

TAKEOFF PERFORMANCE SIMPLIFIED CRITERIA

A simplified criterion is provided which is intended to cover the majority of situations where runway length is appreciably longer than required for this airplane. The other tabulated data gives more exact performance criteria through a range of conditions which include all but the most extreme cases.

The majority of takeoff situations result in field length margins that permit using a single set of values for speeds and power settings for takeoff. If the following conditions are met, the simplified procedures may be used.

1. No obstacle in flight path.
2. Anti-ice systems off.
3. Takeoff and approach flaps (15°).
4. Takeoff field length available = 5,000 feet or longer.
5. No tail wind.
6. No runway gradient.

The values to be used are as follows:

WEIGHT	13,300 POUNDS OR LESS	12,500 POUNDS OR LESS
ALTITUDE OF AIRPORT	3000 FEET OR BELOW	5000 FEET OR BELOW
AMBIENT TEMPERATURE BETWEEN	-7°C AND 25°C	-7°C AND 25°C
V ₁	106 KIAS	103 KIAS
V _R	106 KIAS	103 KIAS
V ₂	114 KIAS	111 KIAS
SINGLE-ENGINE CLIMB SPEED	149 KIAS	143 KIAS
TAKEOFF FAN	97.3% RPM	97.3% RPM
SINGLE-ENGINE CLIMB FAN	95.1% RPM	95.1% RPM

When conditions are other than those specified in the simplified criteria, the appropriate tabulated data must be referred to.

TAKEOFF/GO-AROUND THRUST — N_1 % RPM

BLEED AIR - ON

ALL ANTI-ICE - OFF

°C	°F	PRESSURE ALTITUDE - FEET					
		SL	1000	2000	3000	4000	5000
40	104	94.3	94.3	94.3	94.3	94.3	94.3
35	95	95.3	95.3	95.3	95.3	95.3	95.3
30	86	96.3	96.3	96.3	96.3	96.3	96.3
25	77	97.3	97.3	97.3	97.3	97.3	97.3
20	68	98.3	98.3	98.3	98.3	98.3	98.3
15	59	99.3	99.3	99.3	99.3	99.3	99.3
10	50	100.0	100.3	100.3	100.3	100.3	100.3
5	41	99.3	101.3	101.3	101.3	101.3	101.3
0	32	98.5	100.6	102.3	102.3	102.3	102.3
-5	23	97.6	99.8	101.8	103.0	103.0	103.0
-10	14	96.9	99.0	101.0	102.8	103.5	103.5
-15	5	96.2	98.2	100.1	101.9	103.7	103.9
-20	-4	95.4	97.4	99.3	101.0	102.8	104.0

BLEED AIR - ON

ALL ANTI-ICE - ON

°C	°F	PRESSURE ALTITUDE - FEET					
		SL	1000	2000	3000	4000	5000
5	41	96.4	96.4	96.4	96.4	96.4	96.4
0	32	97.3	97.3	97.3	97.3	97.3	97.3
-5	23	97.7	98.2	98.2	98.2	98.2	98.2
-10	14	97.0	99.0	99.1	99.1	99.1	99.1
-15	5	96.2	98.2	100.0	100.0	100.0	100.0
-20	4	95.5	97.4	99.3	100.9	100.9	100.9
-25	-13	94.7	96.6	98.4	100.2	101.8	101.8
-30	-22	93.9	95.8	97.6	99.3	101.0	102.6
-35	-31	93.1	95.0	96.7	98.5	100.1	102.0
-40	-40	92.4	94.0	95.9	97.6	99.2	101.2
-45	-49	91.6	93.4	95.1	96.7	98.4	100.1

TAKEOFF CORRECTION FACTORS

If the runway has a gradient and/or airplane anti-ice systems on, the following correction factors must be applied to the distances and V_1 speeds.

CORRECTION FACTORS - RUNWAY GRADIENT				
RUNWAY GRADIENT	SHADED AREA		NONSHADED AREA	
	V_1 *	MULTIPLY DISTANCE BY	V_1 *	MULTIPLY DISTANCE BY
2% UPHILL	ADD 4 KNOTS	1.30	ADD 2 KNOTS	1.30
1% UPHILL	ADD 2 KNOTS	1.15	ADD 1 KNOT	1.15
1% DOWNHILL	SUBTRACT 1.5 KNOTS	1.00	SUBTRACT 1 KNOT	1.00
2% DOWNHILL	SUBTRACT 3 KNOTS	1.00	SUBTRACT 2 KNOTS	1.00

*If the adjusted V_1 is greater than V_R , the value of V_R must be used for V_1 .

