TABLE 17. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 727-200 SERIES)
JT8D-9 ENGINE, 5" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	low	2000	3000	4000	5000	6000	7000	8000
50	190.0	190.0	190.0	184.6	178.0	171.4	165.0	158.9	153.0
55	190.0	190.0	188.7	182.0	175.3	166.7	162.4	156.4	150.6
60	190.0	190.0	186.6	179.8	173.1	166.6	160.4	154.4	148.7
65	190.0	190.0	186.6	179.8	173.1	166.6	160.4	154.4	148.7
70	190.0	190.0	186.6	179.8	173.1	166.6	160.4	154.4	148.7
75	190.0	190.0	186.6	179.8	173.1	166.6	160.4	154.4	148.7
80	190.0	190.0	186.6	179.8	173.1	166.6	160.4	154.4	149.7
85	190.0	190.0	185.7	178.8	172.3	165.9	159.0	153.8	148.1
90	190.0	188.5	181.5	174.8	168.4	162.2	156.3	150.6	145.1
95	190.0	184.2	177.4	170.9	164.6	156.6	152.8	147.2	141.6
100	186.5	179.8	173.3	167.0	160.9	155.1	149.3	143.8	
105	182.0	175.6	169.3	163.2	157.3	151.6	146.0	140.5	
110	177.8	171.5	165.4	159.4	153.7	148.1	142.6	137.4	

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION(FEET) 0	moo	2000	3000	4000	5000	6000	7000	8000
50	60.7	63.4	66.8	74.7	81.1	88.1	95.8	101.3	113.5
55	61.3	65.2	70.7	76.8	83.4	90.6	98.5	107.2	116.7
60	61.9	67.0	72.6	78.7	85.5	92.9	101.1	110.1	120.0
65	62.4	67.6	73.2	79.4	86.3	93.8	102.0	111.1	121.0
70	63.0	68.2	73.9	80.2	87.0	94.6	102.9	112.1	122.1
75	63.6	68.8	74.6	80.9	87.8	95.4	103.8	113.1	123.2
80	64.1	69.5	75.3	81.6	88.6	96.3	104.7	114.0	124.2
85	64.9	10.3	76.1	82.6	89.7	97.5	106.1	115.5	125.9
90	67.2	72.7	78.7	85.4	92.8	100.9	109.8	119.6	130.2
95	69.0	75.4	81.7	88.6	96.3	104.7	113.9	124.0	134.9
100	72.5	78.4	85.0	92.2	100.1	108.8	118.4	128.6	
105	75.4	81.6	88.4	95.9	104.2	113.2	123.2	134.1	
110	78.3	84.8	91.8	99.6	108.3	117.8	128.4	140.0	

RUNWAY LENGTH (1000 FEET)

WEIGHT .000 LBS	REFERENCE FACTOR "R" bo	70	80	90	100	110	120	130	140
110	5.50	5.50	5.50	5.50	5.50	5.95	6.50	7.03	7.53
115	5.50	5.50	5.50	5.50	5.97	6.59	7.18	7.76	8.31
120	5.50	5.50	5.50	5.91	6.58	7.24	7.90	8.53	9.14
125	5.50	5.50	5.75	6.48	7.21	7.93	8.64	9.33	10.01
130	5.50	5.50	6.28	7.07	7.86	8.65	9.42	10.18	10.93
135	5.50	5.98	6.83	7.69	8.54	9.39	10.24	11.08	ll.91
140	5.55	6.48	7.41	8.33	9.26	10.18	11.10	12.02	12.93
145	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.01	14.02
150	6.47	7.55	8.62	9.70	10.78	11.86	12.95	14.05	15.16
155	6.95	8.11	9.27	10.43	11.60	12.77	13.95	15.15	
160	7.45	8.70	9.95	11.20	12.45	13.72	15.01		
165	7.97	9.32	10.66	12.00	13.36	14.73			
170	8.51	9.95	11.40	12.84	14.30	15.78			
175	9.07	10.62	12.17	13.73	15.30				
180	9.65	11.31	12.97	14.65					
185	10.24	12.03	13.82	15.62					
190	10.85	12.77	14.70						

TABLE 18. AIRCRAFT PERFORMANCE, LANDING (BOEING 727-200 SERIES) JT8D-15 ENGINE, 40' FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
55	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
60	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
65	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
70	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
75	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
80	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5
85	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	141.6
90	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	139.3
95	142.5	142.5	142.5	142.5	142.5	142.5	142.5	141.7	136.6
100	142.5	142.5	147.5	142.5	142.5	142.5	143.5	131.5	133.5
105	142.5	142.5	142.5	142.5	142.5	142.5	140.2	134.9	129.9
110	142.5	142.5	142.5	142.5	142.5	141.3	136.1	130.9	126.0

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
110	4.00	4.10	4.19	4.27	4.35	4.44	4.53	4.64	4.77
115	4.15	4.24	4.33	4.42	4.51	4.61	4.71	4.82	4.95
120	4.30	4.39	4.49	4.58	4.68	4.78	4.88	5.00	5.13
125	4.45	4.55	4.64	4.74	4.85	4.95	5.07	5.19	5.32
130	4.61	4.71	4.91	4.91	5.02	5.13	5.25	5.35	5.51
135	4.76	4.87	4.98	5.03	5.20	5.32	5.44	5.57	5.70
140	4.92	5.04	5.15	5.27	5.39	5.51	5.64	5.76	5.90
145	5.03	5.21	5.33	5.46	5.58	5.71	5.83	5.96	6.10

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	ADVANCED OPTIONS		
MAXIMUM TAKEOFF WEIGHT	LBS.	181,500	190,500	197,000
MAXIMUM LANDING WEIGHT				
FLAPS 30°	LBS.	154,500	160,000	160,000
FLAPS 40"	LBS.	142,500	142,500	142,500
TYPICAL OPERATING EMPTY WEIGHT PLUS RESERVE FUEL	LBS.	109,211 116,141	109,753 116,683	112,835 1/ 119,765 2/
AVERAGE FUEL CONSUMPTION	LBS./MILE	22	22	22
TYPICAL MAXIMUM PASSENGER LOAD AT 200 LBS./PASSENGER	LBS.	32,400	35,000	37,800
MAXIMUM STRUCTURAL PAYLOAD	LBS.	40,339	41,797	42,715

1/ Based on 1.25 hours of reserve fuel.
2/ Based on 2.00 hours of reserve fuel.

TABLE 19. AIRCRAFT PERFORMANCE, LANDING (BOEING 727-200 SERIES)
JT8D-15 ENGINE, 30' FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
55	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
60	160.0	160.0	160.0	160.0	160.0	160.0	160.0	163.9	160.0
65	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
73	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
75	S.49.9	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
80	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0
85	169.3	160.0	160.0	160.0	160.0	160.0	160.0	160.0	16Q.0
90	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	158.6
95	160.0	160.0	160.0	160.0	160.0	160.0	160.0	160.0	155.5
100	160.0	160.0	160.0	160.0	160.0	160.0	160.0	127.9	151.9
105	160.0	160.0	160.0	160.0	160.0	160.0	159.7	153.7	147.0
110	160.0	160.0	160.0	160.0	160.0	160.0	154.0	148.1	143.5

RUNWAY LENGTH (1000 FEET)

WEIGHT	AIRPORT ELEVATION (FEET)								
1000 LRS	0	1000	2000	3000	4000	5000	6000	7000	8000
110	4.14	4.20	4.27	4.34	4.42	4.51	4.60	4.70	4.30
115	4.24	4.31	4.38	4.46	4.54	ft.64	4.73	4.13	4.93
120	4.35	4.42	4.50	4.58	4.67	4.77	4.06	4.96	5.06
12.5	4.46	4.54	4.63	4.71	4.81	4.90	5.00	5.10	5.21
130	4.58	A.67	4.76	4.85	4.95	5.05	5.15	5.25	5.36
135	4.71	4.80	4.99	4.99	5.09	5.19	5.30	5.41	5.52
140	4.84	4.94	s.94	5.14	5.25	5.35	5.46	5.57	5.69
145	4.97	5.09	5.33	5.30	5.4')	5.51	5.62	5.74	5.57
150	5.12	5.24	5.36	5.46	5.57	5.68	5.79	5.91	6.05
155	5.26	5.40	5.52	5.63	5. 74	5.85	5.96	6.09	6.2.5
160	5.42	5.57	5.70	5.81	5.92	6.03	6.15	6.28	6.45

TABLE 20. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 727-200 SERIES)
JT8D-15 ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	190.0	183.5	177.5	170.4	164.5	158.6	152.7	147.0	141.5
55	184.5	181.0	177.5	170.4	164.5	158.6	152.7	147.0	141.5
60	184.5	181.0	177.5	170.4	154.5	153.6	152.7	147.0	141.5
65	184.5	181.0	177.5	170.4	164.5	150.6	152.7	147.0	141.5
70	184.5	181.0	176.0	170.4	Ih4.5	159.6	152.7	147.0	141.5
75	184.5	181.0	176.0	170.4	164.5	159.6	152.7	147.0	141.5
no	164.5	180.0	172.9	166.4	160.5	154.9	149.5	144.1	138.5
85	153.6	176.3	169.5	163.3	157.5	151.9	14h.S	141.2	135.3
90	179.4	172.5	166.2	160.1	1.54.4	148.9	143.5	139.3	133.0
95	175.3	168.9	162.8	156.9	151.3	145.3	143.6	135.4	130.3
100	171.5	165.3	159.4	153.7	149.1	142.8	137.6	132.5	127.5
105	167.9	161.8	156.0	150.4	145.0	139.7	134.6	129.7	124.7
110	164.5	158.4	152.5	147.0	141.8	136.7	131.7	126.8	122.0

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	53.6	56.2	59.3	64.1	69.6	75.9	82.5	89.5	96.8
55	53.7	56.2	59.8	64.4	69.8	75.9	52.7	69.7	97.0
60	53.8	56.5	GO.3	64.9	70.3	76.3	82.9	90.0	97.6
65	54.1	57.1	61.1	65.7	71.0	77.0	83.6	90.8	93.7
70	54.2	57.5	62.0	66.R	72.1	73.1	84.7	92.1	100.3
75	54.8	58.8	63.2	68.1	73.5	79.6	86.3	93.w	102.3
an	55.8	60.1	64.7	69.7	75.2	81.4	88.3	96.0	104.7
85	57.0	61.5	66.3	71.5	77.2	83.h	99.7	98.7	107.6
99	58.5	63.2	68.2	73.6	79.5	36.1	93.5	101.7	111.0
95	69.3	65.1	70.3	75.9	32.1	89.0	96.7	105.3	114.8
100	62.4	67.3	72.6	78.5	95.1	92.3	loo.4	109.2	s19.1
105	64.8	69.7	75.2	21.4	RR.3	96.0	104.4	113.7	123.8
110	67.5	72.3	78.0	34.5	91.8	100.0	108.9	118.6	129.0

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LRS	REFERENCE FACTOR "R" 55	65	75	85	95	105	115	125	135
130	3.61	4.31	4.95	5.55	6.13	6.69	7.25	7.82	8.40
135	3.90	4.62	5.31	5.97	6.60	7.23	7.86	8.49	9.15
140	4.19	4.95	5.70	6.41	7.11	7.81	8.50	9.21	9.94
145	4.50	5.32	6.11	h.89	7.66	8.42	9.19	9.97	10.77
150	4.32	5.69	h.55	7.40	8.24	9.07	9.92	10.77	11.64
155	5.15	6.09	7.01	7.93	8.85	9.77	10.69	11.61	12.55
160	s.49	6.50	7.50	8.50	9.50	10.50	11.49	12.49	
165	5.85	6.93	8.01	9.10	10.18	11.27	12.35		
170	h.22	7.38	8.55	9.73	10.90	12.05	13.24		
175	6.60	7.85	9.12	10.39	11.66	12.92			
180	h.93	A.34	9.70	11.08	12.45				
185	7.40	8.84	10.31	11.80	13.28				
190	7.32	9.37	10.95	12.55					
195	6.25	9.91	11.61	13.33					

TABLE 21. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 727-200 SERIES)
JT8D-15 ENGINE, 20' FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
I °	0	1000	2060	3000	4000	5000	6000	7000	8000
50	197.9	196.0	193.0	182.3	176.0	170.1	164.0	157.9	151.5
55	197.0	193.5	190.0	182.0	176.0	170.1	164.3	157.9	151.5
60	i37.n	193.5	190.0	182.0	176.0	170.1	164.0	157.9	151.5
65	197.0	193.5	190.0	132.3	176.0	170.1	164.9	157.9	151.5
70	197.0	193.5	188.1	182.9	176.0	170.1	164.9	157.9	151.5
75	197.0	193.5	183.1	182.0	176.0	170.1	164.0	157.9	151.5
80	197.0	192.3	184.3	173.0	171.7	165.7	159.9	154.1	143.1
RS	19h.l	180.4	J.51.3	174.7	168.5	162.5	156.3	151.0	145.2
90	191.7	134.5	177.8	171.4	165.2	159.3	153.6	147.9	142.3
95	187.5	180.7	174.2	168.9	161.9	156.0	150.4	144.8	139.5
100	183.5	177.0	170.6	164.5	lSU.S	152.7	147.1	141.8	136.6
13.5	179.7	173.3	167.0	160.9	155.0	149.3	143.9	138.7	133.e
110	176.0	169.6	163.4	157.3	151.4	145.8	140.5	135.6	131.0

REFERENCE FACTOR "R"

TEMP	AIRPORT ELEVATION (FEET)								
I °	□	1000	2000	3000	4000	5000	6000	7000	8000
50	55.4	58.3	62.2	67.0	72.7	79.0	85.8	93.0	100.4
55	55.5	58.4	62.4	67.3	72.8	79.1	85.9	93.1	100.5
60	55.6	58.8	62.9	67.7	73.2	79.4	86.1	93.4	101.1
65	55.7	59.4	63.6	68.5	74.0	80.1	86.8	94.2	102.2
70	56.2	60.2	64.6	69.6	75.1	81.2	88.0	95.5	103.3
75	57.0	61.2	65.8	70.9	76.5	82.7	89.6	97.3	105.9
no	55.1	62.5	67.3	72.5	78.2	84.6	91.7	99.6	108.4
85	59.4	64.1	69.0	74.4	80.3	86.8	94.1	102.3	111.5
90	61.0	65.8	71.0	76.6	82.7	89.5	97.0	105.5	115.0
95	62.9	67.3	73.2	79.0	85.4	92.5	100.4	109.2	119.0
ion	65.0	70.1	75.6	31.7	88.4	95.9	104.2	113.3	123.5
105	67.4	72.6	78.3	84.7	91.8	99.7	108.4	118.0	128.5
110	70.0	75.3	81.3	88.0	95.5	103.9	113.0	123.1	134.0

RUNWAY LENGTH (1000 FEET)

WEIGHT	REFERENCE FACTOR "R"								
1000 LRS	55	h5	75	85	95	105	115	125	135
130	3.71	4.39	5.02	5.62	6.20	6.75	7.30	7.85	8.41
135	3.97	4.69	5.37	h.02	6.66	7.28	7.39	8.50	9.12
140	4.25	5.01	5.74	6.46	7.16	7.85	8.53	9.20	9.89
145	4.54	5.35	6.14	6.92	7.69	8.45	9.20	9.95	10.71
150	4.84	5.71	6.57	7.42	8.26	9.09	9.92	10.75	11.58
155	5.16	6.10	7.02	7.94	8.86	9.78	10.69	31.60	12.51
160	5.50	6.50	7.50	8.50	9.50	in.50	11.50	12.50	13.49
165	5.84	6.92	8.00	9.09	10.17	11.26	12.35	13.44	
170	6.20	7.36	A.53	9.70	10.88	12.06	13.25		
175	6.58	7.83	9.09	10.35	11.63	12.90			
180	6.97	8.31	9.67	11.03	12.40	13.79			
185	7.37	8.81	10.27	11.74	13.22				
190	?.?A	9.34	10.90	12.48					
195	8.21	9.88	11.56	13.25					

