

DC-8 FLIGHT OPERATING MANUAL



AMERICAN
INTERNATIONAL
AIRWAYS, INC.

PERFORMANCE PROCEDURES

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PRESSURE ALTITUDE WEIGHT ADJUSTMENTS

The runway limit ATOG and performance limit ATOG adjustments are to be applied whenever the altimeter setting deviates from 29.92 of HG or from 1014 mb. Both inches and millibars are shown for reading convenience in the tables below.

ALTIMETER SETTING (INCHES MERCURY)

Alt Set (in Hg)	R/W Limit ATOG Adj (1000 lbs)	Perf Limit ATOG Adj (1000 lbs)		
28.90	10.0	12.0	S	A
29.00	9.0	10.8	U	D
29.10	8.0	9.6	B	J
29.20	7.0	8.4	T	
29.30	6.0	7.2	R	S
29.40	5.1	6.1	A	H
29.50	4.1	4.9	C	O
29.60	3.1	3.2	T	W
29.70	2.1	2.5		N
29.80	1.1	1.3		
29.92	0	0		
30.00	.6	.7		
30.10	1.4	1.5		A
30.20	2.3	2.5		D
30.30	3.1	3.4	A	J
30.40	3.9	4.3	D	
30.50	4.8	5.3	D	S
30.60	5.6	6.2		H
30.70	6.4	7.0		O
30.80	7.2	7.9		W
30.90	8.1	8.9		N
31.00	8.9	9.8		

ALTIMETER SETTING (MILLIBARS)

Alt Set (mb)	R/W Limit ATOG Adj (1000 lbs)	Perf Limit ATOG Adj (1000 lbs)		
970	12.4	14.9	S	A
975	11.0	13.2	U	D
980	9.5	11.4	B	J
985	8.0	9.6	T	
990	6.5	7.8	R	S
995	5.1	6.1	A	H
1000	3.6	4.3	C	O
1005	2.1	2.5	T	W
1010	1.0	1.0		
1013	0	0		
1015	.6	.7		
1020	1.8	2.0		A
1025	3.0	3.3		D
1030	3.9	4.3	A	J
1035	5.3	5.8	D	
1040	6.4	7.0	D	S
1045	7.7	8.5		H
1050	8.9	9.8		O
				W
				N

WARNING:

TO BE USED ONLY FOR EPR VERSUS MINIMUM N1 ERROR CHECK.

AIRCRAFT DC-8-62

ENGINE JT3D-3B

N1 VERSUS EPR

EPR	OUTSIDE AIR TEMPERATURE °C			
	-20	-10	0	10
2.05	104			
2.00	102	104		
1.95	100	102	104	
1.90	97	99	101	103
1.85	95	97	99	101
1.80	94	95	97	99
1.75	92	94	95	97
1.70	90	92	93	95
1.66	88	90	92	94

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RUNWAY CLUTTER TAKEOFF WEIGHT CONSIDERATIONS

Weight adjustments assume and are based on a uniform clutter depth for the entire runway length. When areas of the runway are partially contaminated with clutter of varying depths, an estimated average clutter depth on the operational portion of the runway can be used to determine the appropriate adjustments, providing no portion of the runway contamination exceeds the takeoff not permitted limits. With significant amounts of clutter, takeoff acceleration can seem normal at lower speeds, but can deteriorate rapidly as speed approaches V1 or VR.

Find runway limit for existing conditions, headwind, temperature and altimeter and proceed to Step 1.

- Step 1** The runway limit need not be adjusted for clutter when the runway has less than 1/8 inch of slush, 1/4 inch of wet snow, 1 inch of dry snow or 1/8 inch of standing water. Use normal takeoff weights.
- Step 2** The following requirements apply to takeoff when the runway limits must be adjusted for clutter.
- All antiskid operative
 - No Tailwind
 - Use limit takeoff thrust
- Step 3** Using the table below, select the level of clutter that best represents the runway condition.

RUNWAY CLUTTER EQUIVALENTS AND GUIDELINES			
	Use Level 1 Weight adjustments if:	Use Level 2 Weight adjustments if:	Takeoff not permitted if:
Slush	1/8 to 1/4 inch	over 1/4 to 1/2 inch	greater than 1/2 inch
Wet Snow	1/8 to 1/4 inch	over 1/4 to 1/2 inch	greater than 1/2 inch
Dry Snow	1 to 2 inches	over 2 to 6 inches	greater than 6 inches
Standing Water	1/8 to 1/4 inch	over 1/4 to 1/2 inch	greater than 1/2 inch

Step 4 Using the clutter level from step 3, determine the runway clutter

RUNWAY CLUTTER WEIGHT REDUCTIONS										
ADJUSTED RUNWAY LIMIT WEIGHT (1000 POUNDS)										
Clutter Equivalent	180	200	220	240	260	280	300	320	340	350
Level 1	2000	4000	6000	8000	11000	13000	15000	17000	20000	21000
Level 2	4000	7000	11000	16000	21000	26000	30000	34000	38000	40000

ADJUSTMENTS: For each 1000 feet of airport elevation above sea level, reduce runway limit weight an additional 2000 pounds.

- Step 5** Subtract value in Step 4 from the runway limit weight, adjusted for pressure altitude from page 4E-1. Compare this value to the allowable takeoff gross weight limits and use the lowest weight.

