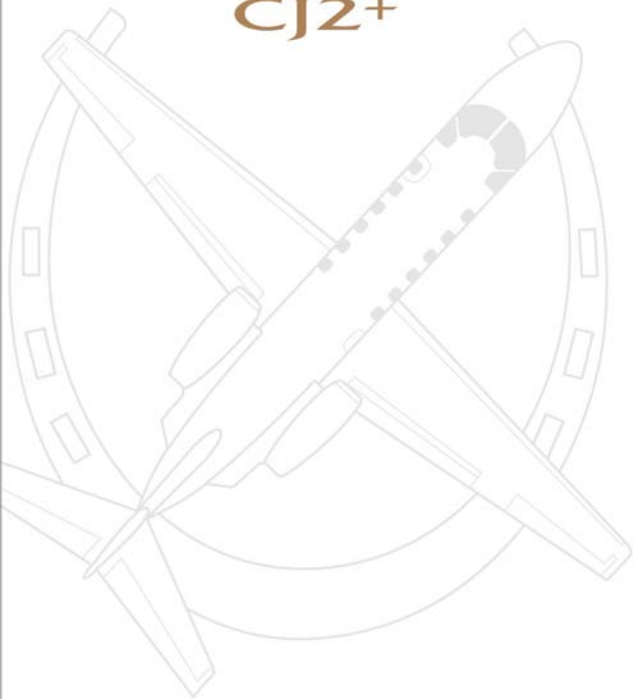


CITATION
CJ2+



Flight Planning Guide

February 2008

TABLE OF CONTENTS

This Flight Planning Guide is published for the purpose of providing specific information for evaluating the performance of the Cessna Citation CJ2+ (Model 525A).

This guide is developed from data contained in the Citation CJ2+ Aircraft Flight Manual and Operating Manual. **This document is not to be used in place of the FAA approved Aircraft Flight Manual or the Operating Manual.** The data included herein does not constitute an offer and is subject to change without notice.

Section	Page
Specifications	2
Takeoff Performance	
Decision, Rotation and Takeoff Safety Speeds	4
Takeoff Field Length – Flaps 15°	5
Takeoff Field Length – Flaps UP	10
Climb Performance.....	15
Cruise Performance	
High Speed Cruise.....	16
Long Range Cruise.....	17
Descent Performance.....	18
Reserve Fuel Calculations	19
Holding Performance.....	19
Landing Performance	20
Stall Speeds	24
Mission Planning Table	25

SPECIFICATIONS

General

Certification Status 14 CFR Part 23*

Engines

Manufacturer Williams International
Model (2) FJ44-3A-24
Thrust Output at S.L. (each) 2,490 lb 11.08 kN
Flat Rating Temperature 72 °F 22 °C
Overhaul Interval (TBO) 4,000 hours

Exterior Dimensions

Length 47 ft 8 in 14.53 m
Height 14 ft 0 in 4.27 m
Wing Span 49 ft 10 in 15.19 m
Landing Gear Wheelbase 17 ft 10 in 5.44 m
Landing Gear Tread 15 ft 11 in 4.85 m

Internal Dimensions (with typical interior installed)

Length - overall 18 ft 6 in 5.64 m
Length - excluding cockpit 13 ft 7 in 4.14 m
Height 57 in 1.45 m
Width 58 in 1.47 m
Passenger Cabin Volume 248 ft³ 7.02 m³

Accommodations

Passenger Seats - typical 8 - 9
Baggage Capacity 65 ft³ 1.84 m³
1,000 lb 454 kg

Pressurization

Differential 8.9 psi 0.61 bar
Sea Level Cabin to 23,586 ft 7,189 m
8,000 Foot Cabin at 45,000 ft 13,716 m

Altitudes

Certified Ceiling 45,000 ft 13,716 m
Service Ceiling - 1 Engine (MTOW) 23,800 ft 7,254 m
Typical Cruise Altitudes FL 330 - 450

* The Citation CJ2+ is designed to 14 CFR Part 25 standards and certified by 14 CFR Part 23. All takeoff and landing performance is based on Part 25 criteria.

SPECIFICATIONS

Basic Performance

Takeoff Distance, Sea Level, ISA, MTOW	3,360 ft	1,024 m
Landing Distance, Sea Level, ISA, MLW	2,980 ft	908 m
Rate of Climb - 2 Engines	4,120 ft/min	1,256 m/min
Rate of Climb - 1 Engine	1,004 ft/min	306 m/min
Typical Cruise Speeds	390-415 ktas	723-769 km/hr

Airspeed Limitations

Maximum Operating Limit	M 0.737 Indicated	
M _{MO} (29,123 ft / 8,877 m and above)	M 0.737 Indicated	
V _{MO} (8,000 ft to 29,123 ft / 8,877 m)	278 KIAS	515 km/hr
V _{MO} (Sea Level to 8,000 ft / 2,438 m)	260 KIAS	482 km/hr
Maximum Flap Extended Speed (V _{FE})		
Takeoff & Approach Position (15°)	200 KIAS	371 km/hr
Land Position (35°)	161 KIAS	298 km/hr
Max Landing Gear Extended Speed (V _{LE})	200 KIAS	371 km/hr
Max Landing Gear Oper - Extending (V _{LO})	200 KIAS	371 km/hr
Max Landing Gear Oper - Retracting (V _{LO})	200 KIAS	371 km/hr
Max. Speed Brake Operation Speed (V _{SB})	No limit	No limit
Minimum Control Speed, Air (V _{MCA})		
Flaps - 0°	83 KIAS	154 km/hr
Flaps - 15°	76 KIAS	141 km/hr
Minimum Control Speed, Ground (V _{MCG})	79 KIAS	146 km/hr

Certified Weights

Maximum Ramp Weight	12,625 lb	5,727 kg
Maximum Takeoff Weight	12,500 lb	5,670 kg
Maximum Landing Weight	11,525 lb	5,228 kg
Maximum Zero Fuel Weight	9,700 lb	4,400 kg
Maximum Fuel Capacity (6.7 lb/gal)	3,930 lb	1,783 kg

Basic Operating Weight

Typically-Equipped Empty Weight	7,750 lb	3,515 kg
Single Pilot & Furnishings	200 lb	91 kg
Basic Operating Weight	7,950 lb	3,606 kg

Payload

Useful Payload and Fuel	4,675 lb	2,121 kg
Maximum Payload	1,750 lb	794 kg
Payload at Full Fuel	745 lb	338 kg

TAKEOFF PERFORMANCE

Although the aircraft is certified under 14 CFR Part 23, Cessna publishes all takeoff performance for the Citation CJ2+ using Part 25 criteria. Part 25 defines takeoff distance as the greater of accelerate-stop, accelerate-go with one engine inoperative, or 115% of the all engine takeoff distance to a point 35 feet above the runway. These factors are reflected in the takeoff field lengths presented.

Second segment climb limitations are presented at the bottom of each takeoff field length table. Second segment climb refers to the ability of the aircraft to meet certain climb rates after takeoff with one engine inoperative. Second segment climb limitations are a function of temperature, elevation and aircraft weight.

Two flap settings are shown for the aircraft: 15° and UP. A flap setting of 15° is preferred to minimize runway length and runway speeds. In those situations where second segment climb requirements are too limiting for 15° of flaps, an UP flap setting is available. An UP flap setting requires greater runway length but provides greater second segment climb capability.

A paved, level, dry runway with zero wind is assumed. Runway lengths shown are based on the aircraft's anti-ice systems being off and the cabin bleed air on.