TABLE 22. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 727-200 SERIES) JT8D-15 ENGINE, 15' FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	197.0	197.0	197.0	193.4	186.9	180.2	173.5	166.9	160.5
55	197.0	197.0	197.0	193.4	136.9	180.2	173.5	166.9	160.5
60	197.0	137.0	197.0	193.4	136.9	180.2	173.5	166.9	160.5
65	197.0	197.0	197.0	193.4	186.9	180.2	173.5	166.9	160.5
70	197.0	197.0	197.0	193.4	186.9	180.2	173.5	166.9	160.5
75	197.0	197.0	197.0	193.4	186.9	180.2	173.5	166.9	160.5
80	197.0	197.0	196.2	189.0	182.2	175.8	169.5	163.4	157.2
85	197.0	197.0	192.5	185.5	178.8	172.4	166.2	160.1	154.1
90	197.0	195.8	IRA.7	181.9	175.4	169.0	162.9	156.8	150.9
95	197.0	191.7	184.9	178.2	171.8	165.5	159.5	153.5	147.7
100	194.5	187.7	101.0	174.5	168.2	162.0	156.0	150.2	144.5
105	190.4	183.7	177.1	170.7	164.5	158.4	152.5	146.8	141.3
110	186.5	179.7	173.1	166.8	160.7	154.8	149.0	143.4	138.0

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	58.6	61.h	65.7	70.7	76.5	83.0	00.2	97.9	106.2
55	58.4	61.7	65.9	70.8	76.6	83.0	90.2	98.0	106.3
60	58.4	62.0	66.3	71.3	77.0	83.4	90.5	98.4	106.9
65	58.8	62.6	67.1	72.1	??.A	94.2	91.4	99.3	108.0
70	59.4	63.5	68.1	73.2	74.9	85.4	92.6	100.6	109.6
75	60.3	64.6	69.3	74.6	R0.4	87.0	94.3	102.5	111.7
80	61.4	65.9	7n.8	76.2	82.2	88.9	96.4	104.9	114.3
85	62.8	67.5	72.6	78.2	84.4	91.3	99.0	107.7	117.4
90	64.5	69.4	74.7	R9.5	86.9	94.0	102.0	111.0	121.0
95	66.5	71.5	77.0	83.0	89.7	97.2	105.5	114.8	125.1
100	68.7	73.3	79.6	85.9	92.9	inn.7	109.4	119.0	129.7
105	71.2	76.5	82.4	89.0	96.4	104.6	113.7	123.8	134.9
110	74.0	79.4	35.5	92.5	100.3	109.0	118.5	129.0	ion.5

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 58	68	78	88	98	108	118	128	138
130	3.96	4.55	5.20	5.90	6.61	7.28	7.88	8.39	8.75
135	4.23	4.09	5.59	6.30	7.00	7.66	8.28	8.82	9.27
140	4.51	5.25	5.99	6.73	7.44	8.13	8.78	9.39	9.94
145	4.31	5.63	6.42	7.19	7.94	8.67	9.38	10.08	10.76
150	5.13	6.02	6.87	7.69	8.49	9.29	10.09	10.90	11.74
155	5.46	6.44	7.35	8.23	9.10	9.98	10.69	11.85	12.88
160	5.32	6.86	7.05	8.81	9.77	10.76	11.80	12.93	14.17
165	6.18	7.31	8.38	9.42	10.49	11.61	12.81	14.13	
170	6.57	7.77	8.92	10.08	11.26	12.53	13.92		
175	6.97	8.25	9.49	10.76	12.10	13.54			
180	7.39	8.74	10.09	11.49	12.98				
185	7.03	9.25	10.71	12.25	13.92				
190	8.28	9.78	11.35	13.05					
195	8.75	10.32	12.02	13.88					

TABLE 23. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 727-200 SERIES) JT8D-15 ENGINE, 5' FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
	n	1000	2000	3000	4000	5000	6000	7000	8000
[illegible]	197.n	197.0	197.0	197.0	193.9	187.0	180.2	173.5	167.0
[illegible]	197.n	197.n	197.0	197.0	193.9	187.0	180.2	173.5	167.0
60	197.0	197.0	197.0	197.0	193.9	107.0	180.2	173.5	167.0
65	197.0	197.0	197.0	197.0	193.9	187.0	180.2	173.5	167.0
70	197.0	197.0	197.0	197.0	193.9	107.0	180.2	173.5	167.0
75	197.0	197.0	197.0	197.0	193.9	107.0	inn.2	173.5	167.0
80	197.0	197.0	197.0	196.3	189.4	182.8	176.3	169.8	163.0
85	197.0	197.0	197.0	192.6	115.8	179.2	172.7	166.3	159.8
90	197.0	197.0	195.9	188.8	182.1	175.6	169.2	162.8	156.5
95	197.0	197.0	191.9	185.1	178.4	171.9	165.6	159.4	153.3
100	197.0	194.9	188.0	181.2	174.7	168.3	162.0	156.0	150.0
105	197.0	190.8	184.0	177.4	170.9	164.6	158.5	152.5	146.7
lln	193.5	186.6	180.0	173.5	167.1	161.6	155.0	149.1	143.5

REFERENCE FACTOR "R"

TEMP	AIRPORT ELEVATION (FEET)								
	0	lnoo	2000	3000	4000	5000	6000	7000	8000
50	65.9	69.4	74.1	80.1	87.1	94.0	103.2	112.1	121.1
55	66.0	69.6	74.5	80.4	87.2	94.9	103.3	112.2	121.6
60	G6.2	70.1	75.1	81.0	87.i	95.2	103.6	112.7	122.7
65	dti.4	7n.9	76.1	81.9	88.6	96.1	104.5	113.9	124.3
70	67.1	71.9	77.3	83.2	89.9	97.4	105.9	115.5	126.4
75	68.1	73.3	78.8	84.8	91.6	99.2	107.9	117.8	129.0
80	69.4	74.8	80.6	66.8	93.7	101.5	110.4	120.5	-132.2
85	71.0	76.7	82.6	89.1	96.2	104.3	113.4	123.9	135.8
90	73.0	78.8	85.0	91.7	99.1.	107.5	117.0	127.7	140.0
95	75.3	81.2	87.6	94.7	102.5	111.2	121.0	132.2	144.7
ion	77.9	83.9	90.6	97.9	106.2	115.4	125.7	137.1	150.0
105	80.8	06.9	93.R	101.6	110.3	120.0	130.8	142.7	155.7
110	84.0	90.1	97.3	105.5	114.8	125.1	136.5	148.8	162.0

RUNWAY LENGTH (1000 FEET)

WEIGHT	REFERENCE FACTOR "R"								
1000 LBS	70	80	90	100	110	120	130	140	150
130	4.67	5.32	5.95	6.56	7.15	7.73	8.30	8.85	9.40
135	5.01	5.70	6.37	7.03	7.67	8.31	8.93	9.56	10.18
140	5.37	6.11	6.83	7.54	8.25	8.94	9.63	10.32	11.02
145	5.75	6.54	7.32	8.10	8.86	9.63	10.39	11.15	11.92
150	6.14	7.00	7.85	8.69	9.53	10.36	11.20	12.04	12.83
155	6.56	7.49	8.41	9.33	10.24	11.16	12.07	12.99	13.91
160	7.00	8.00	9.00	lo.00	11.00	12.00	13.00	14.00	
165	7.45	8.53	9.62	in.71	11.81	12.90	13.99		
170	7.93	9.10	10.28	11.47	12.66	13.86			
175	8.42	9.69	10.97	12.27	13.57				
180	8.93	10.30	11.69	13.10					
185	9.46	10.94	12.45	13.98					
190	in.01	11.61	13.24						
195	10.58	12.30	14.06						

TABLE 24. AIRCRAFT PERFORMANCE, LANDING (BOEING 737-200 SERIES) JT8D-9 ENGINE, 40' FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4ooo	5000	bow	7000	8000
50	103.0	103.0	100.8	97.2	93.7	90.2	06.9	83.6	00.4
55	103.0	102.9	99.2	95.6	92.1	88.8	85.5	82.3	79.3
60	103.0	101.5	97.9	94.3	90.9	87.6	84.4	81.3	78.2
65	103.0	101.5	97.9	94.3	90.9	87.6	84.4	81.3	70.2
70	103.0	101.5	97.9	94.3	90.9	87.6	04.4	81.3	79.2
75	103.0	101.5	97.9	94.3	90.9	87.6	94.4	81.3	78.2
80	103.0	101.5	97.9	94.3	90.9	87.6	94.4	81.3	78.2
85	103.0	101.1	97.5	94.0	90.6	87.3	84.1	81.0	77.9
90	102.8	99.1	95.5	92.0	88.6	85.4	82.2	79.2	7b.3
95	100.5	97.0	93.5	90.0	86.7	83.5	80.4	77.4	74.5
100	98.2	94.7	91.3	88.0	04.8	81.6	78.5	75.6	72.7
105	95.9	92.5	89.1	85.9	82.8	79.7	76.7	73.8	70.9
110	93.6	90.2	66.9	83.7	80.7	77.7	74.9	72.0	

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2ooo	3000	4000	5000	6000	7ooo	8000
70	3.92	4.02	4.11	4.20	4.30	4.40	4.50	4.61	4.72
75	4.15	4.24	4.34	4.44	4.54	4.64	4.75	4.86	4.98
80	4.37	4.46	4.56	4.67	4.78	4.89	5.00	5.13	5.25
85	4.58	4.69	4.79	4.90	5.02	5.14	5.26	5.39	5.52
90	4.80	4.91	5.02	5.13	5.26	5.38	5.51	5.65	5.79
95	5.01	5.13	5.25	5.37	5.50	5.63	5.77	5.91	6.06
100	5.23	5.35	5.47	5.60	5.74	5.88	6.02	6.17	6.33
105	5.44	5.57	5.70	5.84	5.98	6.12	6.27	6.43	6.60

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	-200	-200	-200C PASSENGER	-200C CARGO
MAXIMUM TAKEOFF WEIGHT	LBS.	109,000	115,500	115,500	115,500
MAXIMUM LANDING WEIGHT	LBS.	98.000	103,000	103,000	103,000
TYPICAL OPERATING EMPTY WEIGHT PLUS RESERVE FUEL	LBS.	66,620 1/ 71,040 2/	67,330 1/ 71,950 2/	70,450 1/ 74,850 2/	66,960 1/ 71,370 2/
AVERAGE FUEL CONSUMPTION	LBS./MILE	16	16	16	lb
TYPICAL MAXIMUM PASSENGER LOAD @ 200 LBS./PASSENGER	LBS.	26,000	26,000	26,000	0
MAXIMUM STRUCTURAL PAYLOAD	LBS.	28.740	34,030	31,930	35,400

1/ Bued on 1.25 hours of reserve fuel.
2/ Based on 2.00 hours of reserve fuel.

TABLE 25. AIRCRAFT PERFORMANCE, LANDING (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 30" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
F	0	1000	2000	3000	4000	5000	6000	7000	8606
50	103.0	103.0	103.0	102.4	90.6	95.0	91.5	88.1	86.9
55	103.0	103.0	103.0	100.8	97.2	93.7	90.3	87.0	83.7
60	103.0	103.0	103.0	99.6	95.9	92.4	89.0	85.7	82.7
65	103.0	103.0	103.0	99.6	95.9	92.4	89.0	85.7	82.7
70	103.0	103.0	103.0	99.6	95.9	92.4	89.0	85.7	82.7
75	103.0	103.0	103.0	99.6	95.9	92.4	89.0	85.7	82.7
80	103.0	103.0	103.0	99.6	95.9	92.4	89.0	85.7	82.7
85	103.0	103.0	102.9	99.2	95.5	92.0	88.6	85.4	82.3
90	103.6	103.0	100.8	97.1	93.6	90.1	86.8	83.5	80.3
95	103.0	102.1	98.5	94.9	91.5	88.1	84.8	81.6	78.5
100	103.0	99.8	96.2	92.7	89.3	86.1	82.9	79.8	76.8
105	101.0	97.4	93.9	90.5	87.2	84.0	80.9	77.9	75.0
110	98.7	95.1	91.7	88.4	85.1	82.0	79.0	76.0	73.2

RUNWAY LENGTH (1000 FEET)

WEIGHT	AIRPORT ELEVATION (FEET)								
1000 LBS	0	1000	2000	3000	4000	5000	6000	7000	8000
70	4.23	4.33	4.44	4.54	4.65	4.76	4.87	4.98	5.09
75	4.47	4.57	4.68	4.79	4.90	5.02	5.14	5.26	5.38
80	4.70	4.81	4.93	5.04	5.16	5.28	5.41	5.54	5.67
85	4.94	5.06	5.18	5.30	5.42	5.55	5.68	5.82	5.96
90	5.18	5.30	5.43	5.55	5.69	5.82	5.96	6.10	6.25
95	5.41	5.54	5.68	5.81	5.95	6.09	6.24	6.39	6.54
100	5.65	5179	5.92	6.07	6.21	6.36	6.52	6.67'	6.84
105	5.89	6.03	6.17	6.32	6.48	6.63	6.80	6.96	7.13

TABLE 26. AIRCRAFT PERFORMANCE, LANDING (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE LANDING WRIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
I °	0	1000	2000	3000	4000	5000	6000	7000	8000
50	103.0	103.0	103.0	103.0	103.0	103.0	103.0	103.0	99.4
55	103.0	103.0	103.0	103.0	103.0	103.0	103.0	101.7	97.8
60	103.0	103.0	103.0	103.0	103.0	103.0	103.0	lqo.4	96.6
65	103.0	103.0	103.0	103.0	103.0	103.0	103.0	100.4	96.6
70	103.0	103.0	103.0	103.0	103.0	103.0	103.0	100.4	96.6
75	103.0	103.0	103.0	103.0	103.0	103.0	103.0	100.4	96.6
80	103.0	103.0	103.0	103.0	103.0	103.0	103.0	100.4	96.6
85	103.0	103.0	103.0	103.0	103.0	103.0	103.0	99.9	96.2
90	103.0	103.0	103.0	103.0	103.0	103.0	101.4	97.7	94.0
95	103.0	103.0	103.0	103.0	103.0	102.9	99.1	95.5	91.9
100	103.0	103.0	103.0	103.0	103.0	100.5	96.9	93.3	89.9
105	103.0	103.0	103.0	103.0	101.9	98.2	94.6	91.1	87.7
110	103.0	103.0	103.0	103.0	99.5	95.8	92.2	88.8	85.5

RUNWAY LENGTH (1000 FEET)

WEIGHT	AIRPORT ELEVATION (WET)								
1000 LBS	0	1000	2000	3000	4000	5000	6000	7000	8000
70									
75	4.62 4.87	599 4.72	484 5.10	4.95 5.22	5.06	5.18	5.31	5.44	5.57
					5.34	5.47	5.60	5.74	5.89
85	5.14	5.26	5.38	5.50	5.63	5.77	5.91	6.06	6.21
90	5.69	5.54 5.82	5.67 5.96	5.80 6.10	5.94	6.08	6.23	6.39	6.55
					6.25	6.41	6.56	6.73	6.90
95	5.98	6.12	6.26	6.41	6.57	6.73	6.90	7.08	7.25
100	6.27	6.41	6.57	6.73	6.89	7.06	7.24	7.42	7.61
105	6.56	6.71	6.87	7.04	7.21	7.39	7.58	7.77	7.97