CORRECTION FACTORS - ANTI-ICE ON		
	SHADED AREA	NONSHADED AREA
V_1 - KIAS	NO CORRECTION	ADD 3 KNOTS
TAKEOFF FIELD LENGTH - FEET	MULTIPLY DISTANCE BY 1.4	MULTIPLY DISTANCE BY 1.25

TAKEOFF FIELD LENGTH – FLAPS 0°

FLAPS 0°
ANTI-ICE - OFF

PA	SEA LEVEL				1000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10,000	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	2860	3530	4320	5060	3040	3760	4620	5430
35	2640	3230	3930	4570	2800	3450	4210	4920
30	2460	2940	3560	4130	2600	3140	3810	4420
25	2300	2730	3250	3760	2430	2890	3470	4010
20	2160	2560	3010	3440	2280	2710	3180	3670
15	2040	2410	2820	3180	2140	2540	2970	3370
10	1980	2330	2730	3080	2050	2430	2850	3210
5	1920	2270	2650	2980	1990	2360	2760	3110
0	1880	2230	2600	2930	1950	2300	2690	3030
-5	1850	2190	2560	2880	1920	2270	2650	2980
-10	1820	2150	2510	2830	1880	2230	2600	2930
-15	1790	2110	2470	2780	1850	2190	2560	2880
V _R	98	103	108	111	98	103	108	111
V ₂	107	111	116	119	107	111	116	119
V _{ENR}	135	142	148	152	134	140	146	151
*V _{REF}	99	104	108	111	99	104	108	111

PA	2000 FEET				3000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10500	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	3360	4190	5180	6180	3670	4600	5740	7310
35	3080	3810	4690	5500	3350	4170	5150	6330
30	2830	3480	4240	4950	3080	3800	4660	5530
25	2640	3180	3860	4490	2840	3470	4230	4930
20	2490	2960	3550	4100	2660	3190	3860	4480
15	2340	2780	3280	3780	2520	2990	3580	4140
10	2220	2630	3080	3510	2380	2830	3330	3830
5	2110	2500	2930	3300	2260	2680	3150	3580
0	2010	2380	2790	3140	2160	2550	2990	3370
-5	1980	2340	2740	3080	2080	2460	2880	3240
-10	1940	2300	2690	3020	2020	2390	2800	3150
-15	1910	2260	2640	2970	1970	2330	2730	3070
V _R	98	103	108	111	98	103	108	111
V ₂	107	111	116	119	107	111	116	119
V _{ENR}	134	140	146	150	132	138	144	149
*V _{REF}	99	104	108	111	99	104	108	111

PA	4000 FEET				5000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10500	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	4030	5090	6400	8730	4430	5630	7160	10420
35	3660	4580	5700	7470	4010	5050	6330	8840
30	3350	4160	5130	6470	3660	4570	5660	7620
25	3070	3790	4640	5640	3350	4150	5110	6620
20	2860	3470	4220	4980	3090	3800	4640	5800
15	2700	3220	3900	4520	2900	3500	4260	5150
10	2560	3040	3630	4200	2750	3280	3970	4670
5	2430	2890	3400	3920	2620	3110	3710	4290
0	2310	2740	3220	3670	2480	2950	3480	4010
-5	2210	2620	3060	3450	2370	2810	3290	3760
-10	2120	2510	2940	3310	2270	2700	3160	3570
-15	2040	2410	2820	3180	2190	2590	3030	3420
V _R	98	103	108	111	98	103	108	112
V ₂	107	111	116	119	107	111	116	119
V _{ENR}	132	138	143	148	131	137	143	147
*V _{REF}	99	104	108	111	99	104	108	111

NOTES: All data predicated on BLEED AIR ON.

 *V_{REF} for return. Information above max. landing wt. is for EMER only.

All takeoff distances predicated on zero wind and zero runway gradient.