DECISION, ROTATION & TAKEOFF SAFETY SPEEDS
Sea Level, Dry Runway, ISA, Zero Wind, Anti-Ice Off, KIAS

Takeoff Weight (lb)	Flaps 15° Setting			Flaps UP Setting		
	Decision Speed	Rotation Speed	Safety Speed	Decision Speed	Rotation Speed	Safety Speed
	V₁	V_R	V₂	V₁	V_R	V₂
12,500	105	108	116	113	118	125
12,100	102	106	114	110	116	123
11,500	99	103	112	107	113	122
11,000	95	100	110	105	112	121
10,500	92	97	107	102	110	120
10,000	89	95	106	100	108	119
9,500	86	94	105	97	107	118
9,000	85	92	104	94	105	117

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = Sea Level								
Ambient Temp	----- Takeoff Weight (lb) -----							
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000
0 / 32	3,200	3,020	2,770	2,570	2,380	2,250	2,120	2,080
10 / 50	3,310	3,120	2,870	2,660	2,460	2,320	2,190	2,130
15 / 59	3,360	3,180	2,920	2,700	2,500	2,360	2,230	2,160
20 / 68	3,420	3,230	2,960	2,750	2,540	2,390	2,260	2,180
25 / 77	3,590	3,390	3,110	2,880	2,660	2,460	2,320	2,180
30 / 86	3,810	3,590	3,280	3,040	2,810	2,590	2,390	2,240
35 / 95	4,090	3,830	3,480	3,220	2,970	2,730	2,510	2,310
40 / 104	4,420	4,130	3,730	3,420	3,150	2,890	2,650	2,420
45 / 113	—	4,520	4,070	3,720	3,390	3,090	2,830	2,580
50 / 122	—	—	4,470	4,070	3,710	3,360	3,040	2,750
Climb Wght Temp Limits °C/°F	43/109	46/115	50/122	54/129	54/129	54/129	54/129	54/129
Field Length at Temp Limits (ft)	4,680	4,610	4,470	4,420	4,000	3,620	3,270	2,940

Elevation = 1,000 Feet								
Ambient Temp	----- Takeoff Weight (lb) -----							
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000
0 / 32	3,300	3,120	2,860	2,650	2,460	2,320	2,190	2,140
10 / 50	3,410	3,220	2,960	2,740	2,540	2,390	2,260	2,190
15 / 59	3,470	3,280	3,010	2,790	2,580	2,430	2,300	2,220
20 / 68	3,570	3,370	3,090	2,860	2,650	2,480	2,340	2,220
25 / 77	3,790	3,570	3,270	3,030	2,800	2,580	2,410	2,260
30 / 86	4,050	3,800	3,470	3,210	2,970	2,730	2,500	2,330
35 / 95	4,390	4,110	3,720	3,420	3,150	2,900	2,660	2,420
40 / 104	—	4,480	4,040	3,700	3,370	3,090	2,830	2,580
45 / 113	—	—	4,420	4,040	3,680	3,340	3,020	2,750
50 / 122	—	—	—	4,450	4,030	3,650	3,300	2,960
Climb Wght Temp Limits °C/°F	39/102	42/108	48/118	51/124	52/126	52/126	52/126	52/126
Field Length at Temp Limits (ft)	4,720	4,660	4,690	4,540	4,200	3,800	3,430	3,080

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 2,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000
0 / 32	3,410	3,220	2,960	2,740	2,540	2,390	2,260	2,190
10 / 50	3,530	3,330	3,060	2,830	2,620	2,470	2,330	2,250
15 / 59	3,590	3,390	3,110	2,880	2,670	2,510	2,370	2,280
20 / 68	3,770	3,560	3,260	3,020	2,790	2,580	2,430	2,290
25 / 77	4,020	3,790	3,470	3,210	2,960	2,730	2,510	2,360
30 / 86	4,360	4,090	3,700	3,420	3,150	2,900	2,660	2,430
35 / 95	4,770	4,460	4,020	3,680	3,370	3,090	2,830	2,580
40 / 104	—	—	4,390	4,010	3,650	3,320	3,020	2,750
45 / 113	—	—	—	4,400	4,000	3,620	3,270	2,940
50 / 122	—	—	—	—	4,410	3,980	3,590	3,220
Climb Wght Temp Limits °C/°F	36/97	39/102	43/109	47/117	50/122	50/122	50/122	50/122
Field Length at Temp Limits (ft)	4,860	4,810	4,660	4,580	4,410	3,980	3,590	3,220

Elevation = 3,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000
-10 / 14	3,400	3,210	2,950	2,730	2,530	2,390	2,260	2,200
0 / 32	3,520	3,320	3,050	2,830	2,620	2,470	2,330	2,260
10 / 50	3,660	3,460	3,170	2,940	2,720	2,560	2,410	2,310
15 / 59	3,820	3,610	3,300	3,060	2,830	2,620	2,470	2,320
20 / 68	4,060	3,830	3,500	3,240	2,990	2,750	2,550	2,390
25 / 77	4,380	4,100	3,720	3,440	3,170	2,920	2,680	2,470
30 / 86	4,750	4,440	4,010	3,670	3,380	3,100	2,840	2,590
35 / 95	—	4,850	4,370	3,990	3,640	3,310	3,020	2,760
40 / 104	—	—	4,790	4,360	3,970	3,600	3,250	2,940
45 / 113	—	—	—	—	4,360	3,940	3,560	3,190
Climb Wght Temp Limits °C/°F	33/91	36/97	40/104	44/111	47/117	47/117	47/117	47/117
Field Length at Temp Limits (ft)	5,020	4,950	4,790	4,720	4,540	4,100	3,690	3,310

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 4,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	3,520	3,320	3,050	2,830	2,620	2,470	2,330	2,260	
0 / 32	3,640	3,440	3,150	2,920	2,700	2,550	2,410	2,330	
10 / 50	3,920	3,700	3,380	3,140	2,900	2,680	2,520	2,370	
15 / 59	4,110	3,880	3,550	3,280	3,030	2,790	2,590	2,430	
20 / 68	4,410	4,130	3,760	3,480	3,200	2,950	2,700	2,500	
25 / 77	4,760	4,460	4,020	3,690	3,400	3,120	2,860	2,610	
30 / 86	—	4,830	4,350	3,980	3,630	3,310	3,040	2,760	
35 / 95	—	—	4,740	4,330	3,940	3,580	3,230	2,940	
40 / 104	—	—	—	4,750	4,310	3,910	3,530	3,170	
45 / 113	—	—	—	—	—	4,300	3,870	3,470	
Climb Wght Temp Limits °C/°F	29/84	32/90	37/99	40/104	44/111	45/113	45/113	45/113	
Field Length at Temp Limits (ft)	5,090	5,010	4,930	4,750	4,680	4,300	3,870	3,470	

