSOCIATED CONDITIONS:

POWER OFF, FLAPS - 40°

PAVED LEVEL DRY RUNWAY, MAXIMUM BRAKING

Example:

Destination airport pressure altitude: 2500 ft.
Destination airport temperature: 24°C
Destination airport wind: 0 KTS
Landing Weight: 2179 lbs.
Ground Roll: 625 ft.



LANDING GROUND ROLL DISTANCE
Figure 5-37

Safety Factor: x 1.43

PIPER AIRCRAFT CORPORATION
PA-28-161, WARRIOR II

SECTION 5
PERFORMANCE

PA28-161 Weight & Balance

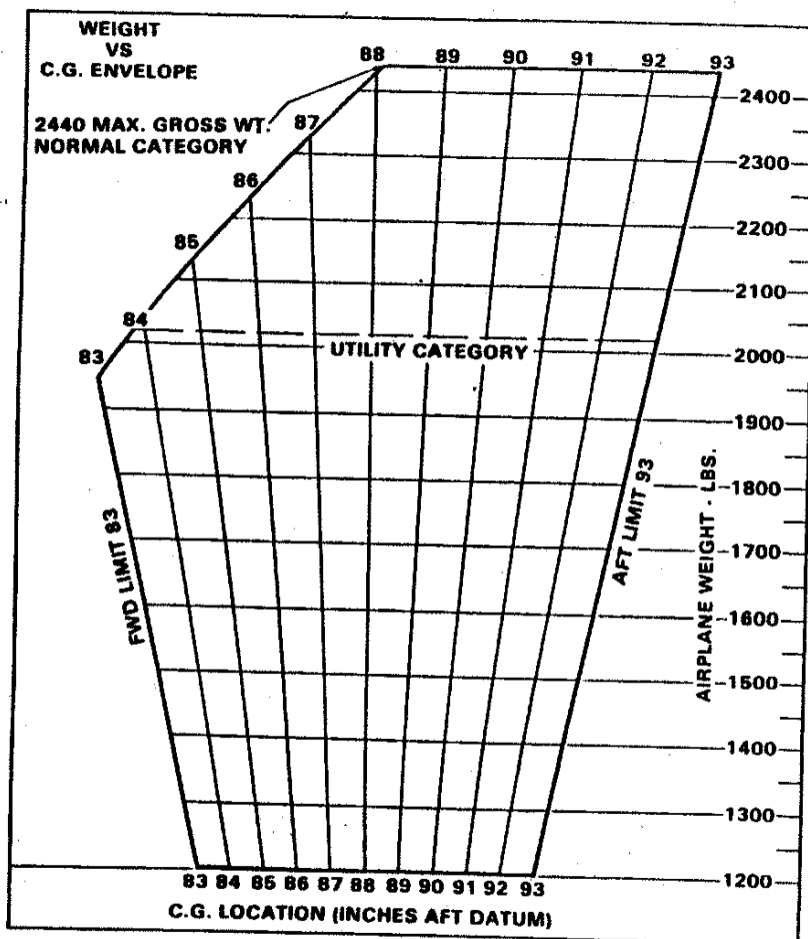
	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty			
Pilot		80.50	
Front Passenger		80.50	
Rear Passengers		118.10	
Baggage (Max 200 Lbs)		142.80	
Fuel (1 USG = 6 Lbs)		95.00	
TOTAL			

Aircraft	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
G-ELZY**	1541	84.86	130764

Figures current December 2011. Refer to aircraft tech log for latest data.