NORMAL PROCEDURES

TAKEOFF FIELD LENGTH – FLAPS 15°

FLAPS 15°

ANTI-ICE - OFF

PA	SEA LEVEL				1000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10500	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	2660	3290	4040	4750	2830	3510	4320	5100
35	2480	3010	3670	4280	2630	3220	3940	4610
30	2320	2760	3320	3850	2450	2920	3550	4130
25	2170	2570	3030	3500	2290	2720	3230	3740
20	2030	2420	2830	3210	2140	2550	2990	3420
15	1910	2270	2650	2990	2020	2390	2800	3160
10	1860	2200	2570	2900	1930	2290	2680	3020
5	1810	2140	2500	2810	1880	2220	2600	2930
0	1770	2090	2450	2750	1830	2170	2540	2850
-5	1740	2060	2410	2710	1800	2130	2500	2800
-10	1710	2030	2370	2660	1770	2100	2460	2760
-15	1680	1990	2330	2620	1740	2060	2410	2710
V _R	94	98	103	106	95	98	103	106
V ₂	102	107	111	114	102	107	111	114
V _{ENR}	135	142	148	152	134	140	146	151
*V _{REF}	99	104	108	111	99	104	108	111

PA	2000 FEET				3000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10500	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	3130	3900	4850	5770	3420	4300	5380	6450
35	2870	3560	4380	5160	3120	3890	4820	5720
30	2660	3240	3960	4630	2870	3540	4350	5120
25	2490	2970	3600	4190	2670	3230	3940	4600
20	2340	2780	3300	3830	2510	2990	3600	4180
15	2210	2620	3080	3520	2370	2810	3330	3860
10	2090	2480	2900	3270	2240	2660	3120	3570
5	1990	2360	2760	3110	2130	2530	2960	3340
0	1890	2240	2630	2950	2030	2410	2820	3170
-5	1860	2200	2580	2900	1960	2320	2710	3050
-10	1830	2160	2530	2840	1900	2250	2640	2960
-15	1800	2120	2490	2790	1850	2190	2570	2890
V _R	93	98	103	106	94	98	103	106
V ₂	102	107	111	114	102	107	111	114
V _{ENR}	134	140	146	150	132	138	144	149
*V _{REF}	99	104	108	111	99	104	108	111

PA	4000 FEET				5000 FEET			
	WEIGHT - POUNDS				WEIGHT - POUNDS			
	10500	11500	12500	13300	10500	11500	12500	13300
°C	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
40	3760	4750	6010	--	4130	5270	6740	--
35	3410	4270	5330	6370	3740	4710	5940	--
30	3120	3880	4800	5690	3400	4260	5300	6310
25	2880	3530	4330	5080	3120	3870	4770	5640
20	2690	3230	3930	4590	2900	3540	4330	5070
15	2540	3030	3630	4220	2730	3260	3970	4630
10	2410	2860	3380	3910	2590	3080	3700	4290
5	2290	2720	3190	3650	2460	2920	3460	4000
0	2180	2580	3030	3420	2340	2780	3260	3740
-5	2080	2460	2880	3250	2230	2640	3100	3500
-10	1990	2360	2770	3110	2140	2530	2970	3350
-15	1920	2270	2660	2990	2060	2440	2860	3220
V _R	94	98	103	106	94	99	103	106
V ₂	102	107	111	114	102	107	111	114
V _{ENR}	132	138	143	148	131	137	143	147
*V _{REF}	99	104	108	111	99	104	108	111

NOTES: All data predicated on BLEED AIR ON.

*V_{REF} for return. Information above max. landing wt. is for EMER only.

All takeoff distances predicated on zero wind and zero runway gradient.

V_1, V_R, V_2 — FLAPS 0°

V_1 FLAPS 0° *

PA	SEA LEVEL				1000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	99	103	108	112	99	103	108	112
35	98	103	108	112	98	103	108	112
30	97	103	108	111	97	103	108	111
25	95	102	108	111	96	103	108	111
20	94	101	107	111	95	101	108	111
15	93	100	106	111	93	100	106	111
10	92	99	106	110	93	99	106	111
5	92	99	105	110	92	99	105	110
0	92	99	105	110	92	99	105	110
-5	92	99	105	110	92	99	105	110
-10	92	99	105	110	92	99	105	110
-15	92	99	105	110	92	99	105	110
-20	92	99	105	110	92	99	105	110

PA	2000 FEET				3000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	99	104	108	111	99	104	108	109
35	99	103	108	112	99	104	108	110
30	98	103	108	112	99	103	108	111
25	97	103	108	111	98	103	108	112
20	96	103	108	111	97	103	108	111
15	95	101	108	111	96	102	108	111
10	94	100	107	111	95	101	108	111
5	93	100	106	111	94	101	107	111
0	92	99	105	110	93	100	106	111
-5	92	99	105	110	92	99	106	110
-10	92	99	105	110	92	99	105	110
-15	92	99	105	110	92	99	105	110
-20	92	99	105	110	92	99	105	110