Elevation = 5,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	3,630	3,430	3,150	2,920	2,700	2,550	2,410	2,330	
0 / 32	3,850	3,640	3,330	3,090	2,850	2,660	2,510	2,360	
5 / 41	4,020	3,790	3,470	3,220	2,970	2,730	2,570	2,420	
10 / 50	4,190	3,960	3,610	3,340	3,090	2,840	2,630	2,470	
15 / 59	4,470	4,190	3,810	3,520	3,250	2,990	2,740	2,540	
20 / 68	4,800	4,490	4,060	3,730	3,430	3,150	2,890	2,630	
25 / 77	5,180	4,830	4,360	3,990	3,640	3,330	3,060	2,780	
30 / 86	—	—	4,710	4,300	3,920	3,560	3,230	2,940	
35 / 95	—	—	—	4,700	4,280	3,880	3,500	3,150	
40 / 104	—	—	—	—	4,700	4,250	3,830	3,440	
Climb Wght Temp Limits °C/°F	26/79	29/84	33/91	38/100	41/106	42/108	42/108	42/108	
Field Length at Temp Limits (ft)	5,270	5,160	4,990	4,990	4,800	4,420	3,980	3,570	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 6,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	3,780	3,570	3,280	3,040	2,810	2,640	2,490	2,380	
0 / 32	4,120	3,890	3,560	3,290	3,050	2,800	2,620	2,460	
5 / 41	4,310	4,060	3,710	3,430	3,170	2,920	2,690	2,520	
10 / 50	4,550	4,260	3,880	3,590	3,310	3,040	2,790	2,590	
15 / 59	4,860	4,550	4,110	3,780	3,480	3,200	2,930	2,670	
20 / 68	5,220	4,880	4,400	4,030	3,670	3,370	3,090	2,810	
25 / 77	—	5,250	4,720	4,320	3,930	3,570	3,250	2,970	
30 / 86	—	—	5,120	4,670	4,250	3,850	3,480	3,140	
35 / 95	—	—	—	—	4,650	4,210	3,800	3,410	
40 / 104	—	—	—	—	—	4,640	4,180	3,740	
Climb Wght Temp Limits °C/°F	22/72	25/77	30/86	34/93	38/100	40/104	40/104	40/104	
Field Length at Temp Limits (ft)	5,380	5,250	5,120	5,050	4,950	4,640	4,180	3,740	

Elevation = 7,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	3,740	3,530	3,240	3,010	2,790	2,630	2,480	2,400	
-10 / 14	4,050	3,820	3,500	3,240	3,000	2,770	2,600	2,450	
0 / 32	4,440	4,170	3,810	3,520	3,250	2,990	2,740	2,570	
5 / 41	4,670	4,380	3,970	3,670	3,380	3,120	2,850	2,640	
10 / 50	4,960	4,640	4,190	3,850	3,550	3,260	2,990	2,720	
15 / 59	5,300	4,950	4,470	4,090	3,730	3,420	3,140	2,850	
20 / 68	—	5,300	4,770	4,360	3,980	3,610	3,290	3,000	
25 / 77	—	—	5,120	4,670	4,250	3,860	3,480	3,160	
30 / 86	—	—	—	5,090	4,620	4,190	3,780	3,390	
35 / 95	—	—	—	—	5,100	4,600	4,140	3,710	
Climb Wght Temp Limits °C/°F	18/64	21/70	27/81	31/88	35/95	37/99	37/99	37/99	
Field Length at Temp Limits (ft)	5,530	5,380	5,300	5,200	5,100	4,790	4,300	3,860	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 8,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	3,970	3,750	3,430	3,180	2,940	2,750	2,590	2,430	
-10 / 14	4,340	4,100	3,740	3,460	3,200	2,950	2,730	2,560	
0 / 32	4,820	4,510	4,080	3,770	3,480	3,200	2,930	2,690	
5 / 41	5,080	4,750	4,290	3,940	3,620	3,330	3,050	2,780	
10 / 50	5,400	5,050	4,550	4,170	3,800	3,490	3,190	2,910	
15 / 59	—	5,380	4,840	4,430	4,030	3,660	3,340	3,050	
20 / 68	—	—	5,160	4,710	4,290	3,890	3,520	3,190	
25 / 77	—	—	—	5,050	4,590	4,160	3,760	3,380	
30 / 86	—	—	—	—	5,040	4,560	4,110	3,680	
35 / 95	—	—	—	—	—	5,040	4,520	4,050	
Climb Wght Temp Limits °C/°F	13/55	17/63	23/73	27/81	31/88	35/95	35/95	35/95	
Field Length at Temp Limits (ft)	5,620	5,530	5,400	5,260	5,150	5,040	4,520	4,050	

Elevation = 9,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	4,260	4,020	3,670	3,400	3,140	2,890	2,710	2,540	
-10 / 14	4,710	4,410	4,010	3,710	3,420	3,150	2,890	2,680	
-5 / 23	4,970	4,650	4,200	3,870	3,570	3,280	3,010	2,750	
0 / 32	5,240	4,900	4,430	4,050	3,720	3,420	3,130	2,850	
5 / 41	5,550	5,180	4,680	4,280	3,900	3,570	3,260	2,980	
10 / 50	—	5,520	4,970	4,540	4,140	3,760	3,420	3,120	
15 / 59	—	—	5,290	4,830	4,400	3,990	3,600	3,260	
20 / 68	—	—	—	5,150	4,680	4,240	3,830	3,440	
25 / 77	—	—	—	—	5,070	4,590	4,140	3,710	
30 / 86	—	—	—	—	—	5,050	4,540	4,060	
Climb Wght Temp Limits °C/°F	8/46	13/55	19/66	24/75	28/82	31/88	32/90	32/90	
Field Length at Temp Limits (ft)	5,770	5,740	5,590	5,490	5,380	5,160	4,720	4,220	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS UP

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = Sea Level									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
0 / 32	3,690	3,490	3,250	3,080	2,920	2,770	2,620	2,480	
10 / 50	3,820	3,610	3,350	3,180	3,020	2,860	2,710	2,560	
15 / 59	3,880	3,670	3,410	3,230	3,070	2,910	2,750	2,600	
20 / 68	3,950	3,730	3,460	3,290	3,120	2,950	2,800	2,640	
25 / 77	4,160	3,920	3,600	3,380	3,200	3,030	2,860	2,700	
30 / 86	4,430	4,170	3,790	3,520	3,290	3,110	2,940	2,770	
35 / 95	4,720	4,440	4,030	3,720	3,430	3,210	3,020	2,840	
40 / 104	5,050	4,740	4,310	3,960	3,640	3,340	3,110	2,920	
45 / 113	5,530	5,160	4,640	4,260	3,900	3,570	3,260	3,010	
50 / 122	6,100	5,680	5,090	4,630	4,210	3,840	3,490	3,170	
Climb Wght Temp Limits °C/°F	51/124	54/129	54/129	54/129	54/129	54/129	54/129	54/129	54/129
Field Length at Temp Limits (ft)	6,230	6,170	5,520	5,020	4,540	4,100	3,720	3,360	

Elevation = 1,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
0 / 32	3,810	3,610	3,350	3,180	3,020	2,860	2,710	2,560	
10 / 50	3,940	3,730	3,460	3,290	3,120	2,950	2,800	2,640	
15 / 59	4,010	3,790	3,520	3,340	3,170	3,000	2,840	2,680	
20 / 68	4,130	3,890	3,590	3,410	3,230	3,060	2,890	2,730	
25 / 77	4,390	4,140	3,770	3,520	3,330	3,140	2,970	2,800	
30 / 86	4,700	4,420	4,020	3,700	3,440	3,240	3,050	2,870	
35 / 95	5,040	4,740	4,300	3,960	3,630	3,360	3,150	2,950	
40 / 104	5,480	5,120	4,620	4,250	3,900	3,560	3,270	3,050	
45 / 113	6,030	5,620	5,040	4,590	4,200	3,830	3,480	3,180	
50 / 122	—	6,210	5,560	5,060	4,580	4,140	3,760	3,400	
Climb Wght Temp Limits °C/°F	48/118	50/122	52/126	52/126	52/126	52/126	52/126	52/126	52/126
Field Length at Temp Limits (ft)	6,420	6,210	5,800	5,270	4,770	4,300	3,880	3,500	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS UP