TABLE 27. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 15" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	100.0	99.3	95.5	91.9	88.4	84.9	81.6	78.4	75.4
55	loo.0	97.7	94.0	90.4	86.9	83.6	80.3	77.2	74.2
60	100.0	96.4	92.7	89.2	85.8	82.5	79.3	76.2	73.3
65	loo.0	96.4	92.7	89.2	85.8	82.5	79.3	76.2	73.3
70	100.0	96.4	92.7	89.2	85.8	82.5	79.3	76.2	73.3
75	160.0	96.4	92.7	89.2	85.8	82.5	79.3	76.2	73.3
80	loo.0	96.4	92.7	89.2	85.8	82.5	79.3	76.2	73.3
85	99.7	95.9	92.3	88.8	85.4	82.1	78.9	75.9	72.9
90	97.3	93.7	90.1	86.7	83.4	80.1	77.1	74.1	71.3
95	95.1	91.5	88.1	94.7	81.4	7a.3	75.3	72.4	
100	92.9	89.4	86.0	82.7	79.5	76.5	73.5	70.8	
105	90.7	87.3	83.9	80.7	77.6	74.7	71.8		
110	88.4	85.1	81.8	78.7	75.8	72.9	70.1		

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3oO0	4000	5000	6000	7000	8000
50	38.11	40.4	43.5	46.9	50.6	54.6	59.1	64.1	69.6
55	39.2	41.5	44.7	48.2	52.0	56.2	60.9	66.1	71.9
60	39.4	42.5	45.8	49.4	53.2	57.5	62.3	67.7	73.8
65	39.7	42.9	46.2	49.8	53.7	58.0	62.8	68.3	74.4
70	40.0	43.2	46.6	50.2	54.1	58.5	63.4	68.9	75.1
75	40.3	43.5	46.9	50.6	54.5	58.9	63.9	69.4	75.7
80	40.6	43.9	47.3	51.0	54.9	59.4	64.4	70.0	76.4
85	41.1	44.5	4719	51.6	55.7	60.1	65.2	70.9	77.4
90	42.6	46.0	49.6	53.4	57.6	62.3	67.5	73.4	80.1
95	44.1	47.6	51.3	55.3	59.7	64.6	70.1	76.3	83.3
100	45.6	49.3	53.1	57.3	61.9	b7.1	72.9	79.4	86.9
105	47.3	51.0	55.0	59.4	64.3	69.7	75.8	82.7	
110	48.8	52.7	56.9	61.6	66.7	72.4	78.9		

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 35	40	45	50	55	60	65	70	75	80	85
70	2.50	2.78	3.11	3.44	3.78	4.11	4.44	4.76	5.07	5.36	5.63
75	2.81	3.18	3.57	3.95	4.34	4.72	5.10	5.48	5.85	6.20	b.54
80	3.18	3.62	4.07	4.51	4.96	s.41	5.85	6.29	6.73	7.15	7.57
85	3.59	4.10	4.61	5.13	5.65	6.16	6.68	7.20	7.71	8.22	8.73
90	4.03	4.62	5.21	5.81	6.40	7.00	7.60	8.20	8.80	9.40	
95	4.51	5.19	5.87	6.55	7.23	7,92	8.61	9.30			
100	5.04	5.82	6.59	7.36	8.14	8.92					

TABLE 28. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 5" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	107.7	106.9	102.7	98.6	94.8	91.0	87.4	83.9	80.6
55	107.7	105.1	100.9	97.0	93.1	89.5	85.9	82.5	79.3
60	107.7	103.5	99.5	95.6	91.8	88.2	84.7	81.4	78.2
65	107.7	103.5	99.5	95.6	91.8	88.2	84.7	81.4	78.2
70	107.7	103.5	99.5	95.6	91.8	88.2	84.7	81.4	7a.2
75	107.7	103.5	99.5	95.6	91.8	88.2	a4.7	81.4	78.2
80	107.7	103.5	99.5	95.6	91.8	88.2	84.7	81.4	78.2
85	107.2	103.1	99.0	95.2	91.4	87.8	a4.3	81.0	77.9
90	106.7	100.6	96.7	92.9	89.3	85.8	82.4	79.3	76.3
95	102.2	98.2	94.4	90.7	87.2	83.8	80.5	77.4	74.5
100	99.7	95.8	92.1	88.5	85.1	81.8	78.6	75.6	72.7
105	97.1	93.5	89.9	86.4	83.0	79.8	76.7	73.8	71.0
110	94.6	91.1	87.7	84.3	81.1	77.9	75.0	72.2	69.6

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	44.6	46.6	50.2	54.0	58.2	62.8	67.9	73.5	79.7
55	45.1	47.9	51.5	55.4	59.7	64.5	69.7	75.5	82.0
60	45.4	4A.9	52.6	56.7	61.1	66.0	71.4	77.3	83.9
65	45.a	49.3	53.1	57.2	61.6	66.6	72.0	78.0	84.7
70	46.2	49.7	53.5	57.7	62.2	67.2	72.7	78.8	85.5
75	46.6	50.2	54.0	58.2	62.7	67.7	73.3	79.5	86.3
80	46.9	50.6	54.5	58.7	63.3	68.3	73.9	80.2	87.1
85	47.6	51.3	55.2	59.5	64.1	69.3	75.0	81.4	88.4
90	49.2	53.1	57.2	61.6	66.5	71.8	77.8	84.4	91.8
95	50.9	54.9	59.1	63.7	60.8	74.4	80.7	87.5	95.2
100	52.6	56.7	61.1	66.0	71.3	77.1	83.6	90.8	98.8
105	54.4	58.6	63.2	68.3	73.9	80.0	86.8	94.3	
110	56.4	60.7	65.5	70.8	76.6	83.1	90.3		

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 40	50	60	70	80	90	100
75	3.00	3.63	4.33	5.02	5.71	6.38	7.03
80	3.30	4.12	4.93	5.73	6.52	7.29	8.06
85	3.71	4.65	5.58	6.50	7.42	8.32	9.22
90	4.17	5.24	6.31	7.37	8.43	9.49	10.54
95	4.68	5.89	7.11	8.33	9.56	10.80	12.05
100	5.23	6.61	8.00	9.41	10.84	12.29	
105	5.83	7.40	8.99	10.61	12.26		
110	6.48	8.26	10.07	11.94			

TABLE 29. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 1" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	114.9	114.1	109.4	104.9	100.6	96.5	92.5	88.8	85.2
55	11b.9	112.0	107.4	103.0	98.8	94.8	90.9	87.2	83.7
60	11b.9	110.4	105.8	101.5	97.4	93.4	89.6	86.0	82.5
65	114.9	110.4	105.8	101.5	97.4	9314	89.6	86.0	82.5
70	114.9	110.4	105.8	101.5	97.4	93.4	89.6	86.0	82.5
75	114.9	110.4	105.8	101.5	97.4	93.4	89.6	86.0	82.5
80	114.9	110.4	105.8	101.5	97.5	93.4	89.6	86.0	82.5
85	114.5	109.8	105.3	101.0	96.9	93.0	89.2	85.6	82.2
90	iii.8	107.1	102.7	98.5	95.5	90.7	87.0	83.6	80.3
95	108.9	104.4	loo.1	96.0	92.1	88.4	84.9	81.5	78.4
100	105.9	101.6	97.5	93.6	89.8	86.2	82.8	79.6	76.6
105	103.0	98.9	94.9	91.1	87.5	84.1	80.8	77.7	74.8
110	100.3	96.3	92.4	88.7	85.2	82.0	78.9	76.0	

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	52.2	54.4	58.5	63.1	68.3	73.9	80.2	87.0	94.4
55	52.6	55.9	60.1	64.8	70.1	75.9	82.3	89.4	97.1
60	53.2	57.1	61.5	66.3	71.6	77.6	84.2	91.5	99.5
65	53.7	57.6	62.0	66.9	72.3	78.3	85.0	92.4	100.5
70	54.1	58.1	62.6	67.5	73.0	79.1	85.8	93.3	101.5
75	54.5	58.6	63.1	68.1	73.7	79.9	86.7	94.2	102.5
80	54.9	59.1	63.7	68.8	74.4	80.6	87.5	95.1	103.6
85	55.7	59.9	64.6	69.8	75.5	81.9	88.9	96.6	105.1
90	57.6	62.1	67.0	72.4	78.4	85.0	92.3	100.1	108.7
95	59.6	64.1	69.2	74.9	81.2	88.2	95.7	103.9	112.7
loo	61.7	66.3	71.6	77.6	84.1	91.b	99.2	107.8	116.9
105	63.8	68.7	74.3	80.5	87.3	94.9	103.0	111.8	
110	66.1	71.5	77.4	83.9	91.0	98.8	107.1		

RUNWAY LENGTH (1000 FRET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 50	60	70	80	90	100	110	120
75	4.00	4.04	4.62	5.18	5.76	6.34	6.94	7.57
80	4.00	4.53	5.21	5.88	6.56	7.25	7.98	8.74
85	4.26	5.09	5.90	6.69	7.48	8.30	9.16	18.08
90	4.75	5.73	6.67	7.59	8.53	9.49	10.50	11.58
95	5.31	6.45	7.54	0.61	9.69	10.80	11.98	13.24
100	5.95	7.26	8.51	9.74	10.98	12.25	13.60	15.06
105	6.66	8.16	9.59	10.98	12.39	13.83	15.37	
110	7.46	9.16	10.77	12.34	13.92	15.55		
115	8.35	10.26	12.07	13.83	15.58			

TABLE 30. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 1" FLAP, 2% SPEED INCREASE

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	115.5	115.5	111.8	107.1	102.7	98.5	94.5	90.7	87.1
55	115.5	114.5	109.8	105.3	101.0	96.9	92.9	89.2	85.6
60	115.5	112.7	10.2	103.8	99.5	95.5	91.6	88.0	84.4
65	l15.5	112.7	108.2	103.8	99.5	95.5	91.6	88.0	84.4
70	115.5	112.7	108.2	103.8	99.5	95.5	91.6	88.0	S4.4
75	115.5	112.7	108.2	103.8	99.5	95.5	91.6	88.0	84.4
80	115.5	112.7	108.2	103.8	99.5	95.5	91.6	88.0	84.4
85	115.5	112.2	107.6	103.2	99.0	95.0	91.2	87.5	84.0
90	114.2	109.5	105.0	loo.7	96.6	92.7	89.0	85.4	82.0
95	111.3	lob.7	102.3	98.2	94.2	90.4	86.8	83.3	SO.1
100	108.3	103.9	99.7	95.7	91.9	88.2	84.7	81.3	78.1
105	105.4	101.1	97.1	93.2	89.5	86.0	82.6	79.4	76.2
110	102.5	98.4	94.5	90.8	87.2	83.8	80.6	77.4	

REFERENCE FACTOR "R"

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	52.2	54.4	58.5	63.1	6A.3	73.9	80.2	87.0	94.4
55	52.6	55.9	60.1	64.8	70.1	75.9	82.3	89.4	97.1
bo	53.2	57.1	61.5	66.3	71.6	77.6	8b.2	91.5	99.5
65	53.7	57.6	62.0	66.9	72.3	78.3	85.0	92.4	100.5
70	54.1	58.1	62.6	67.5	73.0	79.1	85.8	93.3	101.5
75	54.5	58.6	63.1	68.1	73.7	79.9	86.7	94.2	102.5
80	5b.9	59.1	63.7	68.8	74.4	80.6	87,5	95.1	103.6
85	55.7	59.9	64.6	69.8	75.5	81.9	88.9	96.6	105.1
90	57.6	62.1	67.0	72.4	78.4	85.0	92.3	100.1	108.7
95	59.6	64.1	69.2	74.9	81.2	88.2	95.7	103.9	112.7
100	61.7	66.3	71.6	77.6	84.1	91.4	99.2	107.8	116.9
105	63.8	68.7	74.3	80.5	87.3	94.9	103.0	111.8	
110	66.1	71.5	77.4	83.9	91.0	98.8	107.1		

RUNWAY LENGTH (1000 FEET)

WEIGHT	REFERENCE FACTOR "R"							
1000 LBS	50	60	70	80	90	100	110	120
75	4.00	4.0	4.62	5.18	5.76	6.34	6.94	7.57
80	4.00	4.5	5.21	5.88	6.56	7.25	7.98	8.74
85	4.26	5.0	5.90	6.69	7.48	8.30	9.16	10.08
90	4.75	5.7	6.67	7.59	8.53	9.49	10.50	11.58
95	5.31	6.4	7.54	8.61	9.69	10.80	il.98	13.25
100	5.95	7.2	8.51	9.74	10.98	12.25	13.60	15.06
105	6.66	8.1	9.59	lo.98	12.39	13.83	15.37	
110	7.46	9.1	10.77	12.34	13.92	15.55		
115	8.35	10.2	12.07	13.83	15.58			
120	9.35	11.47	13.48	15.43				

TABLE 31. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-9 ENGINE, 1" FLAPS, 5% SPEED INCREASE

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	115.5	115.5	114.4	109.6	105.2	101.0	97.0	93.2	89.5
55	115.5	115.5	112.4	107.9	103.6	99.5	91.5	91.7	87.9
60	115.5	115.5	110.8	106.4	102.2	98.1	94.2	90.4	86.8
65	115.5	115.5	110.8	106.4	102.2	98.1	94.2	90.4	86.8
70	115.5	115.5	110.8	106.4	102.2	98.1	94.2	90.4	86.8
75	115.s	115.5	110.8	106.4	102.2	98.1	94.2	90.4	86.8
80	115.5	115.5	110.8	106.4	102.2	98.1	94.2	90.4	86.8
85	115.5	115.0	110.3	105.9	101.7	97.6	93.7	90.0	86.4
90	115.5	112.2	107.7	103.3	99.2	95.2	91.4	87.8	84.3
95	114.1	109.4	105.0	100.7	96.7	92.9	89.2	85.7	82.2
100	111.0	106.5	102.3	98.2	94.4	90.6	67.1	03.6	80.1
105	106.0	103.7	99.6	95.7	92.0	88.4	84.9	81.5	78.1
110	105.2	101.0	97.0	93.3	89.7	86.2	82.8	79.5	

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	3000	6000	7000	8000
50	52.2	54.4	58.5	63.1	68.3	73.9	80.2	87.0	94.4
55	52.6	55.9	60.1	64.8	70.1	7s.9	82.3	89.4	97.1
60	53.2	57.1	61.5	66.3	71.6	77.6	84.2	91.1	99.5
65	33.7	S7.6	62.0	66.9	72.3	78.3	85.0	92.4	100.5
70	54.1	58.1	62.6	67.5	73.0	79.1	85.8	93.3	101.5
75	54.5	58.6	63.1	68.1	73.7	79.9	86.7	94.2	102.5
80	54.9	59.1	63.7	68.8	74.4	80.6	87.5	95.1	103.6
85	55.7	59.9	64.6	69.8	75.5	81.9	88.9	96.6	105.1
90	57.6	62.1	67.0	72.4	78.4	83.0	92.3	loo.1	108.7
95	59.6	64.1	69.2	74.9	81.2	88.2	95.7	103.9	l12.7
100	61.7	66.3	71.6	77.6	84.1	91.4	99.2	107.8	116.9
105	63.8	68.7	74.3	80.5	87.3	94.9	103.0	111.6	
110	66.1	71.5	77.4	83.9	91.0	98.8	107.1		