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DC-8-62 (JT3D-3B)

MAXIMUM POWER - E.P.R. 40-80 KNOTS (CABIN COMPRESSORS OFF)

OAT	°F	-49	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113
	°C	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45
P.A. - S.L.		1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.80	1.75	1.70
	1000'	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.85	1.85	1.85	1.84	1.80	1.75	1.70
	2000'	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.93	1.90	1.85	1.85	1.85	1.84	1.80	1.75	1.70
	3000'	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	2.01	1.93	1.90	1.85	1.85	1.85	1.84	1.80	1.75	1.70
4000' & Above		2.07	2.07	2.07	2.07	2.07	2.06	2.04	2.02	2.01	2.01	1.93	1.90	1.85	1.85	1.85	1.84	1.80	1.75	1.70

MAXIMUM CONTINUOUS THRUST (CLIMB)

Temp °C	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	
P.A. - S.L.	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.80	1.76	1.73	1.69	1.65	1.62	1.58	1.55	1.52	1.49	
	2000'	1.90	1.90	1.90	1.90	1.90	1.90	1.86	1.83	1.80	1.76	1.73	1.69	1.65	1.62	1.58	1.55	1.52	1.49	
	4000'	2.02	2.01	1.99	1.97	1.95	1.92	1.90	1.86	1.83	1.80	1.76	1.73	1.69	1.65	1.62	1.58	1.55	1.52	1.49
	5-30000'	2.02	2.01	1.99	1.97	1.95	1.93	1.90	1.86	1.83	1.80	1.76	1.73	1.69	1.65	1.62	1.58	1.55	1.52	1.49
	35000'	2.01	1.99	1.97	1.95	1.92	1.89	1.86	1.83	1.79	1.75	1.71	1.67							
	40000'	1.98	1.96	1.94	1.92	1.89	1.86	1.83	1.79	1.76	1.72	1.67	1.64							
Adjustments		-.01	-.12	-.11	-.11	-.11	-.11	-.10	-.09	-.09	-.08	-.07	-.06	Reduce EPR using De-Ice & R/R						

4 ENGINE GO-AROUND

Temp °C	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45
P.A. - S.L.	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.78	1.73	1.68
	1000'	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
	2000'	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
	3000'	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
	4000'	2.02	2.02	2.02	2.02	2.02	2.02	1.99	1.98	1.98	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
5000' and above	2.08	2.08	2.07	2.06	2.04	2.03	2.01	1.99	1.96	1.93	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68

- Adjustments:
1. EPR settings applicable when four engines operating with normal bleed.
 2. Subtract .02 when engine anti-ice and/or airplane deicing ON.
 3. Subtract .01 when three engine operating.

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DC-8/62 - JT3D-3B REDUCED TAKEOFF THRUST

Max Power must be accomplished once every 7 days.

Do Not use reduced takeoff thrust when:

- takeoff runway has standing water, ice, slush and snow.
 - takeoff is to be made with a tailwind
 - OAT is below 0°F
 - anti-ice bleed is required
 - available runway length is less than 8000 feet.
 - aircraft has been de-iced, reported/forecast windshear, MEL/CDL takeoff weight adjustment.
1. Determine max EPR from the MAXIMUM TAKEOFF THRUST table.
 2. Enter the gross weight table with the takeoff G.W. and find the corresponding temperature for this weight from both the RUNWAY and PERFORMANCE LIMIT
 3. Using this assumed temp and maximum EPR, determine EPR.
 4. Determine V1, Vr, and V2 for both the assumed temp and the airport temp and use the highest value for each speed.

EPR is valid when set at 40 - 80 knots, CTC's and blowaway jets are off.

ASSUM TEMP °F	MAX EPR													
	1.66	1.70 thru 1.80	1.84	1.85	1.89	1.90	1.93	1.96	1.99	2.01	2.02	2.04	2.06	2.07
	NORMAL EPR													
120	1.66	1.66	1.72	1.73	1.77	1.78	1.80	1.83	1.86	1.88	1.89	1.90	1.92	1.93
115	1.66	1.73	1.72	1.73	1.77	1.78	1.80	1.83	1.86	1.88	1.89	1.90	1.92	1.93
110	1.66	1.73	1.73	1.73	1.77	1.78	1.80	1.83	1.86	1.88	1.89	1.90	1.92	1.93
105	1.66	1.75	1.75	1.75	1.77	1.78	1.80	1.83	1.86	1.88	1.89	1.90	1.92	1.93
100	1.66	1.76	1.77	1.74	1.77	1.78	1.80	1.83	1.86	1.88	1.89	1.90	1.92	1.93
95	1.66	1.80	1.80	1.80	1.80	1.80	1.84	1.84	1.86	1.88	1.89	1.90	1.92	1.93
90	1.66	1.80	1.80	1.84	1.82	1.84	1.84	1.84	1.86	1.88	1.89	1.90	1.92	1.93
85	1.66	1.80	1.80	1.84	1.84	1.84	1.84	1.84	1.86	1.88	1.89	1.90	1.92	1.93
80	1.66	1.80	1.80	1.84	1.84	1.85	1.85	1.85	1.86	1.88	1.89	1.90	1.92	1.93
75	1.66	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.86	1.88	1.89	1.90	1.92	1.93
70	1.66	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.86	1.88	1.89	1.90	1.92	1.93
65	1.66	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.86	1.88	1.89	1.90	1.92	1.93
60	1.66	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.86	1.88	1.89	1.90	1.92	1.93
55	1.66	1.80	1.80	1.85	1.85	1.85	1.85	1.85	1.88	1.88	1.89	1.90	1.92	1.93
50	1.66	1.80	1.80	1.85	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.92	1.93
45	1.66	1.80	1.80	1.85	1.89	1.89	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.93
40	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93
35	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.94
30	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.96	1.96	1.96	1.96	1.96	1.96	1.96
25	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.96	1.99	1.99	1.99	1.99	1.99	1.99
20	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.96	1.99	1.99	1.99	1.99	1.99	2.02
15	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.96	1.99	2.01	2.02	2.02	2.02	2.04
10	1.66	1.80	1.80	1.85	1.89	1.90	1.93	1.96	1.99	2.01	2.02	2.02	2.04	2.07

Adjustments: All cabin compressors off: Add .01. Rain removal on: Subtract .01. Maximum EPR reduction .10.