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 2,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
0 / 32	3,940	3,730	3,460	3,290	3,120	2,950	2,800	2,640	
10 / 50	4,070	3,860	3,580	3,400	3,220	3,050	2,890	2,730	
15 / 59	4,150	3,930	3,640	3,450	3,270	3,100	2,940	2,770	
20 / 68	4,370	4,120	3,780	3,550	3,360	3,180	3,000	2,830	
25 / 77	4,680	4,400	4,000	3,710	3,470	3,280	3,090	2,910	
30 / 86	5,020	4,720	4,290	3,950	3,640	3,380	3,180	2,990	
35 / 95	5,450	5,090	4,620	4,250	3,890	3,560	3,290	3,090	
40 / 104	5,980	5,570	5,000	4,570	4,190	3,820	3,480	3,190	
45 / 113	6,590	6,140	5,500	5,000	4,530	4,120	3,740	3,380	
50 / 122	—	—	6,100	5,540	5,010	4,520	4,050	3,660	
Climb Wght Temp Limits °C/°F	44/111	47/117	50/122	50/122	50/122	50/122	50/122	50/122	50/122
Field Length at Temp Limits (ft)	6,470	6,400	6,100	5,540	5,010	4,520	4,050	3,660	

Elevation = 3,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	3,930	3,720	3,460	3,280	3,110	2,950	2,790	2,640	
0 / 32	4,060	3,850	3,580	3,400	3,220	3,050	2,890	2,730	
10 / 50	4,230	4,000	3,710	3,520	3,330	3,160	2,990	2,820	
15 / 59	4,430	4,170	3,830	3,610	3,420	3,230	3,050	2,880	
20 / 68	4,720	4,440	4,040	3,760	3,520	3,330	3,140	2,960	
25 / 77	5,050	4,750	4,320	3,970	3,670	3,430	3,230	3,030	
30 / 86	5,430	5,090	4,620	4,250	3,900	3,590	3,330	3,130	
35 / 95	5,940	5,540	4,970	4,570	4,180	3,820	3,490	3,230	
40 / 104	6,530	6,080	5,450	4,960	4,510	4,110	3,730	3,390	
45 / 113	—	—	6,020	5,470	4,950	4,470	4,030	3,640	
Climb Wght Temp Limits °C/°F	41/106	44/111	47/117	47/117	47/117	47/117	47/117	47/117	47/117
Field Length at Temp Limits (ft)	6,670	6,600	6,280	5,700	5,160	4,650	4,170	3,760	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS UP

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 4,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	4,060	3,850	3,580	3,390	3,220	3,050	2,890	2,730	
0 / 32	4,200	3,980	3,700	3,510	3,330	3,150	2,990	2,820	
10 / 50	4,540	4,280	3,920	3,680	3,480	3,290	3,110	2,940	
15 / 59	4,790	4,500	4,100	3,810	3,580	3,380	3,190	3,010	
20 / 68	5,100	4,790	4,360	4,010	3,720	3,480	3,280	3,080	
25 / 77	5,450	5,120	4,640	4,270	3,920	3,620	3,380	3,170	
30 / 86	5,910	5,510	4,970	4,570	4,180	3,820	3,510	3,270	
35 / 95	6,470	6,030	5,410	4,920	4,490	4,100	3,730	3,400	
40 / 104	—	6,650	5,950	5,410	4,900	4,420	4,010	3,630	
45 / 113	—	—	6,600	5,990	5,420	4,880	4,380	3,920	
Climb Wght Temp Limits °C/°F	38/100	40/104	45/113	45/113	45/113	45/113	45/113	45/113	45/113
Field Length at Temp Limits (ft)	6,860	6,650	6,600	5,990	5,420	4,880	4,380	3,920	

Elevation = 5,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	4,190	3,970	3,700	3,510	3,330	3,150	2,980	2,820	
0 / 32	4,460	4,200	3,870	3,660	3,470	3,280	3,100	2,930	
5 / 41	4,670	4,390	4,020	3,760	3,550	3,360	3,170	2,990	
10 / 50	4,880	4,590	4,180	3,880	3,640	3,440	3,250	3,050	
15 / 59	5,170	4,860	4,420	4,070	3,770	3,540	3,330	3,130	
20 / 68	5,500	5,160	4,690	4,320	3,960	3,660	3,430	3,220	
25 / 77	5,920	5,520	4,990	4,590	4,210	3,850	3,540	3,320	
30 / 86	6,410	5,980	5,370	4,900	4,490	4,090	3,730	3,420	
35 / 95	7,250	6,570	5,890	5,360	4,850	4,410	4,000	3,620	
40 / 104	—	—	6,500	5,910	5,350	4,820	4,330	3,900	
Climb Wght Temp Limits °C/°F	35/95	37/99	41/106	42/108	42/108	42/108	42/108	42/108	42/108
Field Length at Temp Limits (ft)	7,250	6,850	6,640	6,160	5,570	5,020	4,500	4,030	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS UP

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 6,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-10 / 14	4,370	4,140	3,830	3,640	3,450	3,260	3,090	2,920	
0 / 32	4,790	4,510	4,110	3,840	3,630	3,430	3,230	3,050	
5 / 41	5,010	4,720	4,290	3,980	3,720	3,510	3,310	3,120	
10 / 50	5,260	4,950	4,500	4,140	3,840	3,600	3,390	3,190	
15 / 59	5,580	5,240	4,760	4,380	4,020	3,720	3,490	3,280	
20 / 68	5,970	5,570	5,050	4,640	4,250	3,890	3,600	3,370	
25 / 77	6,430	6,000	5,380	4,930	4,510	4,120	3,760	3,470	
30 / 86	7,330	6,520	5,840	5,320	4,820	4,400	4,000	3,630	
35 / 95	—	7,190	6,430	5,850	5,290	4,770	4,310	3,890	
40 / 104	—	—	—	6,480	5,850	5,270	4,730	4,220	
Climb Wght Temp									
Limits °C/°F	31/88	34/93	38/100	40/104	40/104	40/104	40/104	40/104	
Field Length at									
Temp Limits (ft)	7,580	7,060	6,200	6,480	5,850	5,270	4,730	4,220	

Elevation = 7,000 Feet									
Ambient Temp	----- Takeoff Weight (lb) -----								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	4,320	4,100	3,820	3,620	3,430	3,250	3,080	2,910	
-10 / 14	4,700	4,420	4,060	3,810	3,610	3,410	3,220	3,040	
0 / 32	5,150	4,850	4,410	4,080	3,800	3,580	3,380	3,180	
5 / 41	5,390	5,070	4,610	4,240	3,930	3,680	3,460	3,250	
10 / 50	5,680	5,340	4,850	4,460	4,090	3,790	3,550	3,340	
15 / 59	6,060	5,650	5,120	4,710	4,320	3,960	3,660	3,430	
20 / 68	6,660	6,060	5,440	4,990	4,570	4,170	3,810	3,520	
25 / 77	7,490	6,510	5,840	5,310	4,840	4,410	4,010	3,660	
30 / 86	—	7,160	6,380	5,800	5,260	4,740	4,300	3,880	
35 / 95	—	—	7,060	6,410	5,800	5,220	4,690	4,190	
Climb Wght Temp									
Limits °C/°F	28/82	31/88	35/95	37/99	37/99	37/99	37/99	37/99	
Field Length at									
Temp Limits (ft)	8,210	7,400	7,060	6,680	6,040	5,440	4,880	4,350	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FLAPS UP