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 50	60	70	80	90	100	110	120
75	4.00	4.04	4.62	5.18	5.76	6.34	6.94	7.57
80	4.00	4.53	5.21	5.88	6.56	7.25	7.98	6.74
85	4.26	5.09	5.90	6.69	7.48	8.30	9.16	10.W
90	4.75	5.73	6.67	7.59	8.53	9.49	10.50,	11.58
95	5.31	6.45	7.54	8.61	9.69	10.80	11.96	13.24
100	5.95	7.26	8.51	9.74	14.98	12.25	13.60	15.06
105	6.66	8.16	9.59	10.98	12.39	13.83	15.37	
110	7.46	9.16	10.77	12.34	13.92	15.55		
115	8.35	10.26	12.07	13.83	15.58			
120	9.35	11.47	13.48	15.43				

TABLE 32. AIRCRAFT PERFORMANCE, LANDING (BOEING 737-200 SERIES) JT8D-15 ENGINE, 40" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	103.0	103.0	103.0	103.0	163.0	103.0	102.7	98.8	95.0
55	163.0	103.0	103.0	103.0	103.0	103.0	102.7	98.8	95.0
60	103.0	103.0	103.0	103.0	103.0	103.0	162.7	98.8	95.n
65	103.0	103.0	103.0	103.0	103.0	103.0	102.7	98.8	95.0
70	103.0	in3.n	ln3.0	103.0	193.0	103.0	101.9	98.0	94.0
75	10310	103.1)	103.0	103.0	103.0	103.0	100.8	97.1	93.2
80	103.0	103.0	103.0	103.0	103.0	103.0	99.6	95.9	92.2
85	103.0	103.0	103.0	103.0	103.0	101.8	98.1	94.5	91.0
90	103.0	103.0	103.0	103.0	103.0	loo.1	96.5	93.0	89.5
95	103.0	103.0	1133.0	103.0	101.9	98.2	94.7	91.2	87.9
100	103.0	103.0	103.0	103.0	99.8	96.2	92.7	89.2	u5.9
105	103.0	103.0	103.0	101.1	97.5	93.9	90.5	87.1	83.8
110	103.0	103.0	102.1	98.5	98.9	91.5	88.1	84.7	R1.5

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
70	3.95	4.05	4.14	4.23	4.11	4.40	4.50	4.59	4.70
75	4.15	4.25	4.35	4.44	4.54	4.64	4.75	4.86	4.98
80	4.35	4.46	4.56	4.66	4.77	4.88	5.00	5.12	5.25
85	4.56	4.67	4.78	4.89	5.01	5.13	5.25	5.39	5.153
90	4.77	4.88	5.00	5.12	5.25	5.38	5.51	5.65	5.80
95	4.98	5.11	5.23	5.36	5.49	5.63	5.77	5.92	6.07
100	5.21)	5.33	5.47	5.60	5.74	5.88	6.03	6.18	6.34
105	5.42	5.57	5.71	5.85	5.99	6.14	6.29	6.44	6.61

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	ADVANCED 200	OPTIONS 200C
MAXIMUM TAKEOFF WEIGHT	LBS.	109,000	115,500
MAXIMUM LANDING WEIGHT			
FLAPS 30°	LBS.	98,000	103,000
FLAPS 40°	LBS.	89,700	103,000
TYPICAL OPERATING EMPTY	LBS.	67,238	70,138 1/
WEIGHT PLUS RESERVE FUEL	LBS.	71,480	74,380 2/
AVERAGE FUEL CONSUMPTION	LBS./MILE	15	15
TYPICAL MAXIMUM PASSENGER LOAD AT 200 LBS/PASSENGER	LBS.	26,000	26,000
MAXIMUM STRUCTURAL PAYLOAD	LBS.	34,830	31,930

1/ Based on 1.25 hours of reserve fuel.
2/ Based on 2.00 hours of reserve fuel.

TABLE 33. AIRCRAFT PERFORMANCE, LANDING (BOEING 737-200 SERIES)
JT8D-15 ENGINE, 30' FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	103.0	103.0	103.0	103.0	103.0	103.0	102.7	98.8	95.0
55	103.0	103.0	103.0	103.0	103.0	103.9	102.7	98.8	95.0
60	103.0	103.0	103.0	103.0	103.0	103.0	102.7	98.9	95.3
65	103.0	103.0	103.0	103.0	103.0	103.0	102.7	98.8	95.0
70	103.0	103.0	103.0	103.0	103.0	103.0	101.9	98.9	94.0
75	103.0	103.0	103.0	103.0	103.0	103.0	100.8	97.1	93.2
80	163.0	103.0	103.0	103.0	103.0	103.0	99.6	95.9	92.2
85	103.0	103.0	103.0	103.0	103.0	101.8	98.1	94.5	91.0
90	103.0	103.0	103.0	103.0	103.0	100.1	96.5	93.0	89.5
95	103.6	103.0	103.1)	103.0	101.9	98.2	94.7	91.2	87.8
100	103.0	103.0	103.0	103.0	99.8	96.2	92.7	89.2	85.9
105	103.0	103.0	103.0	101.1	97.5	93.9	90.5	87.1	83.8
110	103.0	103.0	102.1	98.9	94.9	91.s	88.1	84.7	81.5

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
70	4.25	4.35	4.45	4.55	4.65	4.76	4.87	4.99	5.10
75	4.48	4.59	4.70	4.81	4.91	5.02	5.13	5.26	5.39
80	4.70	4.83	4.95	5.06	5.17	5.29	5.40	5.53	5.68
85	4.94	5.08	5.20	5.32	5.43	5.55	5.65	5.81	5.97
90	5.17	5.32	5.45	5.57	5.69	5.82	5.95	6.09	6.25
95	5.41	5.56	5.70	5.53	5.95	6.08	6.22	6.37	6.54
100	5.65	5.80	5.94	6.03	'a.21	6.35	6.50	6.66	6.83
105	5.90	6.04	6.18	6.32	6.47	6.62	6.78	6.94	7.11

TABLE 34. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-15 ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	104.5	106.5	97.5	93.7	9n.o	86.4	83.0	80.0	77.5
55	104.2	100.0	97.5	93.7	90.0	86.4	83.0	80.0	77.5
60	103.8	99.5	97.5	93.7	90.0	86.4	83.0	80.0	77.5
65	103.5	99.0	97.5	93.7	90.9	06.4	83.0	80.0	77.5
70	101.0	98.9	96.3	93.3	89.9	86.5	83.0	79.6	76.5
75	100.9	9u.4	95.4	92.2	88.8	as.4	82.0	7A.7	75.8
80	100.5	97.5	94.3	91.0	87.5	84.1	80.9	77.8	75.0
85	99.7	96.4	93.0	89.6	86.1	82.8	79.6	76.7	74.1
90	98.5	95.0	91.5	89.0	84.6	81.4	78.3	75.5	73.0
95	96.9	93.3	89.7	86.3	83.0	79.3	76.9	74.2	71.8
100	95.0	91.3	87.8	04.4	81.2	78.2	75.4	72.8	70.5
105	92.7	89.0	85.5	82.3	79.2	76.4	73.7	71.3	69.1
110	90.0	86.4	A3.1	80.0	77.2	74.5	72.0	69.7	67.5

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	43.5	45.0	48.0	52.0	56.2	60.6	65.4	70.5	76.0
55	43.7	45.5	48.2	52.2	56.3	60.7	65.5	70.7	76.4
60	43.9	45.6	48.6	52.5	56.7	61.1	66.0	71.3	77.0
65	44.1	45.9	49.2	53.1	57.2	61.8	66.7	72.1	78.0
70	44.3	46.4	50.0	53.9	58.1	62.6	67.6	73.1	79.1
75	44.5	47.4	51.0	54.9	59.1	63.8	68.9	74.5	80.6
80	45.1	48.5	52.1	56.1	60.4	65.2	70.4	76.1	82.3
a5	46.4	49.8	53.5	57.5	62.0	66.8	72.2	78.0	84.3
90	47.7	51.2	55.0	59.2	63.7	68.7	74.2	80.1	86.6
95	49.2	52.8	56.7	61.0	65.7	70.9	76.5	82.6	89.2
100	50.8	54.5	58.6	63.1	68.0	73.3	79.1	85.3	92.0
105	52.5	56.4	60.7	65.3	70.4	76.0	81.9	88.3	95.1
110	54.3	58.4	62.9	67.8	73.1	78.9	85.0	91.5	98.5

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 40	50	60	70	80	90	100
70	2.28	2.71	3.11	3.50	3.90	4.33	4.83
75	2.46	2.99	3.47	3.96	4.47	5.04	5.70
80	2.69	3.31	3.89	4.47	5.08	5.77	6.57
85	2.95	3.67	4.35	5.03	5.74	6.52	7.42
90	3.25	4.07	4.85	5.63	6.44	7.30	8.26
95	3.59	4.51	5.40	6.28	7.18	8.10	9.08
100	3.97	5.00	6.00	6.99	7.96	8.92	9.89
105	4.38	5.53	6.65	7.74	8.78	9.77	10.68
110	4.84	6.09	7.34	8.53	9.65	10.64	11.47
115	5.33	6.70	8.07	9.38	10.55	11.53	

TABLE 35. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES)
JT8D-15 ENGINE, 15" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	110.0	106.0	102.5	93.7	95.0	91.3	87.8	84.5	81.5
55	109.7	105.5	102.5	98.7	95.0	91.3	87.8	R4.5	81.5
60	109.3	105.0	102.5	98.7	95.0	91.3	87.8	84.5	81.5
65	109.0	104.5	102.5	98.7	95.0	91.3	87.9	84.5	81.S
70	106.5	104.3	101.4	38.1	34.6	90.9	87.2	83.7	80.5
75	106.3	103.5	100.4	97.0	93.5	89.9	R6.4	J32.9	79.7
80	1n5.7	102.5	99.2	95.8	91.3	88.8	85.4	82.0	7R.8
85	104.8	101.3	97.8	94.3	30.9	87.5	84.2	80.9	77.7
90	103.5	99.8	96.2	92.7	59.3	86.1	82.8	79.7	76.5
95	101.9	9n.a	94.4	90.9	87.6	84.4	81.3	78.3	75.2
190	100.0	96.0	92.4	89.0	85.7	82.6	79.6	76.7	73.8
105	97.6	93.R	90.2	86.8	83.6	80.6	77.7	74.9	72.2
110	35.n	91.3	87.8	84.5	81.4	78.4	75.7	73.0	70.5

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FRET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	46.0	47.5	50.5	55.0	59.4	64.0	68.9	74.1	80.0
55	46.4	48.1	50.8	55.2	5'9.6	64.2	69.1	74.4	80.3
60	46.8	48.8	51.3	55.6	60.0	64.6	69.6	75.0	80.9
65	47.2	49.4	52.0	56.2	60.6	65.3	70.4	75.8	81.9
70	47.6	49.6	52.9	57.1	61.5	66.3	71.4	77.0	83.1
75	48.0	49.9	53.9	58.1	62.6	67.5	72.7	78.4	84.7
80	48.4	51.1	55.1	59.4	63.9	68.9	74.3	80.1	86.5
us	48.R	52.5	56.5	60.8	65.5	70.6	76.1	82.1	88.7
90	50.3	54.0	58.1	62.5	67.3	72.6	78.3	84.4	91.1
95	51.9	55.7	59.8	64.4	69.3	74.8	80.6	87.0	93.9
100	53.7	57.5	61.8	66.5	71.6	77.2	83.3	89.9	97.0
105	55.5	59.5	63.9	68.7	74.1	79.9	86.2	93.0	100.3
310	57.4	61.6	66.2	71.2	76.8	82.9	89.4	96.5	104.0

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 45	55	65	75	85	95	105
70	2.39	2.90	3.36	3.77	4.18	4.59	5.04
75	2.67	3.23	3.75	4.27	4.79	5.35	5.97
80	2.98	3.60	4.20	4.81	5.45	6.13	6.88
A5	3.32	4.01	4.70	5.40	6.14	6.92	7.78
99	3.67	4.47	5.25	6.05	6.87	7.74	8.66
95	4.05	4.96	5.85	6.74	7.64	0.57	9.53
100	4.46	5.50	6.50	7.49	8.45	9.42	10.39
105	4.88	6.08	7.21	8.28	9.30	10.28	11.23
110	5.33	6.70	7.96	9.12	10.19	11.17	12.06
115	5.81	7.36	8.76	10.02	11.12	12.07	

TABLE 36. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 737-200 SERIES) JT8D-15 ENGINE, 5' FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FRET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	115.5	115.5	114.1	110.1	106.0	102.0	99.1	94.4	91.0
55	115.5	115.5	114.1	110.1	106.0	102.0	PA.1	94.4	91.0
60	115.5	115.5	114.1	110.1	106.0	102.0	98.1	94.4	91.0
65	115.5	115.5	114.1	110.1	106.0	102.0	98.1	94.4	91.0
70	115.5	115.5	113.5	109.6	105.6	101.5	97.4	93.6	90.0
75	115.5	115.1	111.6	107.7	103.8	99.8	95.3	99.1	R8.6
80	115.5	113.3	109.7	105.9	101.9	98.0	94.2	90.6	87.2
85	114.8	111.4	107.7	104.0	100.1	96.3	92.6	89.1	85.8
90	113.1	109.5	105.8	102.1	98.3	94.6	91.0	87.5	84.3
95	111.3	107.6	103.9	100.2	96.5	92.9	83.4	86.0	112.9
100	109.5	105.7	102.0	98.3	94.7	91.1	87.8	84.5	81.5
105	107.6	103.9	100.1	96.4	92.8	89.4	86.1	83.')	80.0
110	106.0	102.0	98.1	94.5	91.0	A7.7	84.5	81.5	78.6

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
[illegible]	48.0	49.5	53.0	57.5	62.2	67.1	72.4	78.1	84.5
55	48.1	50.1	53.3	57.8	62.4	67.4	72.7	78.5	84.8
60	48.2	50.8	53.8	58.3	62.9	67.9	73.2	7911	85.5
65	48.3	51.4	56.5	59.0	63.6	68.7	74.1	80.0	86.5
70	48.5	51.3	55.5	59.9	64.6	69.7	75.2	81.3	87.8
75	48.6	52.4	56.6	61.0	65.8	71.0	76.7	82.8	89.4
80	50.0	53.7	57.9	62.4	67.3	72.6	78.4	84.6	91.4
85	51.4	55.2	59.4	63.9	69.0	74.4	80.4	86.8	93.7
90	53.0	56.8	61.0	65.7	70.9	76.5	82.6	89.2	96.3
95	54.7	58.6	62.9	67.7	73.1	78.9	85.2	91.9	99.2
loo	56.5	60.5	65.0	70.0	75.5	81.5	88.0	95.0	102.5
105	58.4	62.6	67.2	72.4	78.1	84.4	91.1	98.3	106.1
110	60.4	64.8	69.7	75.1	81.0	87.5	94.5	102.0	110.0

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 50	60	70	80	90	100	110
70	2.61	3.12	3.56	3.96	4.36	4.78	5.25
75	2.93	3.49	4.00	4.50	5.01	5.57	6.21
80	3.21	3.90	4.49	5.08	5.70	6.39	7.16
85	3.65	4.36	5.04	5.72	6.44	7.23	8.10
90	4.06	4.86	5.64	6.42	7.23	8.09	9.04
95	4.51	5.41	6.29	7.17	8.06	8.99	9.96
100	4.98	6.00	7.00	7.98	8.94	9.91	10.87
105	5.48	6.64	7.76	8.84	9.87	10.85	11.78
110	6.02	7.32	8.57	9.75	10.84	11.82	12.67
115	6.59	8.115	9.44	10.72	11.86	12.82	

TABLE 37 GENERAL CHARACTERISTICS (BOEING 747 SERIES) JT9D-7A ENGINE

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	-100 BASIC	-100 MODIFIED	-200B	-200c PASS.	-200C CARGO	-200F
MAXIMUM TAKEOFF WEIGHT	LBS.	712,000	735,000	785,000	785,000	785,000	785,000
MAXIMUM LANDING WEIGHT	LBS.	564,000	564,000	564,000	630,000	630,000	630,000
TYPICAL OPERATING EMPTY WEIGHT PLUS RESERVE FUEL 1/	LBS.	385,700 4C2,600	385,900 402,800	395,900 414,000	407,900 426,000	386,100 404,700	369,700 389,400
AVERAGE FUEL CONSUMPTION	LBS./MILE	45	45	47	47	49	51
TYPICAL MAXIMUM PASSENGER LOAD @ 200 LBS./PASSENGER	LBS.	77,000 83,200 100,000	77,000 83,200 100,000	77,000 83,200 100,000	77,000 83,200 100,000	-- --	-- --
MAXIMUM STRUCTURAL PAYLOAD	LBS.	168,600	168,400	160,700	212,200	235,100	253,000
ENGINE INJECTION WATER	LBS.	5,010	5,010	5,850	5,850	5,850	5,850

1/ All values on the top line are based On 1.25 hour8 Of reserve fuel. All values on the bottom line are baaed on 2.00 hour8 of reserve fuel. The 2.00 hour value should be wed for operations, outside the 48 contiguous States, to an airport for which an alternate is not specified.