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DC-8/62 JT3D-3B TAKEOFF SPEEDS

1. Determine V1 Basic and adjust per ADJUSTMENTS at bottom of table.
2. Determine V1 Limit.
3. Compare adjusted V1 Basic with V1 Limit from step 2 and use higher speed.
4. VR and V2 do not require adjustments and do have Limit speeds.

ALT. - 1000 FT.	AMBIENT TEMPERATURE - ° C					
	-29 to -21	-21 to -15	-15 to -9	-9 to -4	-4 to 7	7 to 15
6 to 7	- - - -	- - - -	-29 to -15	-15 to -4	-4 to 29	29 to 49
5 to 6	- - - -	-29 to -15	-15 to -4	-4 to 7	7 to 35	35 to 49
4 to 5	-29 to -21	-21 to -4	-4 to 7	7 to 29	29 to 41	41 to 49
3 to 4	-29 to -9	-9 to 2	2 to 13	13 to 35	35 to 41	41 to 49
2 to 3	-29 to 2	2 to 13	13 to 29	29 to 41	41 to 49	- - - -
1 to 2	-29 to 13	13 to 29	29 to 35	35 to 49	- - - -	- - - -
0 to 1	-29 to 29	29 to 35	35 to 41	41 to 49	- - - -	- - - -

18° V BASIC

WEIGHT 1000 LBS	-29 to -21			-21 to -15			-15 to -9			-9 to -4			-4 to 7			7 to 15		
	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2
350	141	157	167	142	158	167	143	158	166	144	159	166	145	160	166	147	161	166
340	138	154	165	139	155	165	140	155	164	141	156	164	142	157	164	144	158	164
320	133	149	161	134	150	161	135	150	160	136	151	160	137	152	159	139	153	159
300	127	143	156	128	144	156	129	144	155	130	145	155	131	146	154	133	147	154
280	121	137	152	122	138	152	123	138	151	124	139	151	125	140	150	127	141	150
260	-	131	147	-	132	147	116	132	146	117	133	146	118	134	145	120	135	145
240	-	125	142	-	126	142	-	126	141	111	127	141	112	128	140	114	129	140
220	-	123	142	-	121	138	-	119	135	-	120	135	-	121	134	107	122	134
200	-	123	143	-	120	139	-	117	133	-	113	131	-	114	129	-	115	129
V1 LIMIT	120	-	-	117	-	-	113	-	-	110	-	-	107	-	-	101	-	-

23° V BASIC

WEIGHT 1000 LBS	-29 to -21			-21 to -15			-15 to -9			-9 to -4			-4 to 7			7 to 15		
	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2
350	139	155	164	140	156	164	141	157	163	142	157	163	143	158	163	145	159	163
340	137	152	162	138	153	162	139	154	161	140	154	161	141	155	161	143	156	161
320	131	146	158	132	147	158	133	148	157	134	148	157	135	149	156	137	150	156
300	126	141	153	127	142	153	128	143	152	129	143	152	130	144	151	132	145	151
280	120	135	149	121	136	149	122	137	148	123	137	148	124	138	147	126	139	147
260	-	129	144	-	130	144	115	131	143	116	131	143	117	132	142	119	133	142
240	-	124	141	-	124	139	-	125	138	110	125	138	111	126	137	113	127	137
220	-	124	142	-	122	136	-	119	133	-	118	133	-	119	132	106	120	132
200	-	124	143	-	122	138	-	118	132	-	114	128	-	113	127	-	113	127
V1 LIMIT	120	-	-	117	-	-	113	-	-	110	-	-	107	-	-	101	-	-

ADJUSTMENTS:

1. Headwind: For each 12 knots, increase V1 Basic 1 knot.
2. Tailwind: For each 5 knots, decrease V1 Basic 1 knot.

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DC-8/62 JT3D-3B																		
18° FLAP																		
7,001 TO 8,000 FEET PRESSURE ALTITUDE																		
WEIGHT x 1,000	-40° C to -25° C			-24° C to -10° C			-9° C to 5° C			6° C to 32° C			33° C to 40° C			41° C to 50° C		
	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2	V1	VR	V2
360,000	148	161	169	149	162	169	150	163	168	152	154	168	155	165	168	160	166	168
350,000	144	159	167	145	160	167	146	161	166	148	162	166	150	163	166	154	164	166
340,000	142	156	165	143	157	165	144	158	164	146	156	164	149	160	164	152	161	164
330,000	139	154	163	140	155	163	141	156	162	143	157	162	146	158	162	149	159	162
320,000	137	151	161	138	152	161	139	153	160	141	154	160	144	155	160	147	156	160
310,000	134	148	159	135	149	159	135	150	158	138	151	158	141	152	158	144	153	158
300,000	131	145	156	132	146	156	133	147	155	135	148	155	139	149	155	141	150	155
290,000	128	142	154	129	143	154	130	144	153	132	145	153	135	146	153	138	147	153
280,000	125	139	152	126	140	152	127	141	151	129	142	151	132	143	151	135	144	151
270,000	122	136	150	123	137	150	124	138	149	126	138	149	129	140	149	132	141	149
260,000	118	133	147	119	134	147	120	135	146	122	136	146	125	167	146	128	138	146
250,000	115	130	145	116	131	145	117	132	144	119	133	144	122	134	144	125	135	144
240,000	112	127	142	113	128	142	114	129	141	116	130	141	119	131	141	122	132	141
230,000	108	123	139	109	124	139	110	125	138	112	126	138	115	127	138	118	128	138
220,000	105	120	136	106	121	136	107	122	135	109	123	135	112	124	135	115	125	135
210,000	101	117	134	102	118	134	103	119	133	105	120	133	108	121	133	111	122	133
200,000	98	113	129	99	114	131	100	115	130	102	116	130	104	117	130	107	118	130

NOTE:

Minimum speeds must be checked at table below.