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 8,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	4,600	4,330	3,990	3,780	3,580	3,390	3,200	3,020	
-10 / 14	5,050	4,750	4,330	4,020	3,780	3,570	3,360	3,160	
0 / 32	5,550	5,210	4,740	4,360	4,030	3,760	3,530	3,320	
5 / 41	5,810	5,460	4,960	4,560	4,180	3,870	3,620	3,400	
10 / 50	6,250	5,770	5,220	4,800	4,400	4,030	3,730	3,490	
15 / 59	6,940	6,150	5,520	5,060	4,630	4,230	3,870	3,590	
20 / 68	7,730	6,570	5,890	5,360	4,890	4,460	4,050	3,710	
25 / 77	8,710	7,250	6,330	5,760	5,220	4,730	4,290	3,880	
30 / 86	—	—	6,980	6,340	5,740	5,170	4,640	4,180	
35 / 95	—	—	—	7,030	6,350	5,720	5,130	4,570	
Climb Wght Temp Limits °C/°F	25/77	27/81	32/90	35/95	35/95	35/95	35/95	35/95	
Field Length at Temp Limits (ft)	8,710	7,750	7,280	7,030	6,350	5,720	5,130	4,570	

Elevation = 9,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	12,500	12,100	11,500	11,000	10,500	10,000	9,500	9,000	
-20 / -4	4,950	4,660	4,250	3,960	3,750	3,540	3,340	3,150	
-10 / 14	5,440	5,120	4,650	4,280	3,980	3,730	3,520	3,310	
-5 / 23	5,700	5,360	4,870	4,480	4,130	3,840	3,610	3,390	
0 / 32	6,020	5,620	5,100	4,690	4,300	3,970	3,700	3,470	
5 / 41	6,610	5,920	5,350	4,920	4,510	4,120	3,800	3,560	
10 / 50	7,330	6,310	5,660	5,180	4,750	4,330	3,960	3,660	
15 / 59	8,150	6,820	6,040	5,500	5,010	4,560	4,150	3,790	
20 / 68	9,120	7,630	6,460	5,870	5,320	4,820	4,370	3,950	
25 / 77	—	8,770	7,020	6,380	5,770	5,210	4,680	4,220	
30 / 86	—	—	—	7,050	6,370	5,740	5,140	4,590	
Climb Wght Temp Limits °C/°F	21/70	24/75	28/82	31/88	32/90	32/90	32/90	32/90	
Field Length at Temp Limits (ft)	9,340	8,550	7,470	7,200	6,640	5,980	5,360	4,770	

CLIMB PERFORMANCE

CRUISE CLIMB
ISA, Zero Wind, Anti-Ice Off

Time, Fuel, and Distance To Climb *						
Pressure Altitude (ft)		----- Takeoff Weight (lb) -----				
		12,500	12,000	11,000	10,000	8,000
15,000	Min	4	4	4	3	3
	Lb	150	143	130	117	92
	NM	17	17	15	13	10
25,000	Min	8	8	7	6	5
	Lb	266	253	229	205	160
	NM	40	38	34	30	24
29,000	Min	10	10	9	8	6
	Lb	309	294	264	236	184
	NM	50	48	43	38	29
31,000	Min	11	11	10	9	7
	Lb	330	314	282	252	196
	NM	56	53	47	42	32
33,000	Min	13	12	11	9	7
	Lb	352	334	299	267	207
	NM	62	59	52	47	36
35,000	Min	14	13	12	10	8
	Lb	374	354	317	283	219
	NM	69	65	58	51	39
37,000	Min	15	14	13	11	9
	Lb	397	376	336	299	230
	NM	77	72	64	57	43
39,000	Min	17	16	14	13	10
	Lb	424	400	356	316	243
	NM	86	81	71	63	47
41,000	Min	20	18	16	14	11
	Lb	455	428	379	334	255
	NM	99	92	80	70	52
43,000	Min	23	21	18	16	12
	Lb	495	463	405	355	269
	NM	116	107	92	79	58
45,000	Min	28	25	21	18	13
	Lb	555	510	438	380	284
	NM	144	129	107	90	65

* Based on the climb starting from sea level.

CRUISE PERFORMANCE

HIGH SPEED CRUISE

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow						
Pressure Altitude (ft)		Cruise Weight (lb)				
		12,000	11,500	10,500	9,500	8,500
5,000	KTAS	279	279	279	279	279
	Lb/Hr	1,302	1,297	1,287	1,279	1,271
10,000	KTAS	319	319	319	319	319
	Lb/Hr	1,403	1,398	1,390	1,381	1,374
15,000	KTAS	343	343	343	343	343
	Lb/Hr	1,368	1,363	1,354	1,345	1,338
21,000	KTAS	374	374	374	374	374
	Lb/Hr	1,340	1,335	1,325	1,315	1,307
23,000	KTAS	386	386	386	386	386
	Lb/Hr	1,340	1,335	1,324	1,314	1,306
25,000	KTAS	398	398	398	398	398
	Lb/Hr	1,348	1,342	1,331	1,321	1,312
27,000	KTAS	410	410	410	410	410
	Lb/Hr	1,364	1,358	1,347	1,337	1,328
29,000	KTAS	416	417	418	420	421
	Lb/Hr	1,345	1,346	1,348	1,350	1,351
31,000	KTAS	416	416	418	419	420
	Lb/Hr	1,265	1,266	1,267	1,269	1,270
33,000	KTAS	414	415	416	418	419
	Lb/Hr	1,187	1,188	1,189	1,191	1,192
35,000	KTAS	411	412	413	415	416
	Lb/Hr	1,092	1,094	1,097	1,100	1,097
37,000	KTAS	408	409	411	413	414
	Lb/Hr	1,000	1,002	1,004	1,006	1,006
39,000	KTAS	404	406	409	411	413
	Lb/Hr	910	912	916	918	920
41,000	KTAS	399	401	406	409	411
	Lb/Hr	829	831	835	838	841
43,000	KTAS	391	395	401	406	409
	Lb/Hr	751	754	758	763	766
45,000	KTAS	375	383	393	401	406
	Lb/Hr	673	679	686	692	696

CRUISE PERFORMANCE

LONG RANGE CRUISE

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow						
Pressure Altitude (ft)		Cruise Weight (lb) -----				
		12,000	11,500	10,500	9,500	8,500
5,000	KTAS	203	200	193	186	179
	Lb/Hr	836	809	755	703	652
10,000	KTAS	219	215	208	199	191
	Lb/Hr	796	770	718	665	613
15,000	KTAS	236	231	223	214	205
	Lb/Hr	766	740	687	637	587
21,000	KTAS	257	253	243	233	223
	Lb/Hr	732	706	654	604	553
23,000	KTAS	266	261	251	240	230
	Lb/Hr	723	697	645	594	545
25,000	KTAS	273	269	259	248	237
	Lb/Hr	711	687	638	587	537
27,000	KTAS	283	278	267	257	245
	Lb/Hr	705	678	628	579	529
29,000	KTAS	292	287	276	266	254
	Lb/Hr	695	669	618	571	521
31,000	KTAS	300	296	285	274	262
	Lb/Hr	683	660	610	562	513
33,000	KTAS	308	304	294	283	270
	Lb/Hr	670	648	601	553	504
35,000	KTAS	317	311	301	291	280
	Lb/Hr	660	635	588	542	496
37,000	KTAS	329	322	310	300	289
	Lb/Hr	657	630	579	533	490
39,000	KTAS	341	336	324	310	299
	Lb/Hr	656	633	581	529	484
41,000	KTAS	350	346	337	324	310
	Lb/Hr	652	628	583	532	482
43,000	KTAS	357	354	347	337	323
	Lb/Hr	647	624	579	533	484
45,000	KTAS	371	364	354	347	336
	Lb/Hr	662	629	575	530	485