NOTE: This series Of performance tables was developed around the wet thrust capability Of the JT9D-7A engine; and for that reason, the weight of engine injection water should be added to the Weight no payload prior to adding the value' for payload, par 2a(3)(e).

TABLE 38. AIRCRAFT PERFORMANCE, LANDING (BOEING 747 SERIES)
JT9D-7A ENGINE, 30" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)									
	0	1000	2000	3000	4000	5000	5000	6000	7000	8000
50	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	625.0
55	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	620.5
60	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	611.5
65	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	626.0	603.3
70	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	617.4	595.0
75	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	608.7	586.6
80	630.0	630.0	630.0	630.0	630.0	630.0	630.0	622.3	599.8	578.0
85	630.0	630.0	630.0	630.0	630.0	630.0	630.0	612.9	590.6	569.3
90	630.0	630.0	630.0	630.0	630.0	622.5	625.7	603.2	581.2	560.2
95	630.0	630.0	630.0	630.0	630.0	611.2	615.5	593.2	571.6	550.8
100	630.0	630.0	630.0	630.0	622.3	599.8	605.0	582.9	561.6	541.0
105	630.0	630.0	630.0	630.0	610.6	588.5	594.0	572.2	551.2	530.8
110	630.0	630.0	630.0	622.0	599.5	577.s	582.5	561.1	540.5	520.0

RUNWAY LENGTH (1000 FRET)

WEIGHT	AIRPORT ELEVATION (FEET)								
1000 LBS	0	1000	2000	3000	4000	5000	6000	7090	8000
460	6.37	6.53	6.69	6.85	7.03	7.20	7.38	7.57	7.76
470	6.48	6.65	6.81	6.98	7.16	7.34	7.52	7.71	7.90
480	6.60	6.77	6.94	7.11	7.29	7.47	7.66	7.55	8.04
490	6.X	6.88	7.06	7.24	7.42	7.61	7.79	7.98	8.18
500	6.82	7.00	7.19	7.37	7.55	7.74	7.93	8.12	8.33
510	6.94	7.12	7.31	7.50	7.68	7.87	8.96	8.27	8.48
520	7.05	7.24	7.43	7.62	7.81	7.99	8.20	8.41	8.63
530	7.17	7.36	7.56	7.74	7.93	8.13	8.34	8.56	8.77
540	7.28	7.48	7.68	7.87	8.05	8.26	8.48	8.70	8.92
550	7.40	7.60	7.80	7.99	3.19	8.40	8.62	8.84	9.07
560	7.52	7.72	7.92	8.11	8.32	8.54	8.76	8.99	9.22
570	7.64	7.84	8.03	8.24	8.46	8.67	8.90	9.13	9.36
580	7.76	7.96	8.16	8.37	8.59	8.81	9.04	9.27	9.51
590	7.88	8.08	8.29	8.50	8.72	8.94	9.17	9.41	9.66
600	8.00	8.21	8.42	8.63	8.85	9.08	9.31	9.55	9.80
610	8.13	8.33	8.54	8.76	8.98	9.21	9.45	9.70	9.95
620	8.25	8.46	8.67	8.89	9.12	9.35	9.59	9.84	10.10
630	8.37	8.58	8.80	9.02	9.25	9.48	9.73	9.98	10.25

TABLE 39. AIRCRAFT PERFORMANCE, LANDING (BOEING 747 SERIES)
JT9D-7A ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	5000	6000	7000	8000
50	630.9	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
55	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0
60	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	621.6
65	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	612.4
70	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	626.4	603.3
75	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	617.1	594.3
80	630.0	630.0	630.0	630.0	630.0	630.0	630.0	630.0	607.6	589.2
85	630.0	630.0	630.0	630.0	630.0	630.0	630.0	621.0	597.9	575.9
90	630.1)	630.0	630.0	630.0	630.0	628.0	630.0	610.7	588.1	566.4
95	630.0	630.0	630.0	630.0	630.0	616.6	623.0	600.2	577.9	556.7
100	630.0	630.0	630.0	630.0	629.0	605.0	611.6	589.3	567.3	546.6
105	630.0	630.0	630.0	630.0	617.0	593.4	599.7	578.1	556.4	536.0
110	630.0	630.0	630.0	627.5	605.0	582.0	537.5	566.5	545.0	525.0

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
460	6.77	6.93	7.10	7.27	7.44	7.63	7.31	8.01	8.22
470	6.90	7.06	7.24	7.41	7.59	7.78	7.96	8.17	8.39
480	7.03	7.20	7.38	7.56	7.74	7.93	8.13	8.34	8.56
490	7.17	7.34	7.52	7.70	7.89	8.08	8.29	8.51	8.73
500	7.30	7.47	7.66	7.85	3.04	3.24	8.46	8.68	8.90
510	7.43	7.61	7.80	7.99	8.18	8.40	8.62	8.85	9.07
520	7.57	7.75	7.94	8.13	a.33	a.55	8.78	9.01	9.24
530	7.70	7.88	8.07	8.27	8.48	8.71	8.94	9.18	9.41
540	7.84	8.02	8.21	8.42	8.64	8.87	9.10	9.34	9.59
550	7.97	8.15	8.35	8.57	3.79	9.02	9.26	9.51	9.76
560	8.10	8.30	8.50	8.72	9.94	9.18	9.42	9.67	9.93
570	8.24	9.44	8.65	8.87	9.10	9.34	9.58	9.84	10.10
580	8.39	8.60	8.81	9.03	9.26	9.49	9.74	10.00	10.28
590	8.54	8.75	8.97	9.18	9.41	9.65	9.90	10.17	10.45
600	8.69	8.91	9.12	9.34	9.57	9.91	10.06	10.33	10.62
610	8.34	9.06	9.27	9.50	9.73	9.97	10.23	10.50	10.79
620	8.98	9.20	9.42	9.65	9.88	10.13	10.39	10.67	10.96
630	9.11	9.34	9.57	9.80	10.04	10.29	10.56	10.84	11.13

TABLE 40. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 747 SERIES)
JT9D-7A ENGINE, 20" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FRET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	785.0	771.0	751.0	730.0	710.0	689.5	669.3	647.0	626.5
55	785.0	771.0	751.0	730.0	710.0	689.5	669.0	647.0	626.S
60	785.0	771.0	751.Q	730.0	710.0	689.5	669.0	647.0	622.0
65	785.0	771.0	751.0	730.0	710.0	689.5	666.9	640.2	614.7
70	785.0	771.0	751.0	73010	710.0	684.9	657.6	631.6	606.4
75	785.0	771.0	751.0	730.0	701.8	674.2	647.7	622.2	597.5
80	785.0	771.0	747.0	717.9	690.0	663.1	637.2	612.2	588.0
85	785.0	763.0	733.7	705.5	678.2	651.9	626.5	601.9	578.2
90	779.1	749.6	721.0	693.3	666.6	640.7	615.6	591.5	568.1
95	765.9	736.8	708.7	681.4	655.0	629.5	604.8	581.0	558.1
100	753.1	724.4	696.7	669.8	643.7	618.6	594.3	570.8	548.3
105	740.3	712.0	684.7	658.3	632.8	608.0	584.2	561.1	538.8
110	727.0	699.4	672.8	647.0	622.1	598.0	574.6	551.9	529.8

REFERENCE FACTOR "R"

TEMP I °	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	SOW	6000	7000	8000
50	60.5	64.5	68.6	73.0	77.8	83.1	89.0	95.5	102.8
55	61.2	65.1	69.3	73.8	78.7	84.0	89.9	96.5	193.8
60	61.6	65.8	70.0	74.6	79.5	84.9	90.9	97.6	104.2
65	62.4	66.5	70.7	75.3	80.3	85.8	90.9	98.7	107.8
[illegible]	63.1	67.2	71.5	76.1	81.1	86.4	93.6	101.7	111.1
75	63.7	67.9	72.2	76.8	82.2	88.8	96.2	104.6	114.3
80	64.4	68.6	72.6	78.2	84.3	91.1	98.8	107.5	l17.4
85	65.0	69.2	74.3	80.2	86.5	93.6	101.5	110.4	120.5
[illegible]	66.0	71.0	76.4	82.3	88.8	96.1	104.3	113.5	123.8
[illegible]	67.8	72.8	78.4	84.5	91.3	98.8	107.3	l16.7	127.2
100	69.6	74.8	80.5	86.8	93.9	101.7	110.5	120.2	131.0
105	71.5	76.8	82.7	89.3	96.7	104.9	114.0	124.1	
110	73.5	79.0	85.2	92.1	99.8	108.4	117.9		

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LB8	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140
530	4.34	4.93	5.53	6.15	6.77	7.40	8.01	8.61	9.18
550	4.58	5.27	5.96	6.65	7.34	8.02	8.69	9.36	10.01
570	4.86	5.65	6.43	7.19	7.94	8.69	9.43	10.17	10.91
590	5.18	6.06	6.92	7.76	8.59	9.41	10.23	11.05	11.88
610	5.55	6.51	7.44	8.36	9.27	10.17	11.08	11.98	12.90
630	5.95	6.98	8.00	9.01	10.00	10.99	11.98	12.98	13.98
650	6.39	7.49	8.59	9.69	10.78	11.87	12.95	14.03	15.10
670	6.86	8.03	9.22	10.41	11.61	12.80	13.97	15.13	
690	7.35	8.60	9.89	11.19	12.49	13.79	15.06		
710	1.88	9.21	10.59	12.01	13.43	14.84			
730	8.42	9.84	11.34	12.88	14.43	15.95			
750	8.99	10.51	12.13	13.81	15.49				
770	9.57	11.20	12.96	14.79					
790	10.17	11.93	13.85	15.84					

TABLE 41. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 747 SERIES)
JT9D-7A ENGINE, 10" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	785.0	785.0	785.0	763.0	742.5	720.0	697.5	675.5	653.5
55	785.0	785.0	785.0	763.0	742.5	720.0	697.5	675.5	653.5
60	785.0	785.0	785.0	763.0	742.5	720.0	697.5	675.5	649.0
65	785.0	785.0	785.0	763.0	742.5	720.0	696.1	668.5	641.S
70	785.0	785.0	785.0	763.0	742.5	714.8	686.6	6S9.3	632.9
75	785.0	785.0	785.0	763.0	732.9	704.0	676.2	649.3	623.3
80	785.0	785.0	781.1	750.5	721.0	692.5	665.0	638.6	613.1
85	785.0	785.0	767.7	737.7	708.6	680.5	653.5	627.4	602.4
90	785.0	784.5	754.2	724.7	696.0	668.4	641.7	616.1	591.6
95	785.0	770.5	740.7	711.6	683.1	656.3	630.1	604.9	580.9
100	785.0	756.7	727.4	698.8	671.2	644.4	618.7	594.0	570.4
105	772.2	743.3	714.4	686.4	659.3	633.1	607.9	583.7	560.6
110	759.5	730.3	702.0	674.6	648.1	622.5	597.9	574.2	551.5

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	68.3	72.4	76.7	81.6	86.9	92.9	99.S	106.9	115.2
55	69.0	73.0	77.4	82.3	87.8	93.9	100.6	108.1	116.3
60	69.7	73.7	78.1	83.0	88.5	94.6	101.4	109.0	117.5
65	70.2	74.3	78.7	83.7	89.2	95.4	101.9	110.7	120.a
70	70.8	74.9	79.4	84.3	89.9	96.4	104.5	113.7	124.3
7.5	71.3	75.6	80.1	85.0	91.5	98.9	107.3	116.9	127.9
80	71.9	76.2	81.0	87.1	94.0	101.6	110.3	120.3	131.6
85	72.5	77.3	83.2	89.5	96.6	104.6	113.6	123.9	135.5
90	73.8	79.4	85.4	92.0	99.4	107.7	117.1	127.6	139.6
95	75.7	81.4	87.7	94.6	102.3	110.9	120.7	131.6	143.9
100	77.7	83.5	90.0	97.2	105.3	114.3	124.4	135.7	148.3
105	79.9	85.8	92.5	100.0	108.4	117.8	128.4	140.0	
110	82.3	88.2	95.0	102.8	111.6	121.4	132.4		

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140	150
550	4.43	5.15	5.85	6.52	7.18	7.82	8.46	9.09	9.72	10.36
570	4.73	5.51	6.27	7.02	7.74	8.46	9.17	9.87	10.58	ll.29
590	5.04	5.90	6.73	7.5s	8.35	9.14	9.92	lo.70	11.48	12.27
610	5.39	6.31	7.22	8.11	a.99	9.86	10.72	11.58	12.45	13.31
630	5.76	6.76	7.74	8.71	9.67	10.62	11.57	12.52	13.47	lb.43
650	6.15	7.23	8.29	9.34	lo.39	11.44	12.48	13.52	14.57	15.61
670	6.57	7.73	a.87	10.02	11.17	12.31	13.45	14.60	15.74	
690	7.01	8.25	9.50	10.74	11.99	13.24	14.49	15.75		
710	7.47	8.81	10.16	11.51	12.87	14.24	15.61			
730	7.96	9.40	10.86	12.33	13.81	15.30				
750	8.46	10.01	11.59	13.20	14.81	16.44				
770	8.98	10.66	12.37	14.12	15.88					
790	9.52	11.34	13.20	15.09						

TABLE 42. AIRCRAFT PERFORMANCE, LANDING (BOEING 757-232 SERIES)
PW 2037 ENGINE, 30" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1,000 LBS)

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
55	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
60	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
65	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
70	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
75	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
80	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
a5	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
90	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	194.2
95	198.0	198.0	198.0	198.0	198.0	198.0	198.0	195.4	188.2
100	198.0	198.0	198.0	198.0	198.0	198.0	196.4	188.8	182.1
105	198.0	198.0	198.0	198.0	198.0	196.8	189.2	182.1	175.8
110	198.0	198.0	198.0	198.0	196.2	188.7	181.6	175.1	169.3

RUNWAY LENGTH (1,000 FEET)

WRIGHT 1000 POUND	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
125	3.34	3.47	3.58	3.68	3.77	3.85	3.94	4.03	4.14
130	3.65	3.77	3.88	3.98	4.07	4.17	4.27	4.38	4.51
135	3.90	4.01	4.11	4.22	4.32	4.43	4.55	4.67	4.81
140	4.10	4.20	4.31	4.41	4.53	4.64	4.77	4.90	5.05
145	4.26	4.36	4.46	4.57	4.69	4.82	4.95	5.09	5.24
150	4.39	4.49	4.59	4.71	4.83	4.96	5.10	5.24	5.40
155	4.50	4.60	4.71	4.82	4.95	5.09	5.23	5.38	5.53
160	4.60	4.70	4.81	4.93	5.06	5.20	5.35	5.50	5.65
163	4.70	4.80	4.91	5.04	5.17	5.32	5.46	5.62	5.77
170	4.80	4.91	5.03	5.15	5.29	5.44	5.59	5.75	5.91
175	4.92	5.03	5.16	5.29	5.43	5.58	5.74	5.90	6.07
180	5.06	5.18	5.31	5.45	5.60	5.75	5.91	6.08	6.26
185	5.23	5.37	5.50	5.65	5.80	5.96	6.13	6.31	6.50
190	5.45	5.59	5.74	5.89	6.05	6.21	6.39	6.58	6.79
195	5.72	5.88	6.03	6.19	6.35	6.52	6.71	6.92	7.16
200	6.04	6.22	6.38	6.55	6.71	6.90	7.10	7.34	7.61

AIRPLANE CHARACTRRISTICS	UNIT OF MEASURE	MODEL 757-200 RB211 -535C	RB211 -53514	PW 2037	RB211 -535C	RB211 -53534
MAXIMUM DESIGN TAKEOFF WRIGHT	POUNDS	220,000	220,000	230,000	240,000	240,000
MAXIMUM DESIGN LANDING WEIGHT	POUNDS	198,000	198,000	198,000	198,000	198,000
TYPICAL OPERATING EMPTY WRIGHT PLUS RESERVE FUEL 1/	POUNDS	143,135	145,835	139,905	141,325	142,465
AVERAGE FUEL CONSUMPTION 2/	POUNDS/MILES	16.5	16.3	16.2	16.5	16.3
TYPICAL MAXIMUM PASSENGER LOAD @ 200 POUNDS/PASSENGER	POUNDS	37,200 MIXED (16 first class, 170 tourist) 43,600 ALL-ECONOMY (218 tourist)				
MAXIMUM STRUCTURAL PAYLOAD	POUNDS	49,910	47,210	53,140	51,720	50,580

1/ Based on 1.25 hours of reserve fuel.
2/ Average of flight manual and U.S. Department of Transportation "Aircraft Operating Cost and Performance Report" Vol. XIX, September 1985.