BASIC TAKEOFF SPEEDS - FLAPS 18°									
TAKEOFF WEIGHT (1000 LBS)	200	220	240	260	280	300	320	340	360
V1 (KNOTS, IAS)	94.0	101.5	108.5	115.5	122.0	128.0	134.0	139.5	144.5
VR (KNOTS, IAS)	111.0	118.0	124.5	131.0	137.0	142.5	148.0	153.5	158.5
V2 (KNOTS, IAS)	130.0	135.5	141.0	146.0	151.0	156.0	160.5	165.0	169.0
1.2V _s (KNOTS, IAS)	127.0	133.0	139.0	144.5	149.5	154.0	159.0	164.0	169.0

		V1 BASIC	VR BASIC	V2 BASIC
SLOPE PER 1%	UPHILL	+2.0%	+0.5 KNOTS	-0.5 KNOTS
	DOWNHILL	-2.0%	-0.5 KNOTS	+0.5 KNOTS
WIND PER 10 KTS	HEADWIND	+0.8 KNOTS	0	0
	TAILWIND	-2 KNOTS		

* USE THE HIGHER OF V2 CORRECTED FOR ALTITUDE, TEMPERATURE AND SLOPE AND 1.2 V_s AS V2 BASIC. FLAP RETRACTION SPEED = V2 + 25 KNOTS, IAS.

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DC8-62 JT3D-3B 23° FLAP 8,001 TO 9,000 FEET PRESSURE ALTITUDE						
WEIGHT x 1,000	-40°C to -25°C	-24°C to -10°C	-9°C to 5°C	6°C to 32°C	33°C to 40°C	41°C to 50°C
	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2
360,000	147 159 165	148 160 164	149 161 164	150 161 164	155 163 164	157 164 164
350,000	144 157 163	145 159 162	146 159 162	147 159 162	151 161 162	154 162 162
340,000	141 154 161	141 155 160	143 156 160	144 156 160	148 158 160	151 159 160
330,000	138 152 159	139 153 158	140 154 158	141 154 158	145 156 158	148 157 158
320,000	136 149 157	137 150 156	138 151 156	139 151 156	143 153 156	146 154 156
310,000	133 146 155	134 147 154	135 148 154	136 148 154	140 150 154	143 151 154
300,000	130 143 151	131 144 150	132 145 150	133 145 150	137 147 150	140 148 150
290,000	127 140 150	128 141 149	129 142 149	130 142 149	134 144 149	137 145 149
280,000	124 137 148	125 138 147	126 139 147	127 139 147	131 141 147	134 142 147
270,000	120 134 146	121 135 145	122 136 145	123 136 145	127 138 145	130 139 145
260,000	117 131 143	118 132 142	119 133 142	120 133 142	124 135 142	127 136 142
250,000	114 129 141	115 130 140	116 131 140	117 131 140	121 133 140	124 134 140
240,000	112 126 138	113 127 137	114 128 137	115 128 137	119 130 137	122 131 137
230,000	108 122 135	109 123 134	110 124 134	111 124 134	115 126 134	118 127 134
220,000	105 119 132	106 120 131	107 121 131	108 121 131	112 123 131	115 124 131
210,000	101 116 130	102 117 129	103 118 129	104 118 129	108 120 129	111 121 129
200,000	97 112 127	99 113 126	99 114 126	100 114 126	104 116 126	107 117 126

NOTE:

Minimum speeds must be checked at weights below the W_{mc} weight.

BASIC TAKEOFF SPEEDS - FLAPS 23°									
TAKEOFF WEIGHT (1000 LBS)	200	220	240	260	280	300	320	340	360
V1 (KNOTS, IAS)	93.0	100.5	107.0	113.5	120.0	126.0	131.5	137.0	142.5
VR (KNOTS, IAS)	108.5	115.5	122.0	128.0	134.0	140.0	145.5	150.5	155.5
V2 (KNOTS, IAS)	127.5	133.0	138.0	143.0	147.5	152.0	156.5	161.0	165.5
1.2V _s (KNOTS, IAS)	124.0	130.5	136.0	141.5	146.0	151.0	156.0	161.0	165.5

		V1 BASIC	VR BASIC	V2 BASIC
SLOPE PER 1%	UPHILL	+2.0%	+0.5 KNOTS	-0.5 KNOTS
	DOWNHILL	-2.0%	-0.5 KNOTS	+0.5 KNOTS
WIND PER 10 KT	HEADWIND	+0.8 KNOTS	0	0
	TAILWIND	-2 KNOTS		

*USE THE HIGHER OF V2 CORRECTED FOR ALTITUDE, TEMPERATURE AND SLOPE AND 1.2 V_s AS V2 BASIC. FLAP RETRACTION SPEED = V2 + 25 KNOTS, IAS.

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DC-8/62 JT3D-3B 23° FLAP 9,001 TO 10,000 FEET PRESSURE ALTITUDE						
WEIGHT	-40°C TO -25°C	-24°C TO -10°C	-9°C TO 5°C	6°C TO 32°C	33°C to 40°C	41°C to 50°C
x 1,000	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2	V1 VR V2
360,000	148 159 165	149 160 165	150 161 165	152 162 165	155 163 165	158 164 165
350,000	145 157 163	146 158 163	147 159 163	149 160 163	152 161 163	155 162 163
340,000	142 154 161	143 155 161	144 156 161	146 157 161	149 158 161	152 159 161
330,000	139 152 159	140 153 159	141 154 159	143 155 159	146 156 159	149 157 159
320,000	137 149 157	138 150 157	139 151 157	141 152 157	144 153 157	147 154 157
310,000	134 145 155	135 146 155	136 147 155	138 148 155	141 149 155	144 150 155
300,000	131 143 150	132 144 150	133 145 150	135 146 150	138 147 150	141 149 150
290,000	128 140 148	129 141 148	130 142 148	132 143 148	135 144 148	138 145 148
280,000	125 137 146	126 138 146	127 139 146	129 140 146	132 141 146	135 142 146
270,000	121 134 144	122 135 144	123 136 144	125 137 144	128 138 144	131 139 144
260,000	118 131 141	119 132 141	120 133 141	122 134 141	125 135 141	128 136 141
250,000	115 128 139	116 129 139	117 130 139	119 131 139	122 132 139	125 133 139
240,000	113 126 136	114 127 136	115 128 136	117 130 136	120 130 136	123 131 136
230,000	109 122 133	110 123 133	111 124 133	113 125 133	118 126 133	119 127 133
220,000	106 119 130	107 120 130	108 121 130	111 122 130	113 123 130	116 124 130
210,000	102 116 128	103 117 128	104 118 128	106 119 128	109 120 128	112 121 128
200,000	98 112 125	99 113 125	100 114 125	102 115 125	105 116 125	108 117 125