SECTION 6 WEIGHT AND BALANCE

PIPER AIRCRAFT CORPORATION PA-28-161, WARRIOR II



PA28-181 Performance

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

PA-28-181

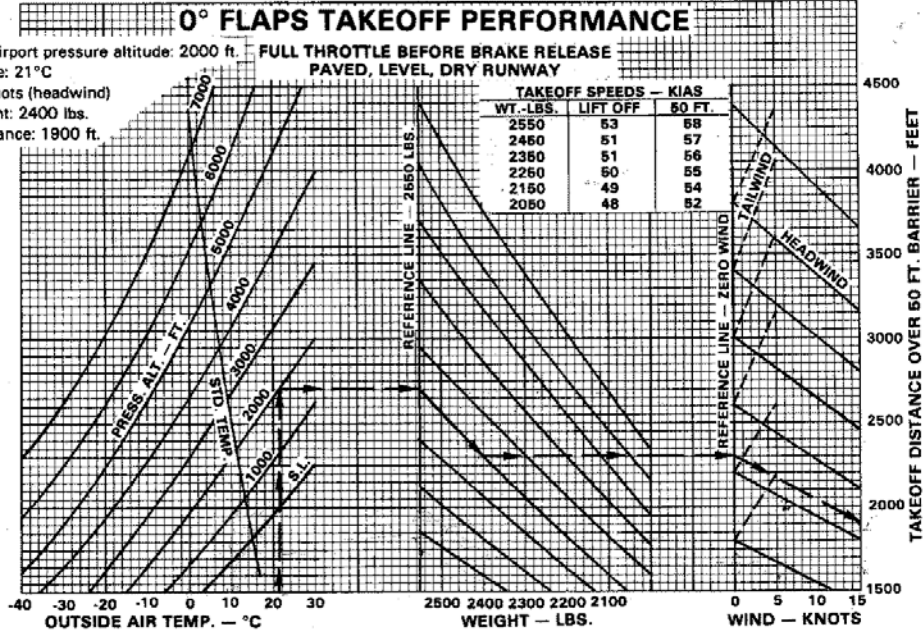
0° FLAPS TAKEOFF PERFORMANCE

Example:

Departure airport pressure altitude: 2000 ft.
Temperature: 21°C
Wind: 15 knots (headwind)
Gross weight: 2400 lbs.
Takeoff distance: 1900 ft.

FLAPS UP TAKEOFF PERFORMANCE

Figure 5-7



Safety Factor: x 1.33

PA-28-181

25° FLAPS TAKEOFF PERFORMANCE

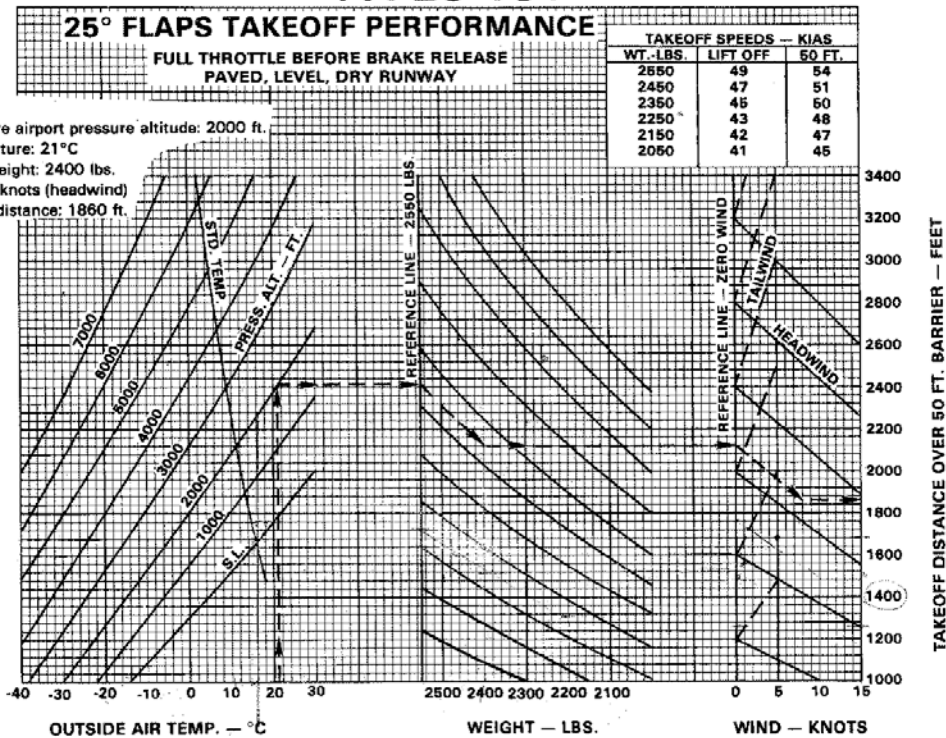
FULL THROTTLE BEFORE BRAKE RELEASE
PAVED, LEVEL, DRY RUNWAY

Example:

Departure airport pressure altitude: 2000 ft.
Temperature: 21°C
Gross weight: 2400 lbs.
Wind: 8 knots (headwind)
Takeoff distance: 1860 ft.

