

# Tecnam P2006T Landing Performance

## ASSUMED CONDITIONS

Weight: 1,230 kg (2,712 lb)

Flaps: LAND

Short Final Approach Speed: 70 KIAS

Throttle Levers: Idle

Runway: Grass

## CORRECTIONS

Headwind: -16ft/kt (-5m/kt)

Tailwind: +36ft/kt (+11m/kt)

Paved Runway: -2% to Ground Roll

Runway Slope: -2.5% to Ground Roll for each +1% grade.

## EXAMPLE OVER 50' OBSTACLE

Pressure Altitude: 1,500 feet

Temperature: 30°C

Tailwind: 5 knots

Runway: Paved

Slope: .5% up

Interpolate between 1,000 and 2,000 foot pressure altitude and 25°C and 50°C to conservatively estimate the pre-correction figures. We'll average the value of the four highlighted boxes.

$$370 + 396 + 382 + 408 \div 4 = 389 \text{ meters}$$

Now we factor in corrections:

5 knots of tailwind adds 55 meters; 444 meters.

A paved runway reduces ground roll by 2% but the POH applies that to the ground roll only. We conservatively ignore it. Positive runway slope decreases the ground roll per the POH, but since we are conservative we will disregard advantageous runway slope.

This results in a final figure of 444 meters. Multiply by 3.28 feet per meter to arrive at a final figure of just under 1,457 feet.

## CONSIDER

Watch your units carefully. Landing performance must be started in metric and later converted to feet (if desired in feet). We recommend converting either before adding the corrections, or after, but whichever you do, make sure that the corrections are in the appropriate units. Don't, for example, convert to imperial units and then add 11 feet per knot to correct for a tailwind. This could quickly create an unsafe situation.

Wherever possible, be conservative. Interpolation is a skill that pilots must demonstrate to examiners, but you can also complete the process faster if you err far on the side of caution. In our practice example you could, for instance, use a 2,000 foot pressure altitude, 50°C, 5 knot tailwind, and ignore the paved runway, since that increases performance.

Pressure Altitude [ft]		Distance [m]				
		Temperature [°C]				ISA
		-25	0	25	50	
S.L.	Ground Roll	199	219	239	259	231
	At 50 ft AGL	308	334	359	384	349
1000	Ground Roll	206	227	248	269	238
	At 50 ft AGL	318	344	370	396	358
2000	Ground Roll	214	236	257	279	245
	At 50 ft AGL	328	355	382	408	367
3000	Ground Roll	222	244	267	289	252
	At 50 ft AGL	348	377	406	434	385
4000	Ground Roll	230	254	277	300	260
	At 50 ft AGL	348	377	406	434	385
5000	Ground Roll	239	263	287	311	268
	At 50 ft AGL	359	389	419	448	395
6000	Ground Roll	248	273	298	323	276
	At 50 ft AGL	371	402	432	463	405
7000	Ground Roll	258	284	310	336	285
	At 50 ft AGL	382	415	446	478	416
8000	Ground Roll	268	295	322	349	294
	At 50 ft AGL	395	428	461	494	427
9000	Ground Roll	278	306	334	362	303
	At 50 ft AGL	408	442	476	510	438
10000	Ground Roll	289	318	348	377	313
	At 50 ft AGL	421	457	492	527	450