NOTE:

Minimum speeds must be checked at weights below the Wmc weight.

BASIC TAKEOFF SPEEDS - FLAPS 23°									
TAKEOFF WEIGHT (1000 LBS)	200	220	240	260	280	300	320	340	360
V1 (KNOTS, IAS)	93.0	100.5	107.0	113.5	120.0	126.0	131.5	137.0	142.5
VR (KNOTS, IAS)	108.5	115.5	122.0	128.0	134.0	140.0	145.5	150.5	155.5
V2 (KNOTS, IAS)	127.5	133.0	138.0	143.0	147.5	152.0	156.5	161.0	165.5
1.2Vs (KNOTS, IAS)	124.0	130.5	136.0	141.5	146.0	151.0	156.0	161.0	165.5

		V1 BASIC	VR BASIC	V2 BASIC
SLOPE PER 1%	UPHILL	+2.0%	+0.5 KNOTS	-0.5 KNOTS
	DOWNHILL	-2.0%	-0.5 KNOTS	+0.5 KNOTS
WIND PER 10 KTS	HEADWIND	+0.8 KNOTS	0	0
	TAILWIND	-2 KNOTS		

* USE THE HIGHER OF V2 CORRECTED FOR ALTITUDE, TEMPERATURE AND SLOPE AND 1.2 Vs AS V2 BASIC. FLAP RETRACTION SPEED = V2 + 25 KNOTS, IAS.

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STABILIZER TRIM SETTING

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FLAPS	WEIGHT 1000 LBS	STABILIZER SETTING					C.G. - % MAC			
		18	20	22	24	26	28	30	32	34
18°	350	10.0	8.8	7.7	6.4	5.3	4.1	2.9	1.7	0.5
	340	9.6	8.5	7.4	6.2	5.0	3.9	2.7	1.5	0.3
	320	9.1	8.0	6.9	5.7	4.6	3.6	2.5	1.4	0.1
	300	8.5	7.5	6.4	5.3	4.3	3.3	2.2	1.2	0.0
	290	8.0	7.0	6.0	5.0	4.0	3.0	2.0	1.0	-0.1
	280	7.6	6.6	5.6	4.6	3.7	2.7	1.7	0.8	-0.2
	270	7.3	6.3	5.4	4.4	3.5	2.5	1.6	0.6	-0.3
	260	6.9	6.0	5.1	4.2	3.2	2.3	1.4	0.4	-0.5
	250	6.5	5.6	4.7	3.8	2.9	2.0	1.1	0.2	-0.7
	240	6.1	5.2	4.3	3.4	2.5	1.6	0.8	-0.1	-1.0
	230	5.7	4.8	3.9	3.1	2.2	1.3	0.4	-0.4	-1.0
	220	5.3	4.4	3.6	2.7	1.9	1.0	-0.1	-0.8	-1.0
	210	4.8	4.1	3.2	2.4	1.5	0.7	-0.3	-1.0	-1.0
	200	4.6	3.8	2.9	2.1	1.2	0.4	-0.6	-1.0	-1.0
190	4.1	3.3	2.4	1.7	0.8	0.0	-0.8	-1.0	-1.0	
180	3.5	2.8	2.1	1.3	0.4	-0.4	-1.0	-1.0	-1.0	

FLAPS	WEIGHT 1000 LBS	STABILIZER SETTING					C.G. - % MAC			
		18	20	22	24	26	28	30	32	34
23°	350	9.4	8.2	7.0	5.8	4.5	3.3	2.1	0.9	-0.4
	340	9.1	7.9	6.7	5.5	4.2	3.1	2.0	0.7	-0.4
	320	8.4	7.2	6.2	5.1	4.0	2.9	1.8	0.6	-0.5
	300	7.9	6.8	5.8	4.7	3.6	2.5	1.5	0.5	-0.6
	290	7.5	6.5	5.5	4.4	3.4	2.4	1.4	0.3	-0.7
	280	7.2	6.2	5.2	4.2	3.2	2.2	1.3	0.2	-0.8
	270	7.0	6.0	5.0	4.0	3.0	2.0	1.0	0.1	-0.9
	260	6.6	5.6	4.7	3.7	2.8	1.8	0.9	0.0	-1.0
	250	6.2	5.2	4.3	3.4	2.5	1.5	0.6	-0.2	-1.0
	240	5.8	4.9	4.0	3.2	2.2	1.4	0.5	-0.4	-1.0
	230	5.4	4.6	3.7	2.9	2.0	1.1	0.2	-0.7	-1.0
	220	5.1	4.2	3.4	2.3	1.7	0.8	-0.1	-0.9	-1.0
	210	4.6	3.8	3.0	2.1	1.3	0.5	-0.4	-1.0	-1.0
	200	4.2	3.4	2.6	1.6	1.0	0.1	-0.7	-1.0	-1.0
190	3.8	3.0	2.2	1.4	0.6	-0.2	-0.9	-1.0	-1.0	
180	3.5	2.6	1.8	1.1	0.3	-0.5	-1.0	-1.0	-1.0	