25° FLAPS TAKEOFF PERFORMANCE

Figure 5-9



Safety Factor: x 1.33

PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

SECTION 5
PERFORMANCE

REPORT: VB-1120
5-14

ISSUED: JULY 2, 1979

ISSUED: JULY 2, 1979

REPORT: VB-1120
5-15

PA28-181 Performance

SECTION 5
PERFORMANCE

PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

PA-28-181

FLAPS UP TAKEOFF GROUND ROLL

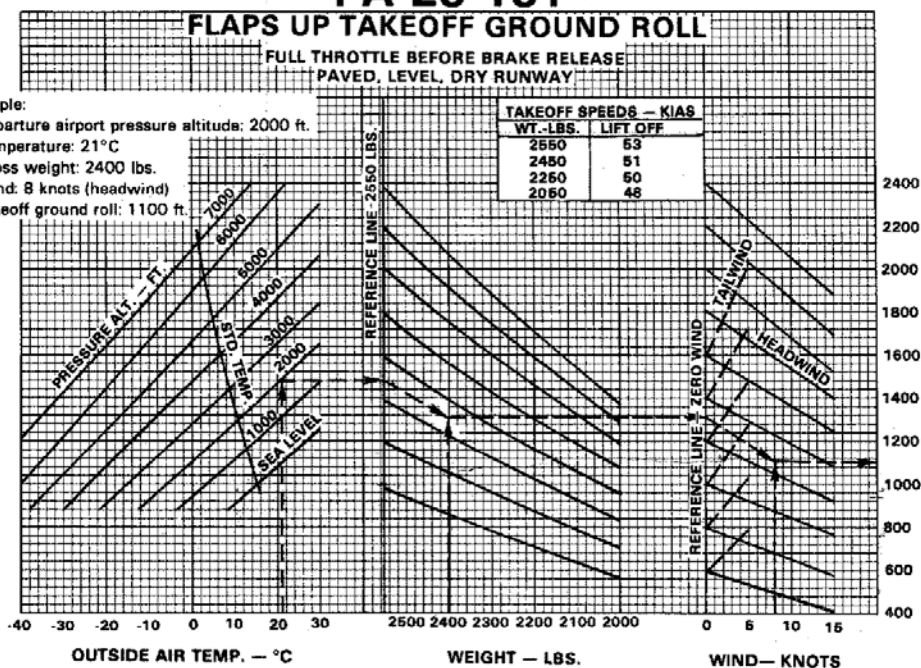
FULL THROTTLE BEFORE BRAKE RELEASE
PAVED, LEVEL, DRY RUNWAY

Example:

Departure airport pressure altitude: 2000 ft.
Temperature: 21°C
Gross weight: 2400 lbs.
Wind: 8 knots (headwind)
Takeoff ground roll: 1100 ft.