DESCENT PERFORMANCE

HIGH SPEED & NORMAL DESCENT
ISA, Zero Wind, Anti-Ice Off,
Speed Brakes Retracted, Gear & Flaps Up

		Time, Fuel, and Distance To Descend *					
		High Speed – 3,000 FPM			Normal – 2,000 FPM		
Pressure Altitude (ft)		----- End of Cruise Weight (lb) -----			----- End of Cruise Weight (lb) -----		
		11,000	10,000	9,000	11,000	10,000	9,000
15,000	Min	6	6	5	8	8	8
	Lb	31	31	31	60	64	69
	NM	28	26	25	36	36	36
25,000	Min	9	9	9	13	13	13
	Lb	50	53	55	107	114	121
	NM	47	46	44	65	65	65
31,000	Min	11	11	11	16	16	16
	Lb	64	68	72	137	145	154
	NM	61	59	58	85	85	85
33,000	Min	12	12	11	17	17	17
	Lb	69	73	78	148	156	165
	NM	65	64	62	92	92	92
35,000	Min	13	12	12	18	18	18
	Lb	73	78	83	157	165	174
	NM	69	68	67	99	99	99
37,000	Min	13	13	13	19	19	19
	Lb	77	81	87	164	173	182
	NM	74	72	71	106	105	105
39,000	Min	14	14	13	20	20	20
	Lb	79	84	90	171	180	189
	NM	78	77	75	112	112	112
41,000	Min	15	14	14	21	21	21
	Lb	82	87	92	177	185	195
	NM	83	81	80	119	119	119
43,000	Min	15	15	15	22	22	22
	Lb	84	89	95	182	191	201
	NM	88	86	84	125	125	125
45,000	Min	16	16	15	23	23	23
	Lb	87	91	97	186	195	206
	NM	93	91	89	132	132	132

* Based on descending to sea level.

RESERVE FUEL

RESERVE FUEL ALLOWANCES

Based on 4 Passengers, ISA, Zero Wind

VFR Fuel Reserves (at 15,000 feet)

Day (30 minutes)	307 lb
Night (45 minutes)	468 lb

IFR Fuel Reserves (Alternate plus 45 minutes at 15,000 feet)

100 Nautical Mile Alternate	796 lb
200 Nautical Mile Alternate	1,021 lb
300 Nautical Mile Alternate	1,192 lb

NBAA IFR Reserves *

100 Nautical Mile Alternate	777 lb
200 Nautical Mile Alternate	1,000 lb
300 Nautical Mile Alternate	1,170 lb

*NBAA IFR Reserves are defined as the amount of fuel for the following profile:

- A 5 minute approach at sea level
- Climb to 5,000 feet
- A 5 minute hold at 5,000 feet
- Climb to cruise altitude for the diversion to the alternate airport
- Cruise at long range cruise power
- Descend to sea level
- Land with 30 minutes of holding fuel at 5,000 feet.

HOLDING PERFORMANCE

ISA, Anti-Ice Off, Speed Brakes Retracted, Gear & Flaps Up

Holding Speed & Fuel Flow								
Weight (lb)	KIAS	----- Pressure Altitude (ft) -----						
		S.L.	5,000	10,000	15,000	20,000	25,000	30,000
12,500	180	848	802	764	739	716	696	677
11,500	175	800	756	720	696	673	654	635
10,500	170	754	711	677	654	632	613	594
9,500	165	709	668	636	613	592	573	554
8,500	160	665	626	595	573	552	534	516

LANDING PERFORMANCE

LANDING DISTANCE – ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Land, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = Sea Level								
Ambient Temp	Landing Weight (lb)							
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000
0 / 32	2,870	2,800	2,700	2,620	2,530	2,450	2,360	2,250
10 / 50	2,940	2,870	2,770	2,690	2,600	2,510	2,420	2,310
15 / 59	2,980	2,910	2,810	2,720	2,640	2,550	2,450	2,340
20 / 68	3,020	2,950	2,850	2,760	2,670	2,580	2,480	2,370
25 / 77	3,060	2,990	2,880	2,790	2,700	2,610	2,510	2,400
30 / 86	3,100	3,020	2,920	2,830	2,740	2,640	2,550	2,430
35 / 95	3,140	3,060	2,950	2,860	2,770	2,670	2,580	2,460
40 / 104	3,180	3,100	2,990	2,900	2,800	2,710	2,610	2,490
45 / 113	3,210	3,140	3,020	2,930	2,840	2,740	2,640	2,520
50 / 122	3,250	3,170	3,060	2,960	2,870	2,770	2,670	2,550
Lndg Wght Temp Limits °C/°F	54/129	54/129	54/129	54/129	54/129	54/129	54/129	54/129
V _{REF} (KIAS)	111	109	106	104	101	99	96	93

Elevation = 1,000 Feet								
Ambient Temp	Landing Weight (lb)							
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000
0 / 32	2,940	2,870	2,770	2,680	2,600	2,510	2,420	2,310
10 / 50	3,020	2,950	2,850	2,760	2,670	2,580	2,480	2,370
15 / 59	3,060	2,990	2,880	2,790	2,700	2,610	2,510	2,400
20 / 68	3,100	3,030	2,920	2,830	2,740	2,640	2,550	2,430
25 / 77	3,140	3,070	2,960	2,870	2,770	2,680	2,580	2,460
30 / 86	3,180	3,100	2,990	2,900	2,810	2,710	2,610	2,490
35 / 95	3,220	3,140	3,030	2,940	2,840	2,740	2,640	2,520
40 / 104	3,260	3,180	3,070	2,970	2,880	2,780	2,670	2,550
45 / 113	3,300	3,220	3,100	3,010	2,910	2,810	2,700	2,580
50 / 122	3,340	3,260	3,140	3,040	2,940	2,840	2,740	2,610
Lndg Wght Temp Limits °C/°F	50/122	52/126	52/126	52/126	52/126	52/126	52/126	52/126
V _{REF} (KIAS)	111	109	106	104	101	99	96	93

LANDING PERFORMANCE

LANDING DISTANCE – ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Land, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 2,000 Feet									
Ambient Temp	----- Landing Weight (lb) -----								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
0 / 32	3,020	2,950	2,840	2,760	2,670	2,570	2,480	2,370	
10 / 50	3,100	3,030	2,920	2,830	2,740	2,640	2,550	2,430	
15 / 59	3,140	3,070	2,960	2,870	2,770	2,680	2,580	2,460	
20 / 68	3,190	3,110	3,000	2,900	2,810	2,710	2,610	2,490	
25 / 77	3,230	3,150	3,040	2,940	2,850	2,750	2,650	2,530	
30 / 86	3,270	3,190	3,070	2,980	2,880	2,780	2,680	2,560	
35 / 95	3,310	3,230	3,110	3,010	2,920	2,820	2,710	2,590	
40 / 104	3,350	3,270	3,150	3,050	2,950	2,850	2,740	2,620	
45 / 113	3,390	3,300	3,190	3,090	2,990	2,880	2,780	2,650	
50 / 122	—	—	3,220	3,120	3,020	2,920	2,810	2,680	
Lndg Wght Temp Limits °C/°F	46/115	49/120	50/122	50/122	50/122	50/122	50/122	50/122	50/122
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

