

## SHORT FIELD TAKEOFF DISTANCE AT 3100 POUNDS

**CONDITIONS:**

- Flaps 20'
- 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- Paved, Level, Dry Runway
- Cowl Flaps Open
- Lift Off: 49 KIAS
- Speed at 50 Feet: 58 KIAS
- Zero Wind

Pressure Altitude in Feet	0°C		10°C		20°C		30°C		40°C	
	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst
		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll
SL.	715	1365	765	1460	825	1570	885	1680	945	1800
1000	775	1490	835	1600	900	1720	965	1845	1030	1980
2000	850	1635	915	1760	980	1890	1055	2035	1130	2190
3000	925	1800	995	1940	1070	2090	1150	2255	1235	2435
4000	1015	1990	1090	2150	1175	2325	1260	2515	1355	2720
5000	1110	2210	1195	2395	1290	2595	1385	2820	1485	3070
6000	1220	2470	1315	2690	1415	2930	1520	3200	1635	3510
7000	1340	2785	1445	3045	1560	3345	1675	3685		
8000	1480	3175	1595	3500	1720	3880				

**NOTE**

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

## SHORT FIELD TAKEOFF DISTANCE AT 2700 POUNDS

**CONDITIONS:**

- Flaps 20°
- 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- Paved, Level, Dry Runway
- Cowl Flaps Open
- Lift Off: 45 KIAS
- Speed at 50 Feet: 54 KIAS
- Zero Wind

Pressure Altitude in Feet	0°G		10°G		20°C		30°C		40°C	
	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst
S L	520	995	560	1065	600	1135	645	1215	690	1295
1000	565	1080	610	1155	655	1235	700	1320	750	1410
2000	615	1180	665	1260	710	1350	765	1445	820	1545
3000	675	1285	725	1380	775	1480	835	1585	895	1695
4000	735	<b>1410</b>	790	1510	850	1625	910	1740	975	1870
5000	805	1550	865	1665	930	1790	1000	1920	1070	2065
6000	880	1705	950	1840	1020	1980	1095	2135	1175	2300
7000	965	1890	1040	2040	1120	2205	1200	2380	1290	2575
8000	1060	2100	1145	2275	1230	2465	1320	2675	1420	2910

**NOTE**

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel Flow placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

## SHORT FIELD LANDING DISTANCE AT 2950 POUNDS

**CONDITIONS:**

- Flaps - FULL
- Maximum Braking
- **Zero Wind**
- Power Off
- Paved, Level, Dry Runway
- Speed at 50 Feet: 60 KIAS

Pressure Altitude in Feet	0°C		10°C		20°C		30°C		40°C	
	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst
		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll
S.L.	560	1300	580	1335	600	1365	620	1400	640	1435
1000	580	1265	600	1365	620	1400	<b>645</b>	1440	665	1475
2000	600	1370	625	1405	645	1440	670	1480	690	1515
3000	625	1410	645	<b>1445</b>	670	1485	695	1525	715	1560
4000	650	1450	670	1485	695	1525	720	1565	740	1600
5000	670	1485	695	1525	720	1565	745	1610	770	1650
6000	700	1530	725	1575	750	1615	775	1660	800	1700
7000	725	1575	750	1615	780	1665	805	1710	830	1750
8000	755	1625	780	1655	810	1715	835	1760	865	1805

**NOTE**

- Short field technique as specified in NORMAL PROCEDURES page N-21.
- *Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.*
- For operation on dry, grass runway, *increase distances by 45% of the "ground roll" figure.*
- If a landing with flaps up is necessary, increase the approach speed by 10 KIAS and allow for 40% longer distances.

## SHORT FIELD TAKEOFF DISTANCE AT 2300 POUNDS

**CONDITIONS:**

- Flaps 2D°
- 2400 RPM, Full Throttle and Mixture Set Prior to Brake Release
- Paved, Level, Dry Runway
- Cowl Flaps Open
- Lift Off: 42 KIAS
- Speed at 50 Feet: 50 KIAS
- Zero Wind

Pressure Attitude in Feet	0°C		10°C		20°C		30°C		40°C	
	Grnd Roll	Total Ft to Clear 50 Ft Obst	Gmd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst	Grnd Roll	Total Ft to Clear 50 Ft Obst
		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll		Total Ft to Clear 50 Ft Obst		Grnd Roll
S.L.	365	705	390	750	420	800	450	850	480	905
1000	395	765	425	815	455	870	490	925	520	985
2000	430	830	460	885	495	940	530	1005	565	1070
3000	470	900	505	960	540	1025	580	1090	620	1165
4000	510	980	550	1045	590	1115	630	1190	675	1270
5000	555	1065	600	1140	640	1220	690	1305	735	1390
6000	610	1165	655	1250	700	1335	755	1430	805	1530
7000	665	1275	715	1370	770	1470	825	1570	885	1685
8000	730	1405	785	1510	845	1620	905	1735	970	1865

**NOTE**

- Short field technique as specified in NORMAL PROCEDURES page N-17.
- Prior to takeoff, the mixture should be leaned to the Maximum Power Fuel How placard value in a full throttle, static runup.
- Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
- For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.