TAKEOFF SPEEDS — KIAS

WT. - LBS.	LIFT OFF
2550	53
2450	51
2250	50
2050	48



Safety Factor: x 1.33

FLAPS UP TAKEOFF GROUND ROLL
Figure 5-11

REPORT: VB-1120
5-16

ISSUED: JULY 2, 1979

PA-28-181

25° FLAPS TAKEOFF GROUND ROLL

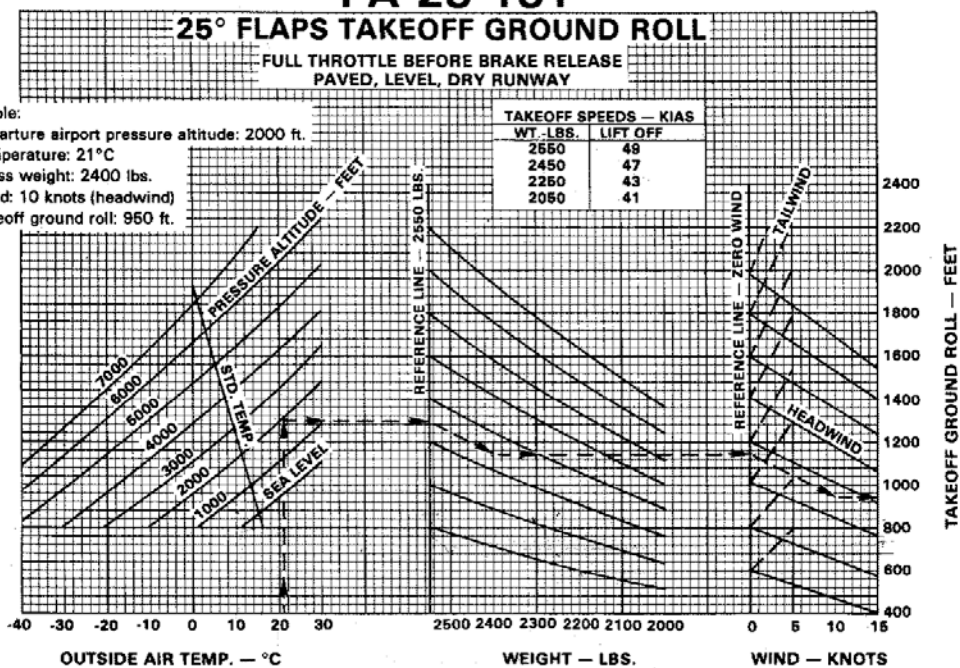
FULL THROTTLE BEFORE BRAKE RELEASE
PAVED, LEVEL, DRY RUNWAY

Example:

Departure airport pressure altitude: 2000 ft.
Temperature: 21°C
Gross weight: 2400 lbs.
Wind: 10 knots (headwind)
Takeoff ground roll: 950 ft.

TAKEOFF SPEEDS — KIAS

WT. - LBS.	LIFT OFF
2550	48
2450	47
2250	43
2050	41



Safety Factor: x 1.33

25° FLAPS TAKEOFF GROUND ROLL
Figure 5-13

PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

SECTION 5
PERFORMANCE

ISSUED: JULY 2, 1979

REPORT: VB-1120
5-17

PA28-181 Performance

SECTION 5
PERFORMANCE

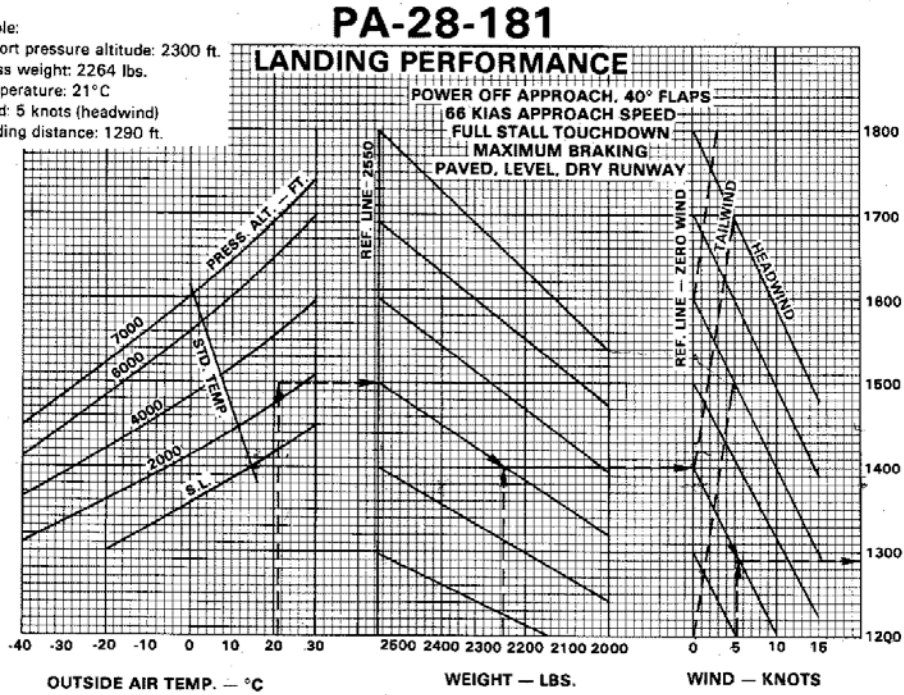
PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