Elevation = 3,000 Feet									
Ambient Temp	----- Landing Weight (lb) -----								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-10 / 14	3,020	2,940	2,840	2,750	2,660	2,570	2,480	2,370	
0 / 32	3,100	3,030	2,920	2,830	2,740	2,640	2,550	2,430	
10 / 50	3,190	3,110	3,000	2,910	2,810	2,720	2,620	2,500	
15 / 59	3,230	3,150	3,040	2,950	2,850	2,750	2,650	2,530	
20 / 68	3,270	3,190	3,080	2,980	2,890	2,790	2,680	2,560	
25 / 77	3,320	3,230	3,120	3,020	2,920	2,820	2,720	2,590	
30 / 86	3,360	3,280	3,160	3,060	2,960	2,860	2,750	2,630	
35 / 95	3,400	3,320	3,200	3,100	3,000	2,890	2,780	2,660	
40 / 104	3,440	3,360	3,240	3,130	3,030	2,930	2,820	2,690	
45 / 113	—	3,400	3,270	3,170	3,070	2,960	2,850	2,720	
Lndg Wght Temp Limits °C/°F	43/109	46/115	47/117	47/117	47/117	47/117	47/117	47/117	47/117
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

LANDING PERFORMANCE

LANDING DISTANCE – ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Land, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 4,000 Feet									
Ambient Temp	Landing Weight (lb)								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-10 / 14	3,100	3,030	2,920	2,830	2,740	2,640	2,550	2,430	
0 / 32	3,190	3,110	3,000	2,910	2,810	2,720	2,620	2,500	
10 / 50	3,280	3,200	3,080	2,990	2,890	2,790	2,690	2,570	
15 / 59	3,320	3,240	3,120	3,030	2,930	2,830	2,720	2,600	
20 / 68	3,370	3,280	3,170	3,070	2,970	2,860	2,760	2,630	
25 / 77	3,410	3,330	3,210	3,110	3,000	2,900	2,790	2,670	
30 / 86	3,450	3,370	3,250	3,150	3,040	2,940	2,830	2,700	
35 / 95	3,500	3,410	3,290	3,180	3,080	2,970	2,860	2,730	
40 / 104	3,540	3,450	3,330	3,220	3,120	3,010	2,900	2,760	
45 / 113	—	—	3,370	3,260	3,150	3,040	2,930	2,800	
Lndg Wght Temp Limits °C/°F	40/104	43/109	45/113	45/113	45/113	45/113	45/113	45/113	
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

Elevation = 5,000 Feet									
Ambient Temp	Landing Weight (lb)								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-10 / 14	3,190	3,110	3,000	2,910	2,810	2,720	2,620	2,500	
0 / 32	3,280	3,200	3,090	2,990	2,890	2,790	2,690	2,570	
5 / 41	3,330	3,240	3,130	3,030	2,930	2,830	2,730	2,600	
10 / 50	3,370	3,290	3,170	3,070	2,970	2,870	2,760	2,640	
15 / 59	3,420	3,330	3,210	3,110	3,010	2,910	2,800	2,670	
20 / 68	3,460	3,380	3,250	3,150	3,050	2,940	2,830	2,700	
25 / 77	3,510	3,420	3,300	3,190	3,090	2,980	2,870	2,740	
30 / 86	3,550	3,460	3,340	3,230	3,130	3,020	2,910	2,770	
35 / 95	3,590	3,510	3,380	3,270	3,170	3,060	2,940	2,810	
40 / 104	—	3,550	3,420	3,310	3,200	3,090	2,980	2,840	
Lndg Wght Temp Limits °C/°F	37/99	40/104	42/108	42/108	42/108	42/108	42/108	42/108	
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

LANDING PERFORMANCE

LANDING DISTANCE – ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Land, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 6000 Feet									
Ambient Temp	----- Landing Weight (lb) -----								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-10 / 14	3,280	3,200	3,090	2,990	2,890	2,790	2,690	2,570	
0 / 32	3,370	3,290	3,170	3,070	2,970	2,870	2,760	2,640	
5 / 41	3,420	3,340	3,220	3,120	3,010	2,910	2,800	2,670	
10 / 50	3,470	3,380	3,260	3,160	3,060	2,950	2,840	2,710	
15 / 59	3,510	3,430	3,300	3,200	3,100	2,990	2,880	2,740	
20 / 68	3,560	3,470	3,350	3,240	3,140	3,030	2,910	2,780	
25 / 77	3,610	3,520	3,390	3,280	3,180	3,070	2,950	2,820	
30 / 86	3,650	3,560	3,430	3,330	3,220	3,100	2,990	2,850	
35 / 95	—	3,610	3,480	3,370	3,260	3,140	3,020	2,880	
40 / 104	—	—	3,520	3,410	3,290	3,180	3,060	2,920	
Lndg Wght Temp Limits °C/°F	33/91	37/99	40/104	40/104	40/104	40/104	40/104	40/104	40/104
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

Elevation = 7000 Feet									
Ambient Temp	----- Landing Weight (lb) -----								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-20 / -4	3,280	3,200	3,080	2,990	2,890	2,790	2,690	2,560	
-10 / 14	3,370	3,290	3,170	3,070	2,970	2,870	2,760	2,640	
0 / 32	3,470	3,390	3,260	3,160	3,060	2,950	2,840	2,710	
5 / 41	3,520	3,430	3,310	3,210	3,100	2,990	2,880	2,750	
10 / 50	3,570	3,480	3,350	3,250	3,140	3,030	2,920	2,790	
15 / 59	3,620	3,530	3,400	3,290	3,180	3,070	2,960	2,820	
20 / 68	3,660	3,570	3,440	3,340	3,230	3,110	3,000	2,860	
25 / 77	3,710	3,620	3,490	3,380	3,270	3,150	3,030	2,900	
30 / 86	3,760	3,670	3,530	3,420	3,310	3,190	3,070	2,930	
35 / 95	—	—	3,580	3,460	3,350	3,230	3,110	2,970	
Lndg Wght Temp Limits °C/°F	30/86	33/91	37/99	37/99	37/99	37/99	37/99	37/99	37/99
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

LANDING PERFORMANCE

LANDING DISTANCE – ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Land, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 8,000 Feet									
Ambient Temp	Landing Weight (lb)								
°C / °F	11,525	11,100	10,500	10,000	9,500	9,000	8,500	8,000	
-20 / -4	3,370	3,290	3,170	3,070	2,970	2,870	2,760	2,640	
-10 / 14	3,470	3,390	3,260	3,160	3,060	2,950	2,840	2,710	
0 / 32	3,570	3,480	3,360	3,250	3,150	3,040	2,920	2,790	
5 / 41	3,620	3,530	3,400	3,300	3,190	3,080	2,960	2,830	
10 / 50	3,670	3,580	3,450	3,340	3,230	3,120	3,000	2,860	
15 / 59	3,720	3,630	3,500	3,390	3,280	3,160	3,040	2,900	
20 / 68	3,770	3,680	3,540	3,430	3,320	3,200	3,080	2,940	
25 / 77	3,820	3,720	3,590	3,480	3,360	3,240	3,120	2,980	
30 / 86	—	3,770	3,640	3,520	3,400	3,280	3,160	3,010	
35 / 95	—	—	—	3,560	3,450	3,320	3,200	3,050	
Lndg Wght Temp Limits °C/°F	27/81	30/86	34/93	35/95	35/95	35/95	35/95	35/95	
V _{REF} (KIAS)	111	109	106	104	101	99	96	93	

STALL SPEEDS

Zero Angle of Bank, Landing Gear Up or Down, KCAS

Weight (lb)	Stall Speeds		
	Flap Position		
	Land	15°	Up
12,500	89	95	103
12,100	88	93	102
11,500	86	91	99
11,000	84	89	97
10,500	82	87	95
10,000	80	85	93
9,500	78	83	91
9,000	76	81	88

MISSION PLANNING

CRITERIA

The following mission planning table provides flight time and fuel burn statistics for selected distances and altitudes.