TABLE 43. AIRCRAFT PERFORMANCE, LANDING (BOEING 757-232 SERIES)
PW 2037 ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1,000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
DEG F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
55	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
60	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
65	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
70	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
75	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
80	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
85	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
90	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
95	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
100	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	193.4
105	198.0	198.0	198.0	198.0	198.0	198.0	198.0	193.4	187.1
110	198.0	198.0	198.0	198.0	198.0	198.0	193.4	186.6	181.0

RUNWAY LENGTH (METERS)

WEIGHT	AIRPORT ELEVATION (METERS)					
1000 KG	0	500	1000	1500	2000	2500
55	1114	1147	1180	1212	1245	1278
58	1184	1224	1264	1308	1356	1410
61	1243	1287	1334	1386	1445	1515
64	1292	1340	1392	1450	1517	1596
67	1333	1385	1441	1503	1575	1659
70	1369	1423	1482	1548	1622	1707
73	1401	1457	1518	1586	1662	1746
76	1432	1489	1553	1622	1698	1781
79	1464	1522	1587	1657	1733	1814
82	1498	1558	1623	1695	1772	1853
85	1537	1598	1665	1738	1817	1900
88	1583	1645	1714	1789	1871	1960
91	1638	1702	1772	1851	1939	2039

TABLE 44. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 757-232 SERIES)
PW 2037 ENGINE, 20° FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1,000 LBS)

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	227.5	226.0	224.5	222.5	220.3	218.0	212.5	208.5	203.5
55	227.5	226.0	224.5	222.5	220.3	218.0	212.5	208.5	203.5
60	227.5	226.0	224.5	222.5	220.3	218.0	212.5	208.5	202.3
65	227.5	226.0	224.5	222.5	220.3	218.0	213.5	205.3	198.3
70	227.5	226.0	224.5	222.5	220.3	217.2	209.4	201.6	194.1
75	227.5	226.0	224.5	222.5	218.8	212.1	205.0	197.5	189.8
80	227.5	226.0	224.4	219.1	213.3	207.0	200.2	192.9	185.2
a5	227.5	223.9	219.2	213.9	208.1	201.8	195.1	188.0	180.5
90	223.4	219.3	214.4	208.9	202.9	196.4	189.6	182.6	175.5
95	219.0	214.7	209.6	203.8	197.4	190.8	183.9	177.0	170.2
100	214.5	209.9	204.4	198.2	191.6	184.7	177.8	171.0	164.6
105	209.7	204.3	198.3	191.8	185.0	178.1	171.3	164.8	158.7
110	204.1	197.6	191.0	184.3	177.6	171.0	164.6	158.3	152.3

REFERENCE FACTOR "R"

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	43.4	44.8	46.7	49.1	51.8	54.8	57.9	61.2	64.3
55	43.7	44.5	46.1	48.4	51.1	54.1	57.3	60.6	63.7
60	43.9	44.5	46.0	48.1	50.8	53.9	57.3	60.8	64.3
65	44.1	44.8	46.3	48.4	51.1	54.2	57.8	61.6	65.7
70	44.2	45.3	46.9	49.1	51.8	55.0	58.8	63.1	67.9
75	44.4	46.0	47.9	50.2	52.9	56.3	60.3	65.1	70.7
80	44.8	46.9	49.1	51.6	54.5	58.0	62.3	67.5	73.8
85	45.4	48.0	50.6	53.3	56.4	60.2	64.8	70.3	77.1
90	46.3	49.3	52.2	55.3	58.8	62.8	67.7	73.5	80.5
95	47.6	50.7	53.9	57.5	61.4	65.9	71.0	76.9	83.6
100	49.3	52.2	55.8	59.8	64.4	69.4	74.7	80.4	86.5
105	51.5	53.9	57.6	62.3	67.6	73.3	78.9	84.1	88.8
110	54.2	55.7	59.5	64.9	71.1	77.6	83.4	87.9	

RUNWAY LENGTH (1,000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140
140	3.4	3.9	4.4	4.8	5.3	5.8	6.3	7.0	7.8
150	3.9	4.4	5.0	5.6	6.2	6.9	7.6	8.5	9.4
160	4.3	5.0	5.6	6.3	7.0	7.7	8.5	9.4	10.2
170	4.8	5.6	6.3	7.1	7.8	8.6	9.4	10.2	11.0
180	5.4	6.2	7.1	7.9	8.8	9.7	10.6	11.6	12.6
190	6.0	7.0	a.0	9.0	10.1	11.3	12.6	14.0	15.7
200	6.6	7.8	8.9	10.3	11.8	13.6	15.6		
210	7.3	8.6	10.1	11.9	14.0				
220	8.1	9.6	11.4	13.8					
230	8.9	10.6	13.0						
240	9.7	11.8	14.7						

TABLE 45. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 757-232 SERIES)
PW 2037 ENGINE, 15" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1,000 LBS)

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	240.0	240.0	239.5	237.5	235.0	232.5	227.5	222.0	217.0
55	240.0	240.0	239.5	237.5	235.0	232.5	227.5	222.0	217.0
60	240.0	240.0	239.5	237.5	235.0	232.5	227.5	222.0	215.5
65	240.0	240.0	239.5	237.5	235.0	232.5	227.5	219.6	211.2
70	240.0	240.0	239.5	237.5	235.0	232.0	223.9	215.2	206.7
75	240.0	240.0	239.5	237.5	233.6	226.8	218.9	210.5	202.0
80	240.0	240.0	239.5	234.1	228.2	221.3	213.6	205.5	197.1
a5	240.0	230.7	234.4	229.0	222.6	215.6	208.0	200.1	192.0
90	238.6	234.5	229.4	223.4	216.7	209.5	202.0	194.4	186.7
95	234.1	229.4	223.8	217.4	210.5	203.2	195.7	188.3	181.1
100	228.8	223.6	217.6	210.9	203.8	196.5	189.1	181.9	175.2
105	223.1	217.4	211.0	204.0	196.7	189.4	182.1	175.3	169.0
110	217.6	210.9	203.9	196.5	189.1	181.8	174.8	168.3	162.4

REFERENCE FACTOR "R"

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	46.6	40.3	49.8	51.3	52.7	54.2	55.8	57.6	59.6
55	46.9	48.3	49.8	51.3	53.1	55.3	57.8	61.0	64.8
60	47.1	48.5	50.0	51.7	53.8	56.4	59.8	63.9	69.0
65	47.4	48.8	50.4	52.3	54.7	57.8	61.7	66.5	72.4
70	47.7	49.2	51.0	53.2	55.9	59.3	63.6	68.9	75.4
75	48.2	49.9	51.9	54.3	57.3	61.1	65.7	71.3	78.0
80	48.8	50.7	53.0	55.7	59.1	63.1	67.9	73.7	80.6
a5	49.5	51.8	54.4	57.4	61.1	65.4	70.5	76.4	83.4
90	50.4	53.0	56.0	59.4	63.4	68.0	73.3	79.5	86.5
95	51.6	54.6	57.9	61.7	66.0	71.0	76.6	83.1	90.4
100	53.0	56.4	60.1	64.2	69.0	74.3	80.4	87.3	95.1
105	54.8	58.4	62.5	67.1	72.2	78.1	84.7	92.3	100.9
110	56.8	60.8	65.2	70.2	75.0	82.3	89.7	98.3	108.1

RUNWAY LENGTH (1,000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140
140	3.5	4.0	4.4	4.8	5.3	5.8	6.3	7.0	7.9
150	3.9	4.5	5.0	5.5	6.1	6.6	7.2	7.9	8.6
160	4.4	5.0	5.7	6.3	6.9	7.5	8.1	8.8	9.5
170	4.9	5.6	6.4	7.1	7.8	8.5	9.2	9.8	10.4
180	5.4	6.3	7.2	8.0	a.9	9.7	10.4	11.0	11.6
190	6.0	7.0	a.0	9.0	10.0	10.9	11.7	12.4	12.9
200	6.6	7.8	9.0	10.2	11.3	12.3	13.3	14.0	14.5
210	7.3	0.6	10.0	11.4	12.7	13.9	15.0		
220	8.0	9.5	11.1	12.7	14.3				
230	8.8	10.6	12.4	14.3					
240	9.7	11.7	13.8						

TABLE 46. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 757-232 SERIES)
PW 2037 ENGINE, 5" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1,000 LBS)

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	240.0	240.0	240.0	240.0	240.0	240.0	238.5	233.0	227.5
55	240.0	240.0	240.0	240.0	240.0	240.0	238.5	233.0	227.5
60	240.0	240.0	240.0	240.0	240.0	240.0	238.5	233.0	226.6
65	240.0	240.0	240.0	240.0	240.0	240.0	238.5	230.2	222.0
70	240.0	240.0	240.0	240.0	240.0	240.0	234.4	225.7	217.1
75	240.0	240.0	240.0	240.0	240.0	237.5	229.3	220.7	212.0
80	240.0	240.0	240.0	240.0	239.2	231.7	223.7	215.3	206.7
85	240.0	240.0	240.0	240.0	233.2	225.7	217.7	209.5	201.1
90	240.0	240.0	240.0	234.0	226.9	219.3	211.4	203.3	195.2
95	240.0	240.0	234.6	227.7	220.3	212.6	204.7	196.8	189.1
100	240.0	235.0	228.3	221.0	213.4	205.5	197.6	190.0	182.8
105	235.3	228.6	221.4	213.8	205.9	198.0	190.4	183.0	176.3
110	228.8	221.3	213.6	205.7	197.9	190.2	182.8	175.9	169.6

REFERENCE FACTOR 'R"

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	52.1	53.7	55.5	57.6	60.1	63.0	66.4	70.4	75.0
55	52.2	53.6	55.4	57.5	60.1	63.3	67.0	71.3	76.4
60	52.4	53.8	55.6	57.8	60.5	63.9	67.9	72.6	78.0
65	52.6	54.1	56.0	58.4	61.3	64.8	69.1	74.2	80.1
70	53.0	54.6	56.7	59.2	62.4	66.2	70.7	76.2	82.6
75	53.4	55.4	57.7	60.4	63.8	67.9	72.8	78.6	85.5
80	54.1	56.3	58.9	62.0	65.6	70.0	75.3	81.5	88.9
85	55.0	57.5	60.5	63.9	67.9	72.6	78.3	84.9	92.7
90	56.0	59.0	62.4	66.1	70.5	75.7	81.8	88.8	97.1
95	57.4	60.8	64.6	68.8	73.7	79.3	85.8	93.3	102.0
100	59.1	62.9	67.1	71.9	77.3	83.4	90.4	98.4	107.4
105	61.2	65.3	70.0	75.3	81.3	88.1	95.7	104.1	113.5
110	63.6	68.0	73.2	79.2	85.9	93.4	101.6	110.5	120.1

RUNWAY LENGTH (1,000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140
140	3.4	4.0	4.5	5.0	5.4	5.8	6.2	6.5	6.6
150	3.9	4.5	5.0	5.6	6.1	6.6	7.1	7.6	a.1
160	4.4	5.0	5.7	6.3	6.9	7.5	8.1	8.7	9.4
170	4.9	5.6	6.4	7.1	7.8	8.5	9.2	9.9	10.6
180	5.4	6.3	7.2	8.1	a.9	9.8	10.5	11.2	11.8
190	6.0	7.0	8.0	9.1	10.1	11.1	11.9	12.6	13.1
200	6.6	7.7	9.0	10.2	11.4	12.5	13.4	14.1	14.6
210	7.3	8.6	10.0	11.4	12.8	14.0	15.0	15.8	
220	8.0	9.5	11.1	12.6	14.1	15.5			
230	a.9	10.5	12.2	13.9	15.6				
240	9.8	11.7	13.5	15.2					

TABLE 47. AIRCRAFT PERFORMANCE, TAKEOFF (BOEING 757-232 SERIES)
PW 2037 ENGINE, 1" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1,000 LBS)

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	239.5
55	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	239.5
60	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.8
65	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	232.8
JO	240.0	240.0	240.0	240.0	240.0	240.0	240.0	236.7	227.6
75	240.0	240.0	240.0	240.0	240.0	240.0	239.9	231.0	222.0
80	240.0	240.0	240.0	240.0	240.0	240.0	233.9	225.1	216.3
85	240.0	240.0	240.0	240.0	240.0	236.2	227.7	219.0	210.3
90	240.0	240.0	240.0	240.0	237.9	229.8	221.2	212.6	204.2
95	240.0	240.0	240.0	239.2	231.4	223.1	214.6	206.1	197.9
100	240.0	240.0	239.9	232.4	224.4	216.1	207.7	199.4	191.5
105	240.0	240.0	232.6	224.8	216.8	208.6	200.5	192.6	185.0
110	240.0	232.1	224.2	216.3	208.4	200.6	193.0	185.6	178.5

REFERENCE FACTOR "R"

TEMP DEG F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
SO	61.1	63.1	64.9	66.6	68.6	71.0	74.3	78.7	84.5
55	61.1	62.7	64.4	66.5	69.1	72.4	76.5	81.6	87.6
60	61.2	62.6	64.5	66.9	70.0	73.9	78.6	84.3	91.1
65	61.4	62.8	64.9	67.7	71.3	75.7	al.0	87.2	94.6
JO	61.8	63.4	65.8	68.9	72.9	77.8	83.5	90.2	97.8
75	62.4	64.3	67.1	70.6	74.9	80.2	86.4	93.5	101.6
80	63.2	65.6	68.7	72.6	77.4	83.0	89.6	97.1	105.7
a5	64.3	67.2	70.8	75.1	80.2	86.2	93.2	101.3	110.6
90	65.8	69.1	73.2	77.9	83.5	90.0	97.4	106.0	115.8
95	67.6	71.4	75.9	81.1	87.2	94.2	102.2	111.4	121.9
100	69.8	74.0	79.0	84.7	91.3	99.0	107.7	117.7	128.9
105	72.5	77.0	82.3	88.6	96.0	104.4	113.9	124.8	136.9
110	75.7	80.3	86.0	92.9	101.0	110.4	121.0	132.9	146.1