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FOUR ENGINE CLIMB PERFORMANCE

SPEED: 250/300/.78; STANDARD TEMPERATURE

TIME IN MINUTES; FUEL IN POUNDS; DISTANCE IN NAUTICAL MILES

INITIAL CLIMB	WEIGHT X-1000	PRESSURE ALTITUDE (FL)									
		150	250	270	290	310	330	350	370	390	410
340	TIME	8	19	22	26	30					
	FUEL	4420	8110	9120	10320	11490					
	DIST	48	117	139	168	197					
330	TIME	8	18	21	24	27					
	FUEL	4020	7660	8590	9670	10670					
	DIST	46	110	131	156	182					
320	TIME	8	17	19	22	25					
	FUEL	3830	7240	8100	9080	9960					
	DIST	44	104	123	146	168					
310	TIME	7	16	18	21	24	27				
	FUEL	3650	6840	7640	8540	9320	10260				
	DIST	41	98	116	137	157	182				
300	TIME	7	15	17	20	22	25				
	FUEL	3480	6840	7210	8040	8750	9540				
	DIST	39	93	109	128	146	168				
290	TIME	7	14	16	19	21	23	27			
	FUEL	3310	6120	6810	7580	8220	8910	9840			
	DIST	38	87	102	120	137	156	183			
280	TIME	6	13	15	18	19	22	25			
	FUEL	3150	5780	6430	7130	7720	8340	9100			
	DIST	36	82	96	113	128	145	168			
270	TIME	6	13	14	16	18	20	23			
	FUEL	3000	5470	6060	6720	7260	7810	8470			
	DIST	34	78	91	106	120	135	154			
260	TIME	6	12	14	15	17	19	21	24		
	FUEL	2850	5170	5720	6320	6820	7320	7900	8660		
	DIST	32	73	85	100	112	126	143	167		
250	TIME	6	11	13	15	16	18	20	22		
	FUEL	2710	4880	5390	5950	6410	6870	7390	8010		
	DIST	31	69	80	93	105	118	133	153		
240	TIME	5	11	12	14	15	17	18	21		
	FUEL	2570	4610	5080	5600	6020	6440	6900	7440		
	DIST	29	65	75	88	98	110	123	141		
230	TIME	5	10	11	13	14	15	17	19	22	
	FUEL	2430	4350	4790	5270	5650	6040	6450	6930	7600	
	DIST	27	61	71	82	92	103	115	130	154	
220	TIME	5	9	11	12	13	15	16	18	20	
	FUEL	2300	4110	4510	4950	5310	5660	6040	6460	7020	
	DIST	26	58	67	77	86	96	107	120	140	
210	TIME	4	9	10	11	12	14	15	17	19	22
	FUEL	2180	3870	4250	4660	4980	5310	5650	6030	6510	7160
	DIST	25	54	63	72	81	90	100	112	129	154
200	TIME	4	8	9	11	12	13	14	15	17	20
	FUEL	2050	3640	3990	4370	4670	4970	5280	5620	6040	6570
	DIST	23	51	59	68	75	84	93	104	118	139
190	TIME	4	8	9	10	11	12	13	14	16	18
	FUEL	1930	3420	3750	4100	4380	4650	4930	5240	5610	6060
	DIST	22	48	55	63	71	78	86	98	109	127
180	TIME	4	7	8	9	10	11	12	13	15	17
	FUEL	1820	3200	3510	3840	4090	4340	4600	4880	5210	5590
	DIST	20	45	52	59	66	73	80	89	101	116

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MAXIMUM RECOMMENDED CRUISE WEIGHT

The maximum weight at which speed for long range cruise can be maintained at maximum cruise thrust. These weights will provide a minimum 1.35G buffet margin.

FLIGHT LEVEL STD. TEMP		STATIC AIR TEMPERATURE	
		Ts + 10°C and Below	Ts + 20°C
410 -57°C	WEIGHT MACH/IAS	221,000 .791/234	212,000 .790/234
400 -57°C	WEIGHT MACH/IAS	233,000 .792/239	225,000 .791/238
390 -57°C	WEIGHT MACH/IAS	246,000 .793/246	237,500 .792/246
380 -57°C	WEIGHT MACH/IAS	258,500 .793/252	250,000 .792/251
370 -57°C	WEIGHT MACH/IAS	271,500 .794/257	262,500 .792/256
360 -56°C	WEIGHT MACH/IAS	284,000 .794/263	275,500 .793/262
350 -54°C	WEIGHT MACH/IAS	296,000 .793/269	288,500 .792/268
340 -52°C	WEIGHT MACH/IAS	310,000 .793/275	300,500 .791/274
330 -50°C	WEIGHT MACH/IAS	322,000 .792/281	312,000 .791/281
320 -48°C	WEIGHT MACH/IAS	336,500 .792/287	324,000 .791/286
310 -46°C	WEIGHT MACH/IAS	350,000 .793/294	335,000 .791/293
300 -44°C	WEIGHT MACH/IAS	---	347,000 .791/300

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4- ENGINE MACH .80 CRUISE - JT3D-3B

EPR and NAM/1000# are for Mach .80. When operating in region left of heavy line, determine and set Max. Cruise EPR if less than listed value.