Example:

Airport pressure altitude: 2300 ft.
Gross weight: 2264 lbs.
Temperature: 21°C
Wind: 5 knots (headwind)
Landing distance: 1290 ft.

LANDING PERFORMANCE

Figure 5-35



Safety Factor: x 1.43

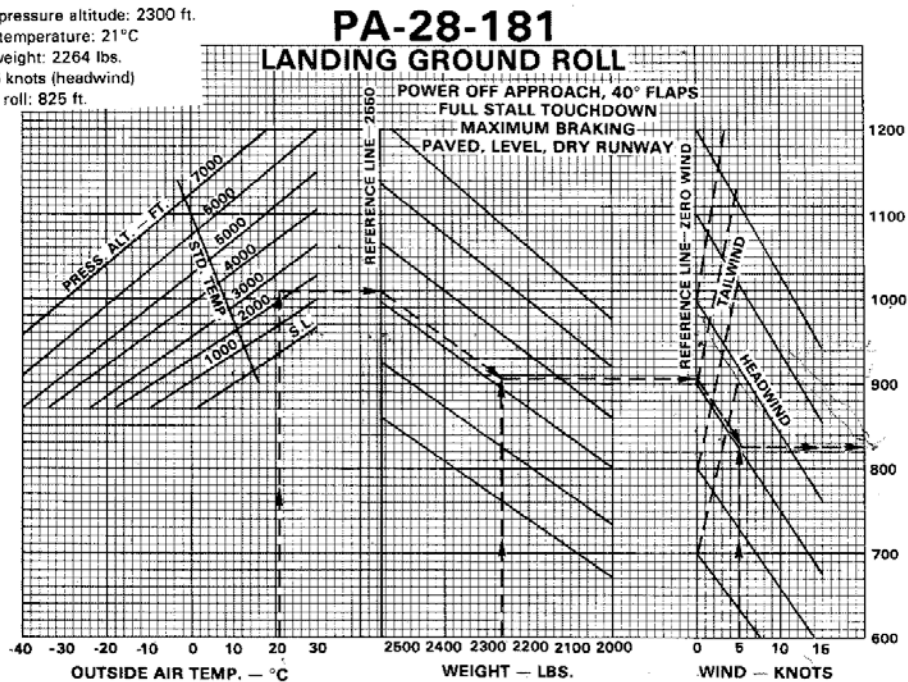
LANDING DISTANCE OVER 50 FT. BARRIER — FT.

Example:

Airport pressure altitude: 2300 ft.
Airport temperature: 21°C
Gross weight: 2264 lbs.
Wind: 5 knots (headwind)
Ground roll: 825 ft.

LANDING GROUND ROLL

Figure 5-37



Safety Factor: x 1.43

LANDING GROUND ROLL — FT.

PIPER AIRCRAFT CORPORATION
PA-28-181, ARCHER II

SECTION 5
PERFORMANCE

REPORT: VB-1120
5-28

ISSUED: JULY 2, 1979

ISSUED: JULY 2, 1979
REVISED: JUNE 29, 1984

REPORT: VB-1120
5-29

PA28-181 Weight & Balance

	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Basic Empty			
Pilot		80.50	
Front Passenger		80.50	
Rear Passengers		118.10	
Baggage (Max 200 Lbs)		142.80	
Fuel (1 USG = 6 Lbs)		95.00	
TOTAL			

Aircraft	Mass (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
G-ODW**	1590.5	86.703	137901

Figures current December 2011. Refer to aircraft tech log for latest data.

SECTION 6 WEIGHT AND BALANCE

PIPER AIRCRAFT CORPORATION PA-28-181, ARCHER II