RUNWAY LENGTH (1,000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 60	70	80	90	100	110	120	130	140
140	3.6	4.0	4.5	4.9	5.4	5.9	7.3	6.7	7.1
150	4.0	4.5	5.1	5.7	6.2	6.8	8.3	7.8	8.3
160	4.4	5.1	5.7	6.4	7.1	7.7		8.9	9.5
170	4.8	5.6	6.4	7.2	a.0	8.7	9.4	10.0	10.6
180	5.4	6.3	7.2	a.1	a.9	9.8	10.6	11.3	12.0
190	6.0	7.0	8.0	9.0	10.0	11.0	11.9	12.8	13.6
200	6.7	7.8	8.9	10.1	11.3	12.4	13.6	14.7	15.7
210	7.4	8.7	10.0	11.3	12.6	14.0	15.5	16.9	
220	8.2	9.7	11.2	12.7	14.2	15.9			
230	9.0	10.8	12.5	14.2	16.0				
240	9.9	12.1	14.0	16.0					

TABLE 48. AIRCRAFT PERFORMANCE, LANDING (DC-8-61)
JT3D-3B ENGINE, FULL FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
55	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
60	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
65	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
70	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
75	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
80	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
85	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
90	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	235.5
95	240.0	240.0	240.0	240.0	240.0	240.0	240.0	230.9	230.2
100	240.0	240.0	240.0	240.0	240.0	240.0	240.0	233.0	224.5
105	240.0	240.0	240.0	240.0	240.0	240.0	235.7	226.9	218.6
110	240.0	240.0	240.0	240.0	240.0	230.1	229.2	220.7	212.5

RUNWAYLENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
140	4.52	4.62	4.73	4.85	4.99	5.16	5.38	5.65	5.98
150	4.77	4.38	4.99	5.12	5.28	5.46	5.69	5.96	6.29
160	5.02	s.13	5.25	5.40	5.57	5.77	6.00	6.28	6.61
170	5.27	5.39	5.52	5.67	5.86	6.07	6.32	6.61	6.94
180	5.52	5.64	5.79	5.95	6.15	6.37	6.63	6.93	7.27
190	5.77	5.90	6.05	6.23	6.44	6.63	6.95	7.26	7.61
200	6.03	6.16	6.32	6.51	6.73	6.98	7.27	7.59	7.96
210	6.28	6.43	6.59	6.79	7.02	7.28	7.58	7.92	8.31
220	6.54	6.69	6.87	7.07	7.31	7.58	7.90	8.25	8.66
230	6.80	6.95	7.14	7.35	7.60	7.88	8.21	8.58	9.01
240	7.05	7.22	7.41	7.63	7.119	0.18	a.52	8.91	9.36
250	7.31	7.49	7.69	7.91	8.17	8.47	8.82	9.23	9.70
260	7.56	7.76	7.96	8.19	8.45	8.76	9.12	9.55	10.05

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	
TYPICAL OPERATING EMPTY WEIGHT PLUS RESERVE FUEL	LBS.	174,100
AVERAGE FUEL CONSUMPTION	LBS./MILE	29
TYPICAL MAXIMUM PASSENGER LOAD @200 LBS./PASSENGER	LBS.	51,800
MAXIMUM STRUCTURAL PAYLOAD	LBS.	71,877

TABLE 49. AIRCRAFT PERFORMANCE, TAKEOFF (DC-8-61)
JT3D-3B ENGINE, 25" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
[illegible]	325.0	322.5	311.1	299.9	289.1	278.6	268.3	258.3	248.5
55	325.0	317.2	306.1	295.2	284.6	274.2	264.1	254.3	244.8
60	325.0	313.5	302.2	291.3	280.7	270.5	260.6	250.9	241.5
65	325.0	313.5	302.2	291.3	280.7	270.5	260.6	250.9	241.5
70	325.0	313.5	302.2	291.3	280.7	270.5	260.6	250.9	241.5
75	325.0	313.5	302.2	291.3	280.7	270.5	260.6	250.9	241.5
80	325.0	313.5	302.2	291.3	280.7	270.5	260.6	250.9	241.5
85	323.5	311.9	300.7	290.0	279.5	269.4	259.6	249.9	240.5
90	316.5	305.5	294.8	284.4	274.2	264.3	254.6	245.0	235.5
95	310.1	299.4	289.0	278.9	268.9	259.2	249.6	240.2	230.9
100	303.5	293.0	282.8	272.9	263.1	253.6	244.3	235.2	226.2
105	295.9	285.6	275.7	265.9	256.4	247.1	238.1	229.3	220.6
110	206.5	276.6	266.9	257.5	248.3	239.3	230.5	221.9	213.5

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	47.2	49.5	52.2	55.G	59.4	63.6	68.3	73.2	78.5
55	47.7	50.3	53.3	56.8	60.7	65.1	69.9	75.0	80.6
60	47.9	50.9	54.3	58.0	62.1	66.5	71.4	76.7	82.4
65	48.3	51.4	54.8	58.5	62.6	67.1	72.0	77.3	83.0
70	48.8	51.8	55.3	59.1	63.2	67.7	72.7	78.0	83.8
75	49.2	52.3	55.7	59.5	63.7	68.3	73.2	78.6	84.5
80	49.6	52.8	56.2	60.0	64.1	68.7	73.8	79.3	85.2
85	50.2	53.4	56.9	60.8	65.0	69.6	74.6	80.2	86.2
90	51.2	54.7	58.4	62.4	66.a	71.5	76.7	82.5	80.8
95	52.6	56.2	60.1	64.2	68.7	73.7	79.1	85.1	91.7
100	54.3	50.0	61.9	66.2	70.9	76.1	81.7	88.0	95.0
105	56.0	59.8	63.9	68.3	73.2	78.6	84.6	91.2	98.5
110	57.7	61.6	65.9	70.5	75.7	81.4	87.7	94.6	102.3

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 40	50	60	70	no	90	100	110
180	3.00	3.61	4.26	4.90	5.53	6.15	6.76	7.35
190	3.19	3.93	4.65	5.37	6.08	6.79	7.49	8.19
200	3.44	4.26	5.07	5.88	6.68	7.48	8.27	9.07
210	3.71	4.62	5.52	6.42	7.32	8.21	9.11	10.01
220	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00
230	4.31	5.41	6.51	7.62	8.73	9.84	10.95	12.05
240	4.64	5.83	7.05	8.28	9.51	10.74	11.96	
250	4.99	6.29	7.62	8.91)	10.34	11.70		
260	5.36	6.77	8.23	9.73	11.23			
270	5.75	7.27	8.87	10.52	12.1~			
280	6.16	7.80	9.55	11.36				
290	6.59	8.36	10.27	12.25				
300	7.03	8.34	11.02					
310	7.50	9.56	11.82					
320	7.98	10.20						
330	8.48	10.86						

TABLE 50. AIRCRAFT PERFORMANCE, TAKEOFF (DC-8-61)
JT3D-3B ENGINE, 15" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	325.0	325.0	325.0	324.8	312.4	300.9	289.9	279.2	268.5
55	325.0	325.0	325.0	319.2	307.3	296.2	285.3	274.7	264.3
60	325.0	325.0	325.0	314.9	303.4	292.3	2El.5	271.0	260.8
65	325.0	325.0	325.0	314.9	303.4	292.3	281.5	271.0	260.A
70	325.0	325.0	325.0	314.9	303.4	292.3	281.5	271.0	260.8
75	325.0	325.0	325.0	314.9	303.4	292.3	281.5	271.0	260.8
80	325.0	325.0	325.0	314.9	303.4	292.3	281.5	271.0	260.8
85	325.0	325.0	325.0	313.6	302.1	291.1	280.3	269.9	259.7
90	325.0	325.0	318.3	306.6	295.5	284.7	274.3	264.2	254.3
95	325.0	322.5	310.6	299.2	288.4	278.0	267.9	258.1	248.4
100	325.0	314.3	302.8	291.R	281.3	271.2	261.4	231.9	242.3
105	318.4	306.6	295.3	284.8	274.6	264.8	233.2	243.9	236.7
110	311.2	299.9	289.0	278.6	268.6	258.9	249.5	240.3	231.2

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (PEAT) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	49.7	51.7	55.2	58.6	62.5	66.8	71.6	76.9	82.6
55	50.2	52.7	56.3	59.8	63.8	68.3	73.3	78.7	84.7
60	50.6	53.7	57.2	61.0	65.3	69.9	75.0	80.5	86.4
65	51.0	54.1	57.6	61.3	65.8	70.5	75.6	81.1	87.1
70	51.4	54.5	58.0	62.0	66.3	71.1	76.3	81.8	87.8
75	51.8	54.9	58.5	62.4	66.8	71.7	76.9	82.5	an.5
80	52.1	55.3	58.9	62.9	67.4	72.2	77.5	83.2	89.2
85	52.6	55.9	59.7	63.7	68.2	73.1	78.4	84.2	90.5
90	53.8	57.5							
95	55.5	59.2	63.2	67.6	72.3	75.2	83.2	89.5	96.5
100	57.2	61.1	65.2	69.7	74.6	80.0	86.0	92.6	loo.0
105	59.0	62.9	67.2	71.8	77.0	82.6	an.9	93.8	103.3
110	60.4	64.6	69.1	74.0	79.3	83.2	91.7	9A.9	106.8

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 40	50	60	70	80	90	100	110
180	4.00	4.00	4.27	4.91	5.55	6.18	6.81	7.42
190	4.00	4.00	4.67	5.38	6.10	6.80	7.51	8.22
200	4.00	4.28	5.09	5.89	6.68	7.48	8.28	9.08
210	4.00	4.63	5.53	6.43	7.32	8.21	9.11	10.02
220	4.00	5.00	6.00	7.00	7.99	8.99	10.00	11.02
230	4.29	5.39	6.50	7.61	8.72	9.83	10.95	12.08
240	4.61	5.81	7.03	8.26	9.49	10.73	11.96	13.19
250	4.95	6.25	7.58	8.94	in.31	11.68	13.03	
260	5.32	6.71	8.17	9.67	11.19	12.69	14.16	
270	5.70	7.20	8.80	10.43	12.11	13.73		
280	6.10	7.72	9.46	11.27	13.09			
290	6.52	8.26	U-J.13	12.13	14.12			
300	6.96	8.83	10.89	13.05				
310	7.41	9.43	11.67	14.01				
320	7.89	10.06	12.49					
330	8.38	10.72	13.35					

TABLE 51. AIRCRAFT PERFORMANCE, LANDING (DC-9-30 SERIES)
JT8D-9 ENGINE, FULL FLAPS

MAXIMUM ALLOWABLE LANDING WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	moo	4ooo	5ooo	6000	7000	8000
[illegible]	99.0	99.0	99.0	99.0	99.0	95.5	91.9	88.5	85.2
55	99.0	99.0	99.0	99.0	97.3	93.7	90.3	S6.9	83.7
60	99.0	99.0	99.0	99.0	96.6	93.0	89.6	86.3	83.1
65	99.0	99.0	99.0	99.0	96.6	93.0	89.6	86.3	83.1
70	99.0	99.0	99.0	99.0	96.6	93.0	89.6	86.3	83.1
75	99.0	99.0	99.0	99.0	96.6	93.0	89.6	86.3	83.1
80	99.0	99.0	99.0	99.0	96.6	93.0	89.6	86.3	83.1
85	99.0	99.0	99.0	98.9	95.3	91.8	88.5	85.2	82.0
90	99.0	99.0	99.0	96.8	93.3	89.9	86.6	83.3	80.2
95	99.0	99.0	98.2	94.7	91.2	87.9	84.6	81.5	78.4
100	99.0	99.0	96.0	92.6	89.2	85.9	82.7	79.6	76.6
105	99.0	97.4	93.9	90.5	87.2	84.0	80.8	77.8	74.9
110	98.6	95.1	91.7	88.4	85.1	82.0	78.9	76.0	73.2

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
60	3.59	3.66	3.74	3.82	3.92	4.01	4.11	4.21	4.31
65	3.80	3.88	3.98	4.07	4.17	4.28	4.38	4.49	4.60
70	4.02	4.12	4.22	4.32	4.43	4.54	4.65	4.77	4.89
75	4.24	4.35	4.46	4.58	4.69	4.81	4.93	5.05	3.18
80	4.47	4.59	4.71	4.83	4.95	5.07	5.20	5.33	5.47
85	4.71	4.83	4.96	5.08	5.21	5.34	5.47	5.61	5.76
90	4.94	5.07	5.20	5.33	S.46	5.60	5.74	5.89	6.05
95	5.17	5.31	5.45	5.58	5.72	5.86	6.01	6.17	6.34
100	5.40	5.54	5.68	5.83	5.97	6.13	6.29	6.45	6.63

AIRPLANE CHARACTERISTICS	UNIT OF MEASURE	
MAXIMUM TAKEOFF WEIGHT	LBS.	108,000
MAXIMUM LANDING WEIGHT	LBS.	99,000
TYPICAL OPERATING EMPTY WEIGHT PLUS RESERVE FUEL	LBS.	64,845 1/ 69,640 2/
AVERAGE FUEL CONSUMPTION	LBS./MILE	17
TYPICAL MAXIMUM PASSENGER LOAD @ 200 LBS./PASSENGER	LBS.	23,000
MAXIMUM STRUCTURAL PAYLOAD	LBS.	30,145

1/ Based on 1.25 hours of reserve fuel.
2/ Based on 2.00 hours of reserve fuel.