FLT LVL STD TEMP	MAC H TAS	EPR NAM/1000#	GROSS WEIGHT - X -1000 LBS																	
			330	320	310	300	290	280	270	260	250	240	230	220	210	200	190	180	170	
410 -57°C	0.80 461	EPR NAM/1000#													1.91 41.3	1.85 44.3	1.70 47.2	1.75 49.9	1.70 52.5	
390 -57°C	0.80 461	EPR NAM/1000#												1.91 37.8	1.85 40.2	1.80 12.6	1.75 44.9	1.71 47.2	1.68 49.0	1.64 50.7
370 -57°C	0.80 461	EPR NAM/1000#										1.89 35.0	1.84 37.0	1.80 39.0	1.73 40.8	1.72 42.6	1.68 44.2	1.65 45.8	1.62 47.0	1.60 48.3
350 -54°C	0.80 464	EPR NAM/1000#						1.90 30.9	1.87 32.7	1.82 34.3	1.75 33.9	1.75 37.4	1.71 39.0	1.68 40.2	1.65 41.6	1.63 42.8	1.61 43.8	1.59 44.6	1.57 45.5	
330 -50°C	0.80 468	EPR NAM/1000#			1.93 27.9	1.88 29.2	1.84 30.9	1.80 32.0	1.77 33.3	1.74 34.5	1.71 35.8	1.68 36.8	1.65 37.9	1.63 38.9	1.61 39.7	1.59 40.4	1.58 41.1	1.57 41.9	1.56 42.5	
310 -46°C	0.80 472	EPR NAM/1000#	1.88 26.7	1.85 27.7	1.81 28.8	1.78 29.9	1.75 31.0	1.72 32.1	1.69 33.0	1.67 33.8	1.65 34.8	1.63 35.6	1.61 36.3	1.59 36.8	1.58 37.4	1.57 38.0	1.56 38.5	1.54 39.1	1.53 39.6	
290 -42°C	0.80 476	EPR NAM/1000#	1.79 27.4	1.76 28.1	1.73 28.9	1.70 29.8	1.68 30.5	1.66 31.2	1.64 32.0	1.62 32.7	1.61 33.2	1.59 33.8	1.58 34.2	1.57 34.7	1.56 35.1	1.55 35.5	1.53 36.1	1.52 36.5	1.51 37.1	
280 -40°C	0.80 478	EPR NAM/1000#	1.75 27.0	1.72 28.1	1.70 28.7	1.67 29.4	1.65 30.0	1.64 30.8	1.62 31.5	1.60 31.7	1.59 32.2	1.58 32.7	1.57 33.2	1.56 33.6	1.55 33.9	1.53 34.3	1.52 34.8	1.51 35.4	1.50 35.8	
270 -38°C	0.80 480	EPR NAM/1000#	1.71 26.7	1.69 27.7	1.67 28.3	1.65 29.0	1.63 29.6	1.62 30.1	1.60 30.4	1.59 30.9	1.58 31.3	1.57 31.7	1.56 32.1	1.55 32.4	1.53 32.8	1.52 33.5	1.51 33.7	1.50 34.2	1.49 34.7	
260 -37°C	0.80 482	EPR NAM/1000#	1.68 26.3	1.66 27.3	1.64 27.8	1.63 28.3	1.61 28.7	1.60 29.2	1.59 29.6	1.58 30.0	1.57 30.4	1.56 30.7	1.55 31.1	1.54 31.3	1.52 31.8	1.51 32.2	1.50 32.6	1.49 33.0	1.49 33.5	
250 -35°C	0.80 484	EPR NAM/1000#	1.67 25.7	1.64 26.8	1.62 27.4	1.61 27.8	1.60 28.1	1.59 28.4	1.58 28.8	1.57 29.2	1.56 29.4	1.55 29.7	1.54 30.0	1.52 30.5	1.51 30.8	1.50 31.2	1.50 31.6	1.49 32.0	1.48 32.4	
240 -33°C	0.80 486	EPR NAM/1000#	1.64 25.1	1.62 26.2	1.60 26.6	1.59 27.0	1.58 27.5	1.57 27.7	1.57 27.9	1.56 28.2	1.55 28.5	1.54 28.7	1.53 29.1	1.52 29.4	1.51 29.8	1.50 30.2	1.49 30.6	1.48 30.9	1.47 31.2	
230 -31°C	0.80 488	EPR NAM/1000#	1.63 24.5	1.60 25.6	1.59 25.9	1.58 26.2	1.57 26.5	1.57 26.9	1.56 27.1	1.55 27.3	1.53 27.5	1.53 27.9	1.52 28.2	1.51 28.3	1.50 28.9	1.49 29.3	1.48 20.6	1.48 29.6	1.47 30.2	
220 -29°C	0.80 490	EPR NAM/1000#	1.61 24.0	1.59 25.0	1.58 23.2	1.57 25.5	1.56 25.8	1.55 26.0	1.64 26.2	1.53 26.5	1.52 26.8	1.52 27.1	1.51 27.3	1.50 27.7	1.49 28.0	1.48 28.3	1.48 28.5	1.47 28.8	1.46 29.1	
210 -27°C	0.80 492	EPR NAM/1000#	1.59 23.7	1.59 24.3	1.57 24.5	1.56 24.7	1.55 24.9	1.54 25.1	1.53 25.4	1.52 25.7	1.52 26.1	1.51 26.3	1.50 26.6	1.49 26.8	1.48 27.1	1.48 27.3	1.47 27.5	1.47 27.7	1.46 27.8	

ADJUSTMENTS: TAS (knots) is for standard temperature. Add 1 knot/°C above standard. Subtract 1 knot/°C below standard.

$$\text{Fuel consumption (1000\#/hr)} = \frac{\text{TAS for actual temperature}}{\text{NAM/1000\#}}$$

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DC-8/62 - JT3D-3B 4-ENGINE MACH .78 CRUISE

EPR and NAM/1000# are for Mach .78. When operating in region left of heavy line, determine and set Max. Cruise EPR if less than listed value.