PA	4000 FEET				5000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	99	104	108	107	99	104	108	105
35	99	104	108	108	99	104	108	106
30	99	104	108	109	99	104	108	107
25	98	103	108	110	99	103	108	108
20	97	103	108	111	98	103	108	109
15	96	103	108	111	97	103	108	110
10	96	102	108	111	96	103	108	111
5	95	101	108	111	96	102	108	111
0	94	101	107	111	95	101	108	111
-5	93	100	106	111	94	101	107	111
-10	92	99	106	110	93	100	106	111
-15	92	99	105	110	93	100	106	111
-20	92	99	105	110	92	99	106	110

$V_R V_2$ FLAPS 0° *

WT.	9500	10,500	11,500	12,500	13,000	13,300
V_R	93	98	103	108	110	111
V_2	102	107	111	116	118	119

NOTE

For gradient and anti-ice on V_1 and takeoff field length corrections, refer to Takeoff Correction Factors (N-14). Refer to page N-14 for Takeoff Power, N_1 % RPM Anti-Ice On and Takeoff Power, N_1 % RPM Anti-Ice Off. All speeds predicated on zero runway gradient and zero wind. Refer to page N-18 for V_1 , V_R , and V_2 Flaps 15°.

V₁, V_R, V₂ — FLAPS 15°

V₁ FLAPS 15° *

PA	SEA LEVEL				1000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	94	99	103	107	94	99	103	107
35	93	99	103	106	93	99	103	107
30	92	98	103	106	92	99	103	106
25	90	97	103	106	91	97	103	106
20	89	96	102	106	89	96	102	106
15	88	94	100	105	88	95	101	106
10	87	94	100	105	87	94	100	105
5	87	94	100	104	87	94	100	105
0	87	94	100	104	87	94	100	104
-5	87	94	100	104	87	94	100	104
-10	87	94	100	105	87	94	100	104
-15	87	94	100	105	87	94	100	105
-20	87	94	100	105	87	94	100	105

PA	2000 FEET				3000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	94	99	103	107	94	99	103	107
35	94	99	103	107	94	99	103	107
30	93	99	103	107	94	99	103	107
25	92	98	103	106	93	99	103	106
20	91	97	103	106	92	98	103	106
15	90	96	102	106	91	97	103	106
10	89	95	101	106	90	96	102	106
5	88	94	100	105	89	95	101	106
0	87	93	100	104	88	94	101	105
-5	87	93	100	104	87	94	100	105
-10	87	93	100	104	87	94	100	104
-15	87	93	100	104	87	93	100	104
-20	87	94	100	104	87	93	100	104

PA	4000 FEET				5000 FEET			
WT	10,500	11,500	12,500	13,300	10,500	11,500	12,500	13,300
°C								
40	94	99	103	--	94	99	103	--
35	94	99	103	107	94	99	103	106
30	94	99	103	107	94	99	103	107
25	94	99	103	107	94	99	103	107
20	92	99	103	106	93	99	103	107
15	91	98	103	106	92	99	103	106
10	90	97	103	106	91	98	103	106
5	90	96	102	106	90	97	103	106
0	89	95	101	106	90	96	102	106
-5	88	95	101	105	89	95	102	106
-10	87	94	100	105	88	95	101	106
-15	87	93	100	104	88	94	100	105
-20	87	93	100	104	87	94	100	105

V_R V₂ FLAPS 15° *

WT	9500	10,500	11,500	12,500	13,000	13,300
V _R	89	94	98	103	105	106
V ₂	97	102	107	111	113	114

NOTE

For gradient and anti-ice on V₁ and takeoff field length corrections, refer to Takeoff Correction Factors (N-14). Refer to page N-14 for Takeoff Power, N₁% RPM Anti-Ice On and Takeoff Power, N₁% RPM Anti-Ice Off. All speeds predicated on zero runway gradient and zero wind. Refer to page N-17 for V₁, V_R, and V₂ Flaps 0°.