TABLE 52. AIRCRAFT PERFORMANCE, TAKEOFF (DC-g-30 SERIES)
JT8D-9 ENGINE, 15" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	103.8	102.8	99.3	95.8	92.2	88.8	85.5	82.3	79.3
55	103.8	101.4	97.8	94.3	90.8	87.4	84.2	81.0	78.1
60	103.8	100.2	96.6	93.1	89.7	86.4	83.1	80.0	77.1
65	103.8	100.2	96.6	93.1	89.7	86.4	83.1	80.0	77.1
70	103.8	100.2	96.6	93.1	89.7	86.4	83.1	80.0	77.1
75	103.8	100.2	96.6	93.1	89.7	86.4	83.1	80.0	77.1
80	103.8	100.2	96.6	93.1	89.7	86.4	83.1	80.0	77.1
85	103.3	99.8	96.2	92.7	89.3	86.0	82.8	79.7	76.8
90	101.1	97.7	94.2	90.8	87.4	84.1	81.0	78.0	75.1
95	99.0	95.6	92.2	88.8	85.5	82.3	79.2	76.3	73.5
100	96.9	93.5	90.2	86.9	83.7	80.5	77.5	74.6	71.9
105	94.8	91.5	88.2	85.0	81.8	78.8	75.9	73.0	70.3
110	92.7	89.4	86.2	83.1	80.1	77.1	74.2	71.4	68.0

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	30.1	31.5	33.1	35.1	37.4	40.0	42.9	46.C	49.2
55	30.3	32.0	33.8	36.0	38.4	41.0	43.9	47.0	so.4
60	30.6	32.4	34.5	36.7	39.2	41.8	44.8	47.9	51.3
65	30.9	32.7	34.7	37.0	39.6	42.3	45.2	48.3	51.5
70	31.2	32.9	35.0	37.3	39.9	42.7	45.7	48.8	51.9
75	31.5	33.2	35.3	37.6	40.3	43.1	46.1	49.2	52.4
80	31.7	33.5	35.6	38.0	40.6	43.4	46.4	49.6	53.0
85	31.9	33.9	36.1	38.5	41.2	44.0	47.1	50.4	53.9
90	32.6	34.7	37.0	39.5	42.2	45.1	48.2	51.6	55.2
95	33.4	35.6	37.9	40.5	43.3	46.3	49.5	33.0	56.8
loo	34.3	36.5	39.0	41.6	44.4	47.5	50.8	54.4	58.4
105	35.2	37.5	40.0	42.7	45.6	48.8	52.2	56.0	60.2
110	36.0	38.5	41.1	43.8	46.8	50.1	53.7	57.7	62.2

RUNWAY **LENGTH (1000 FEET)**

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 30	35	40	45	50	55	60	65
70	2.87	3.33	3.80	4.27	4.74	5.21	5.68	6.15
75	3.20	3.76	4.31	4.87	5.42	5.98	6.53	7.09
80	3.57	4.22	4.86	5.51	6.16	6.82	7.50	
85	3.97	4.72	5.46	6.20	6.96	7.75		
90	4.41	5.25	6.09	6.94	7.82			
95	4.87	5.81	6.75	7.71				
loo	5.36	6.41	7.44					
105	3.88	7.02	8.16					

TABLE 53. AIRCRAFT PERFORMANCE, TAKEOFF (DC-g-30 SERIES)
JT8D-9 ENGINE, 15" FLAPS, 2% SPEED INCREASE

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	104.4	103.2	99.8	96.2	92.7	89.3	85.9	82.7	79.7
55	104.4	101.9	98.3	94.8	91.3	87.9	84.6	81.4	78.4
60	104.4	100.7	97.1	93.6	90.2	86.8	83.6	80.4	77.5
65	104.4	100.7	97.1	93.6	90.2	86.8	83.6	80.4	77.5
70	104.4	100.7	97.1	93.6	90.2	86.8	83.6	80.4	77.5
75	104.4	100.7	97.1	93.6	90.2	86.8	83.6	86.4	77.5
80	104.4	100.7	97.1	93.6	90.2	86.8	83.6	80.4	77.5
85	103.6	100.0	96.4	92.9	89.5	86.1	82.9	79.8	76.8
90	101.7	98.0	94.5	91.1	87.7	84.5	81.3	78.3	75.3
95	99.6	96.1	92.6	89.2	86.0	82.8	79.7	76.7	73.7
100	97.6	94.1	90.7	87.4	84.2	81.1	78.1	75.1	72.2
105	95.4	92.0	88.7	85.5	82.4	79.3	76.4	73.5	70.7
110	93.2	90.0	86.8	83.6	80.6	77.6	74.7	71.9	69.2

REFERENCE FACTOR "R"

TEMP	AIRPORT ELEVATION @RET)								
I °	0	1000	2000	3000	4000	5000	6000	7000	8000
[illegible]	32.0	33.2	35.4	37.7	40.1	42.8	45.9	49.3	53.1
55	32.4	33.9	36.1	38.5	41.0	43.9	47.0	50.5	54.3
60	32.5	34.5	36.7	39.1	41.8	44.8	48.0	51.5	55.4
65	32.7	34.7	37.0	39.4	42.2	45.1	48.4	52.0	55.9
70	32.9	35.0	37.3	39.8	42.5	45.5	48.8	52.4	56.3
75	33.2	35.3	37.6	40.1	42.9	45.9	49.2	52.9	56.8
80	33.5	35.6	38.0	40.5	43.3	46.3	49.7	53.3	57.3
85	33.9	36.1	38.5	41.0	43.9	47.0	SO.3	54.0	38.1
90	34.9	37.1	39.5	42.1	45.0	48.2	s1.7	55.6	59.8
95	35.7	38.0	40.5	43.2	46.2	49.5	53.2	S7.1	81.5
loo	36.6	39.0	41.6	44.4	47.5	50.9	54.7	58.8	63.3
105	37.5	40.0	42.7	45.7	48.9	52.4	56.3	60.6	65.3
110	38.6	41.2	44.0	47.0	50.3	54.0	58.0	62.6	67.6

RUNWAY LENGTH (1000 FEET)

WEIGHT	REFERENCE FACTOR "R"								
1000 LBS	30	35	40	45	50	55	60	65	70
70	2.81	3.26	3.71	4.16	4.61	5.05	5.49	5.93	6.35
75	3.13	3.67	4.21	4.75	5.28	5.81	6.34	6.87	7.38
80	3.49	4.12	4.74	5.36	5.98	6.61	7.23	7.85	8.48
85	3.88	4.60	5.31	6.02	6.73	7.44	8.17		
90	4.31	5.11	5.91	6.71	7.52	8.34			
95	4.76	5.66	6.56	7.46	8.38				
100	5.24	6.25	7.25	8.26					
105	5.76	6.87	8.00						

TABLE 54. AIRCRAFT PERFORMANCE, TAKEOFF (DC-g-30 SERIES)
JT8D-9 ENGINE, 5" FLAPS

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	100.0	106.0	106.5	102.6	98.9	9f.3	91.7	88.3	84.9
55	108.0	108.0	104.8	101.1	97.4	93.8	90.3	86.9	83.6
60	108.0	107.4	103.6	99.8	96.2	92.7	89.2	85.8	82.S
65	108.0	107.4	103.5	99.8	96.2	92.6	89.2	85.8	82.5
70	108.0	107.4	103.5	99.8	96.1	92.6	89.2	8S.8	82.S
75	108.0	107.4	103.3	99.8	96.1	92.6	89.1	8S.8	82.S
80	108.0	107.4	103.5	99.7	96.1	92.S	89.1	85.8	82.5
85	108.0	106.6	102.7	99.0	9S.4	91.8	88.4	85.1	81.9
90	lob.0	104.5	100.8	97.1	93.5	90.1	86.7	83.4	80.3
95	106.2	102.5	98.8	95.1	91.6	88.2	84.9	81.7	78.6
100	104.1	100.3	96.7	93.2	89.7	86.4	83.2	80.0	77.0
105	101.8	98.2	94.6	91.2	87.8	84.5	81.4	78.3	75.3
110	99.S	%.O	92.5	89.1	8S.8	82.6	79.6	76.6	73.7

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	37.3	39.1	41.2	43.7	46.6	49.9	53.5	57.3	61.3
55	37.9	39.8	42.1	44.7	47.7	51.0	54.6	58.5	62.7
60	38.2	40.4	42.8	4S.6	48.6	52.0	SS.6	S9.6	63.9
65	38.4	40.6	43.1	46.0	49.1	52.5	56.2	60.2	64.5
70	38.6	40.9	43.S	4b.4	49.5	S2.9	S6.7	60.7	bS.l
75	38.8	41.3	43.9	46.8	S0.0	53.4	57.2	61.3	65.7
80	39.0	41.6	44.4	47.3	50.3	53.9	S7.7	61.8	66.3
85	39.6	42.2	45.0	48.0	51.2	54.7	58.6	62.8	67.4
90	40.6	43.2	46.0	49.1	52.4	56.1	60.1	64.5	69.3
95	41.7	44.3	47.1	S0.3	53.8	57.6	61.8	66.3	71.2
100	42.7	4S.3	48.3	11.6	55.3	59.2	63.S	68.2	73.3
105	43.7	46.S	49.6	S3.1	Sb.8	60.9	6S.4	70.3	7s.s
110	44.9	47.8	51.0	S4.S	58.5	62.7	67.4	72.4	77.8

RUNWAY LENGTH (1000 FEET)

WEIGHT 1000 LBS	REFERENCE FACTOR "R" 35	40	45	50	55	60	65	70	75	80
70	2.99	3.39	3.79	4.19	4.60	5.02	s.43	5.83	6.24	6.63
75	3.35	3.81	4.28	4.75	5.23	5.70	6.18	6.65	7.12	7.58
80	3.74	4.27	4.82	S.37	5.92	6.47	7.03	7.58	8.12	8.66
85	4.16	4.77	S.39	6.03	6.67	7.32	7.96	8.61	9.24	
90	4.60	S.29	6.01	6.74	7.48	8.23	8.98	9.73		
95	5.06	5.85	6.66	7.49	8.35	9.21				
100	5.55	6.43	7.34	8.29	9.26					
105	6.07	7.03	8.05	9.11						
110	6.61	7.66	8.78							

TABLE 55. AIRCRAFT PERFORMANCE, TAKEOFF (DC-g-30 SERIES)
JT8D-9 ENGINE, 5" FLAPS, 5% SPEED INCREASE

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP °F	AIRPORT ELEVATION (mm) 0	1000	2000	3000	4000	5000	6000	7000	8000
50	108.0	108.0	108.0	104.5	100.7	97.0	93.4	90.0	86.7
55	100.0	108.0	106.8	103.0	99.2	95.5	92.0	88.6	85.3
60	100.0	108.0	105.5	101.7	97.9	94.3	90.8	87.5	84.2
65	108.0	108.0	105.5	101.6	97.9	94.3	90.8	87.5	84.2
70	108.0	108.0	105.5	101.6	97.9	94.3	90.8	87.5	84.2
75	108.0	108.0	105.4	101.6	97.9	94.3	90.8	87.5	84.2
80	108.0	108.0	105.4	101.5	97.0	94.2	90.8	87.4	84.2
85	108.0	108.0	104.5	100.8	97.1	93.5	90.1	86.7	83.6
90	108.0	106.1	102.4	98.8	95.2	91.7	88.3	85.0	81.9
95	107.9	104.1	100.4	96.8	93.3	89.9	86.5	83.3	80.2
100	105.7	101.9	98.3	94.7	91.3	88.0	84.7	81.6	78.5
105	103.5	99.8	96.2	92.7	89.3	06.1	82.9	79.8	76.7
110	101.2	97.6	94.0	90.6	87.3	84.1	81.0	78.0	75.0

REFERENCE FACTOR "R"

TEMP °F	AIRPORT ELEVATION (FEET) 0	1000	2000	3000	4000	5000	6000	7000	aooo
50	44.1	41.6	48.6	51.8	55.3	59.2	63.5	68.3	73.6
55	44.5	46.6	49.6	52.9	56.5	60.6	65.1	70.1	75.6
60	44.8	47.5	50.5	53.8	57.6	61.8	b6.S	71.6	77.3
65	45.1	47.9	51.0	S4.4	58.2	62.4	67.1	72.2	77.9
70	45.5	48.3	51.4	54.9	58.7	63.0	67.7	72.9	78.6
75	4S.9	48.7	51.9	55.4	59.3	63.6	68.3	73.6	79.3
80	46.3	49.1	52.3	55.9	59.8	64.2	69.0	74.3	80.0
85	46.8	49.7	52.9	56.5	60.6	65.0	69.9	75.3	81.1
90	47.7	SO.8	S4.2	58.0	62.2	66.8	71.9	77.4	83.5
95	48.8	52.1	55.7	S9.6	64.0	68.8	74.0	79.8	86.0
100	SO.1	53.5	57.3	61.4	65.9	70.9	76.3	82.2	86.7
105	51.6	SS.l	59.0	63.2	67.9	73.1	78.7	84.8	91.5
110	53.1	56.7	60.8	65.2	70.1	75.4	81.2	87.6	94.4

RUNWAY LENGTH (1000 FEET)

WEIGHT loooLBs	REFERENCE FACTOR "R" 40	50	60	70	80	90	100
70	3.18	3.94	4.69	5.43	6.16	6.87	7.56
75	3.60	4.46	5.32	6.17	7.03	7.88	8.73
80	4.01	5.00	6.00	7.00	8.00	9.00	10.02
85	4.43	5.59	6.74	7.89	9.04	10.21	11.40
90	4.87	6.21	7.53	8.84	10.16	11.49	
95	5.33	6.89	a.39	9.85	11.32		
100	5.84	7.61	9.29	10.91			
105	6.39	8.40	10.26	12.01			
110	6.99	9.25	11.28				

TABLE 56. AIRCRAFT PERFORMANCE, TAKEOFF (DC-g-30 SERIES)
JT8D-9 ENGINE, 0" FLAPS, 6% SPEED INCREASE

MAXIMUM ALLOWABLE TAKEOFF WEIGHT (1000 LBS)

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	moo	6000	7000	8000
50	108.0	108.0	108.0	106.3	102.5	98.8	95.2	91.7	88.1
55	100.0	108.0	108.0	104.8	101.0	97.3	93.7	90.2	86.8
60	108.0	108.0	107.3	103.5	99.7	96.0	92.5	89.0	85.7
65	108.0	108.0	107.3	103.5	99.7	96.0	92.4	89.0	85.7
70	108.0	108.0	107.3	103.4	99.7	96.0	92.4	89.0	85.6
	108.0	100.0	107.3	103.4	99.6	96.0	92.4	88.9	85.6
35	100.0	108.0	107.2	103.4	99.6	95.9	92.4	88.9	8S.S
85	108.0	108.0	106.4	102.5	98.8	95.2	91.6	88.2	84.8
90	108.0	108.0	104.3	loo.5	96.8	93.3	89.8	86.5	83.2
95	107.8	106.0	102.2	98.4	94.9	91.4	88.0	84.7	81.5
loo	105.8	103.8	loo.0	96.4	92.9	89.5	86.2	82.9	79.8
105	104.3	101.5	97.8	94.3	90.9	87.5	84.3	81.1	78.1
110	102.0	99.2	95.7	92.2	88.8	83.6	82.4	79.3	76.3

REFERENCE FACTOR "R"

TEMP	AIRPORT ELEVATION (FEET)								
°F	0	1000	2000	3000	4000	5000	6000	7000	8000
50	47.8	50.0	52.9	56.4	60.5	65.0	70.0	75.4	81.0
55	48.3	50.9	54.1	57.7	61.9	66.6	71.6	77.1	83.0
60	40.7	51.7	55.1	58.9	63.2	67.9	73.1	78.7	84.8
65	49.0	52.1	55.5	s9.4	63.7	68.3	73.8	79.s	85.7
70	49.4	52.5	56.0	59.9	64.3	69.2	74.5	80.2	86.5
75	49.8	53.0	56.5	60.5	64.9	69.8	75.2	81.0	87.3
80	50.3	53.5	57.1	61.1	65.6	70.5	75.9	81.7	88.1
85	51.0	54.2	57.8	61.9	66.4	71.4	76.9	82.8	89.3
90	52.2	55.6	59.3	63.6	68.3	73.5	79.2	85.4	92.1
95	53.5	57.0	61.0	65.4	70.3	75.7	81.6	87.9	94.9
loo	54.8	58.6	62.7	67.4	72.4	78.0	84.1	90.6	97.7
105	56.3	60.2	64.6	69.4	74.7	80.5	86.7	93.5	100.8
110	57.9	62.0	66.6	71.6	77.1	83.1	89.6	96.6	104.2

RUNWAY LENGTH (1000 FEET)

WEIGHT	REFERENCE FACTOR "R"							
1000 LBS	40	50	60	70	80	90	100	110
70	3.17	3.93	4.68	5.42	6.15	6.06	7.56	8.24
75	3.58	4.46	5.32	6.18	7.03	7.88	8.74	9.61
80	4.01	5.01	6.00	6.99	7.98	8.97	9.97	10.98
as	4.48	5.60	6.73	7.06	9.00	10.13	11.27	12.41
90	4.97	6.23	7.51	8.81	10.11	11.40	12.69	
95	5.50	6.90	8.35	9.03	11.32	12.80		
100	6.06	7.61	9.25	10.95	12.66			
105	6.66	8.36	10.21	12.16				
110	7.28	9.15	11.24					