Flight time represents the time for the climb, cruise and descent portion of the mission. No allowance has been added for taxi, takeoff, approach, or ATC procedures. Fuel burn represents the total amount of fuel consumed for taxi, takeoff, climb, cruise, and descent. There is a taxi and takeoff allowance of 90 pounds of fuel included in all fuel burn figures. NBAA IFR fuel reserves (100 nm) are considered in each case but are not included in the fuel burn figure.

The mission planning table reflects cruise climb, high-speed cruise, and high-speed descent schedules. Standard day conditions are assumed with zero wind enroute. The effects of wind can be determined from the wind correction factors table below. Apply the wind correction factor to the zero wind flight time and fuel burn to estimate the impact of wind.

Typical cruise altitudes for various distances are:

<u>Distance (nm)</u>	<u>Typical Cruise Altitude (ft)</u>
0 - 99	6,000 - 14,000
100 - 199	15,000 - 28,000
200 - 299	27,000 - 35,000
300 - 499	33,000 - 39,000
500 - 999	37,000 - 41,000
1000 +	41,000 - 45,000

Wind Correction Factors *									
True Airspeed (kt)	----- Headwinds (kt) -----					----- Tailwinds (kt) -----			
	100	75	50	25	0	25	50	75	100
300	1.50	1.33	1.20	1.09	1.00	0.92	0.86	0.80	0.75
320	1.45	1.31	1.18	1.08	1.00	0.93	0.86	0.81	0.76
340	1.42	1.28	1.17	1.08	1.00	0.93	0.87	0.82	0.77
360	1.38	1.26	1.16	1.07	1.00	0.93	0.88	0.83	0.78
380	1.36	1.25	1.15	1.07	1.00	0.94	0.88	0.84	0.79
400	1.33	1.23	1.14	1.06	1.00	0.94	0.89	0.84	0.80
420	1.31	1.22	1.13	1.06	1.00	0.94	0.89	0.85	0.81

* Wind Correction Factor is calculated as KTAS divided by the sum of KTAS ± wind component

MISSION PLANNING

FLIGHT TIME & FUEL BURN

Dist (nm)	----- Cruise Altitude (ft) -----									
	15,000		25,000		31,000		33,000		35,000	
	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)
100	0:19	479	0:19	430						
200	0:37	874	0:34	767	0:34	716	0:34	691	0:34	671
300	0:55	1,271	0:49	1,104	0:49	1,023	0:48	982	0:49	941
400	1:12	1,669	1:04	1,442	1:03	1,331	1:03	1,273	1:04	1,210
500	1:30	2,067	1:20	1,781	1:18	1,638	1:18	1,564	1:18	1,480
600	1:47	2,467	1:35	2,121	1:32	1,946	1:32	1,854	1:33	1,751
700	2:05	2,870	1:50	2,461	1:46	2,254	1:47	2,145	1:47	2,022
800			2:05	2,803	2:01	2,562	2:01	2,435	2:02	2,292
900					2:15	2,872	2:16	2,725	2:17	2,562
1,000							2:31	3,016	2:31	2,831
1,100										
1,200										
1,300										
1,400										
1,500										

Assumptions:

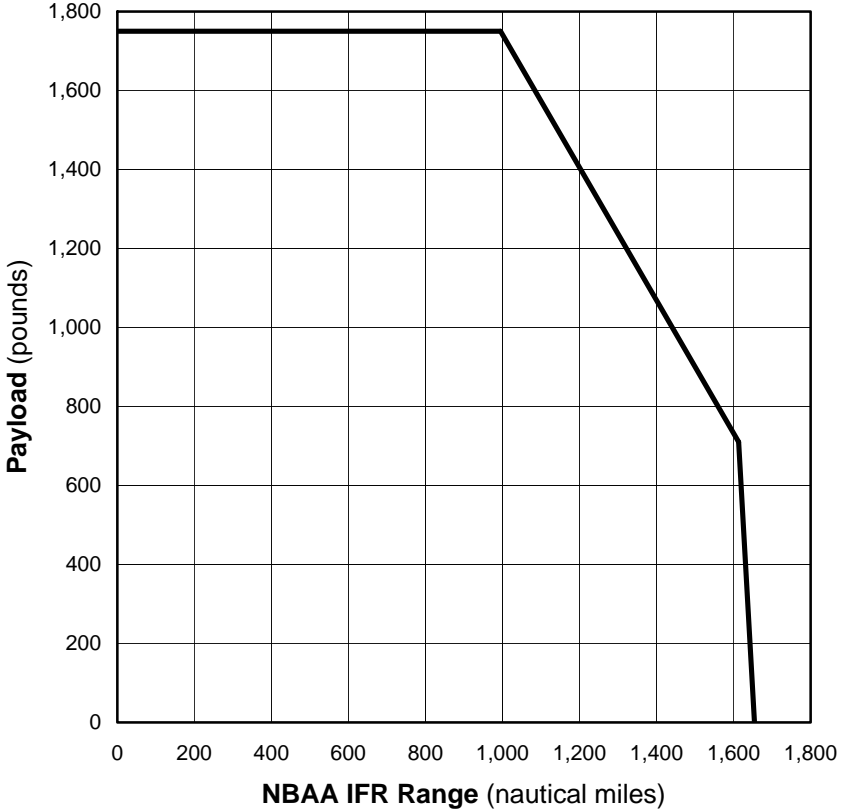
- Cruise climb
- High-speed cruise
- High-speed descent
- ISA, zero winds enroute
- Flight time includes climb, cruise and descent
- Fuel burn includes 90 pounds for taxi and takeoff
- Four passengers @ 200 pounds each, single pilot
- NBAA IFR Reserves - 100 nm (777 lb) Reserves are not included in the fuel burn figures

FOR SELECTED DISTANCES

----- Cruise Altitude (ft) -----										
37,000		39,000		41,000		43,000		45,000		Dist (nm)
Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	
										100
0:35	649	0:35	631	0:35	616	0:36	606	0:37	600	200
0:49	898	0:50	859	0:50	827	0:51	799	0:52	778	300
1:04	1,147	1:05	1,088	1:05	1,037	1:06	992	1:07	956	400
1:19	1,396	1:19	1,317	1:20	1,248	1:21	1,186	1:22	1,135	500
1:34	1,645	1:34	1,546	1:35	1,459	1:36	1,380	1:37	1,314	600
1:48	1,895	1:49	1,775	1:50	1,670	1:51	1,574	1:53	1,494	700
2:03	2,145	2:04	2,004	2:04	1,881	2:06	1,769	2:08	1,674	800
2:18	2,395	2:18	2,234	2:19	2,092	2:21	1,964	2:24	1,856	900
2:32	2,645	2:33	2,464	2:34	2,303	2:37	2,160	2:39	2,037	1,000
2:47	2,894	2:48	2,695	2:49	2,515	2:52	2,355	2:55	2,219	1,100
		3:03	2,926	3:05	2,727	3:07	2,552	3:10	2,401	1,200
				3:20	2,939	3:23	2,749	3:26	2,585	1,300
						3:38	2,946	3:42	2,769	1,400
								3:58	2,955	1,500

MISSION PLANNING

RANGE / PAYLOAD CAPABILITY
NBAA IFR Reserves (100 nm), ISA,
Zero Wind, High-Speed Cruise



Assumptions:
Single pilot
Cruise at FL 450



Citation Marketing Cessna Aircraft Company, P.O. Box 7706, Wichita, Kansas
67277-7706, Telefax 316-517-6640