THRUST SETTINGS

**NORMAL CLIMB/MAXIMUM CRUISE THRUST
SETTING - N₁% RPM**

UPPER IS ANTI-ICE OFF, LOWER IS ANTI-ICE ON (ALL)

PA 1000 FT	RAM AIR TEMPERATURE - °C												
	30	20	10	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
S.L.	94.3 --	96.6 --	96.6 95.1	95.1 95.1	94.5 94.5	93.7 93.7	93.0 93.0	92.3 92.3	91.6 91.6	90.9 90.9	90.2 90.2	89.5 89.5	88.8 88.8
5	94.3 --	96.6 --	98.9 95.1	101.2 96.9	102.3 97.7	102.2 98.4	101.4 99.0	100.5 99.6	99.7 99.7	98.9 98.9	98.0 98.0	97.2 97.2	96.4 96.4
10	94.3 --	96.6 --	98.9 95.1	101.2 96.9	102.3 97.7	103.5 98.4	104.0 99.0	104.0 99.6	103.7 100.0	102.8 100.5	101.8 100.9	100.9 100.9	99.9 99.9
15	94.3 --	96.6 --	98.9 95.1	101.2 96.9	102.3 97.7	103.5 98.4	104.0 99.0	104.0 99.6	104.0 100.0	104.0 100.5	104.0 100.9	104.0 101.2	103.4 101.6
20 & ABOVE	94.3 --	96.6 --	98.9 95.1	101.2 96.9	102.3 97.7	103.5 98.4	104.0 99.0	104.0 99.6	104.0 100.0	104.0 100.5	104.0 100.9	104.0 101.2	104.0 101.6

**MAXIMUM CONTINUOUS THRUST
SETTING - N₁% RPM
SINGLE ENGINE ENROUTE CLIMB**

UPPER IS ANTI-ICE OFF, LOWER IS ANTI-ICE ON (ALL)

PA 1000 FT	RAM AIR TEMPERATURE - °C												
	45	35	25	15	10	5	0	-5	-10	-15	-25	-35	-45
S.L.	91.3 --	93.6 --	95.8 --	97.8 --	98.6 94.0	97.8 95.0	97.1 96.0	96.4 96.4	95.6 95.6	94.9 94.9	93.4 93.4	91.9 91.9	90.4 90.4
2	91.3 --	93.6 --	95.8 --	97.8 --	98.8 94.0	99.9 95.0	100.9 96.0	100.2 96.8	99.4 97.6	98.6 98.6	97.0 97.0	95.4 95.4	93.8 93.8
4	91.3 --	93.6 --	95.8 --	97.8 --	98.8 94.0	99.9 95.0	100.9 96.0	101.8 96.8	102.6 97.6	102.0 98.3	100.3 99.5	98.6 98.6	96.9 96.9
6	91.3 --	93.6 --	95.8 --	97.8 --	98.8 94.0	99.9 95.0	100.9 96.0	101.8 96.8	102.6 97.6	103.2 98.3	103.8 99.5	102.0 100.4	100.2 100.2
8	91.3 --	93.6 --	95.8 --	97.8 --	98.8 94.0	99.9 95.0	100.9 96.0	101.8 96.8	102.6 97.6	103.2 98.3	103.9 99.5	104.0 100.4	103.6 101.1
10 & ABOVE	91.3 --	93.6 --	95.8 --	97.8 --	98.8 94.0	99.9 95.0	100.9 96.0	101.8 96.8	102.6 97.6	103.2 98.3	103.9 99.5	104.0 100.4	104.0 101.1

NORMAL PROCEDURES

V_{REF} (GEAR DOWN AND FLAPS – LAND)

	WEIGHT - POUNDS						
	13,300	13,000	12,500	12,000	11,500	11,000	10,500
SPEED - KIAS	111	110	108	106	104	101	99

	WEIGHT - POUNDS				
	10,000	9500	9000	8,500	8,000
SPEED - KIAS	97	95	92	90	87

LANDING DISTANCE

PA	SEA LEVEL					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
45	1890	2000	2110	2220	2320	2470
40	1880	1990	2090	2200	2300	2420
35	1860	1970	2080	2180	2280	2380
30	1850	1960	2060	2160	2270	2340
25	1840	1940	2040	2150	2250	2320
20	1830	1930	2030	2130	2230	2290
15	1810	1910	2010	2110	2210	2270
10	1800	1900	2000	2090	2190	2250
5	1790	1890	1980	2070	2170	2230
0	1780	1870	1960	2060	2150	2210
-5	1760	1860	1950	2040	2130	2190
-10	1750	1840	1930	2020	2110	2170
-15	1740	1830	1920	2000	2090	2150
-20	1730	1810	1900	1980	2070	2130
-25	1710	1800	1880	1970	2050	2110

PA	1000 FEET					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
45	1920	2040	2150	2260	2370	2580
40	1910	2020	2130	2240	2350	2530
35	1900	2010	2120	2230	2330	2480
30	1880	1990	2100	2210	2310	2440
25	1870	1980	2080	2190	2290	2400
20	1860	1960	2070	2170	2270	2350
15	1840	1950	2050	2150	2250	2320
10	1830	1930	2030	2130	2230	2300
5	1820	1920	2020	2110	2210	2280
0	1800	1900	2000	2100	2190	2260
-5	1790	1890	1980	2080	2170	2230
-10	1780	1870	1970	2060	2150	2210
-15	1760	1860	1950	2040	2130	2190
-20	1750	1840	1930	2020	2110	2170
-25	1740	1830	1920	2000	2090	2150

PA	2000 FEET					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
45	1960	2080	2200	2310	2450	2700
40	1940	2060	2180	2290	2400	2650
35	1930	2050	2160	2270	2380	2600
30	1920	2030	2140	2250	2360	2550
25	1900	2020	2120	2230	2340	2500
20	1890	2000	2110	2210	2320	2450
15	1880	1980	2090	2190	2300	2400
10	1860	1970	2070	2170	2280	2360
5	1850	1950	2050	2160	2260	2330
0	1830	1940	2040	2140	2230	2300
-5	1820	1920	2020	2120	2210	2280
-10	1810	1910	2000	2100	2190	2260
-15	1790	1890	1980	2080	2170	2240
-20	1780	1870	1970	2060	2150	2210
-25	1770	1860	1950	2040	2130	2190

NOTE: All landing distances predicated on zero wind and zero runway gradient.

NORMAL PROCEDURES

PA	3000 FEET					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
40	1980	2100	2220	2340	2510	2780
35	1970	2090	2200	2320	2460	2730
30	1950	2070	2190	2300	2420	2670
25	1940	2050	2170	2280	2390	2610
20	1920	2040	2150	2260	2370	2560
15	1910	2020	2130	2240	2350	2510
10	1890	2000	2110	2220	2330	2460
5	1880	1990	2090	2200	2300	2410
0	1870	1970	2080	2180	2280	2370
-5	1850	1960	2060	2160	2260	2330
-10	1840	1940	2040	2140	2240	2310
-15	1820	1920	2020	2120	2220	2280
-20	1810	1910	2000	2100	2190	2260
-25	1790	1890	1990	2080	2170	2240
-30	1780	1870	1970	2060	2150	2210

PA	4000 FEET					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
40	2020	2150	2270	2390	2620	2940
35	2000	2130	2250	2370	2570	2870
30	1990	2110	2230	2350	2520	2810
25	1970	2090	2210	2330	2480	2740
20	1960	2080	2190	2310	2430	2680
15	1940	2060	2170	2290	2400	2630
10	1930	2040	2150	2270	2380	2570
5	1910	2030	2140	2240	2350	2520
0	1900	2010	2120	2220	2330	2470
-5	1880	1990	2100	2200	2310	2420
-10	1870	1980	2080	2180	2280	2370
-15	1850	1960	2060	2160	2260	2330
-20	1840	1940	2040	2140	2240	2310
-25	1820	1920	2020	2120	2220	2280
-30	1810	1910	2000	2100	2190	2260

PA	5000 FEET					
°C	WEIGHT - POUNDS					
	8000	9000	10,000	11,000	12,000	12,700
40	2060	2190	2320	2450	2750	3110
35	2040	2170	2300	2420	2690	3040
30	2030	2150	2280	2400	2640	2960
25	2010	2140	2260	2380	2590	2890
20	1990	2120	2240	2360	2540	2830
15	1980	2100	2220	2340	2490	2760
10	1960	2080	2200	2310	2440	2700
5	1950	2070	2180	2290	2400	2640
0	1930	2050	2160	2270	2380	2580
-5	1920	2030	2140	2250	2360	2520
-10	1900	2010	2120	2230	2330	2470
-15	1890	1990	2100	2210	2310	2420
-20	1870	1980	2080	2180	2290	2370
-25	1860	1960	2060	2160	2260	2330
-30	1840	1940	2040	2140	2240	2310
-35	1820	1920	2020	2120	2210	2280

NOTE: All landing distances predicated on zero wind and zero runway gradient.