FLT LEVEL	MACH	TAS	GROSS WEIGHT (1000 LBS.)																				
			330	320	310	300	290	280	270	260	250	240	230	220	210	200	190	180	170				
410 -57°C	0.78	449	EPR																1.91	1.84	1.79	1.74	1.69
			NAM/1000#																41.3	44.9	47.9	50.8	53.9
390 -57°C	0.78	449	EPR												1.90	1.84	1.79	1.74	1.70	1.67	1.63		
			NAM/1000#												38.2	40.8	43.3	45.7	47.9	50.0	52.1		
370 -57°C	0.78	449	EPR												1.88	1.83	1.79	1.74	1.71	1.67	1.64	1.61	1.58
			NAM/1000#												35.4	37.5	39.6	41.5	43.4	45.1	46.7	48.2	49.6
350 -54°C	0.78	451	EPR						1.91	1.86	1.81	1.77	1.74	1.70	1.67	1.64	1.61	1.58	1.57	1.55	1.54	1.53	1.55
			NAM/1000#						31.0	33.1	34.9	36.5	38.1	39.6	41.0	42.8	43.8	44.0	45.9	46.8	48.2	49.6	51.5
330 -50°C	0.78	455	EPR			1.92	1.87	1.83	1.79	1.76	1.72	1.69	1.67	1.64	1.61	1.59	1.57	1.55	1.54	1.53	1.52	1.51	1.53
			NAM/1000#			28.1	29.5	31.1	32.5	33.8	35.1	36.3	37.5	38.7	39.8	40.7	41.6	42.3	43.0	43.8	44.8	45.8	46.8
310 -46°C	0.78	459	EPR		1.84	1.80	1.77	1.74	1.71	1.68	1.66	1.64	1.61	1.59	1.57	1.56	1.54	1.53	1.52	1.51	1.50	1.49	1.48
			NAM/1000#		28.5	29.3	30.4	31.5	32.6	33.6	34.5	35.5	36.4	37.1	37.8	38.5	39.1	39.7	40.3	41.0	41.8	42.5	43.2
290 -42°C	0.78	463	EPR	1.76	1.74	1.72	1.69	1.67	1.65	1.63	1.60	1.58	1.57	1.56	1.54	1.54	1.53	1.51	1.51	1.49	1.48	1.47	1.46
			NAM/1000#	27.1	28.3	29.4	30.3	31.1	31.9	32.7	33.4	34.0	34.6	35.1	35.6	36.1	36.6	37.2	37.6	38.1	38.6	39.1	39.6
280 -40°C	0.78	465	EPR	1.73	1.71	1.68	1.66	1.64	1.62	1.60	1.58	1.57	1.56	1.54	1.54	1.53	1.51	1.51	1.49	1.48	1.47	1.46	1.45
			NAM/1000#	27.0	28.5	29.2	30.0	30.7	31.4	32.0	32.6	33.1	33.6	34.1	34.5	35.0	35.5	36.0	36.3	36.8	37.3	37.8	38.3
270 -38°C	0.78	467	EPR	1.71	1.68	1.66	1.64	1.61	1.59	1.58	1.57	1.55	1.54	1.54	1.53	1.51	1.50	1.48	1.48	1.47	1.46	1.45	1.44
			NAM/1000#	26.9	28.2	28.9	29.6	30.2	30.8	31.3	31.8	32.2	32.6	33.0	33.5	33.9	34.4	34.8	35.3	35.8	36.3	36.8	37.3
260 -37°C	0.78	469	EPR	1.68	1.65	1.63	1.61	1.60	1.58	1.56	1.55	1.54	1.54	1.53	1.51	1.50	1.49	1.47	1.47	1.46	1.45	1.44	1.43
			NAM/1000#	26.7	27.9	28.5	29.1	29.5	30.0	30.4	30.8	31.2	31.6	32.0	32.4	32.9	33.3	33.7	34.1	34.5	35.0	35.4	35.8
250 -35°C	0.78	471	EPR	1.64	1.62	1.60	1.59	1.57	1.56	1.55	1.54	1.53	1.53	1.51	1.50	1.49	1.48	1.46	1.46	1.45	1.44	1.43	1.42
			NAM/1000#	2.61	27.5	28.0	28.4	28.8	29.3	29.6	29.9	30.3	30.7	31.0	31.4	31.9	32.2	32.6	33.0	33.4	33.8	34.2	34.6
240 -33°C	0.78	473	EPR	1.61	1.60	1.58	1.57	1.56	1.55	1.54	1.53	1.53	1.51	1.50	1.49	1.48	1.47	1.46	1.45	1.44	1.43	1.42	1.41
			NAM/1000#	25.8	26.9	27.3	27.7	28.1	28.4	28.7	29.1	29.4	29.7	30.1	30.5	30.8	31.1	31.6	31.9	32.2	32.6	33.0	33.4
230 -31°C	0.78	475	EPR	1.60	1.58	1.57	1.56	1.55	1.54	1.53	1.53	1.51	1.50	1.49	1.48	1.47	1.46	1.45	1.45	1.44	1.43	1.42	1.41
			NAM/1000#	25.0	26.3	26.7	27.0	27.3	27.0	27.9	28.2	28.5	28.8	29.1	29.4	29.8	30.2	30.5	30.8	31.1	31.4	31.7	32.0
220 -29°C	0.78	477	EPR	1.58	1.56	1.55	1.54	1.53	1.53	1.52	1.51	1.50	1.49	1.48	1.47	1.46	1.45	1.45	1.44	1.43	1.42	1.41	1.40
			NAM/1000#	24.6	25.6	25.9	26.2	26.5	26.7	27.0	27.3	27.6	27.9	28.2	28.5	29.1	29.2	29.4	29.7	30.0	30.3	30.6	30.9
210 -27°C	0.78	479	EPR	1.57	1.55	1.54	1.54	1.53	1.52	1.51	1.50	1.49	1.48	1.47	1.46	1.45	1.44	1.43	1.42	1.41	1.40	1.39	1.38
			NAM/1000#	24.1	25.0	25.2	25.4	25.7	26.0	26.2	26.2	26.7	27.1	27.3	27.6	27.9	28.2	28.7	29.1	29.4	29.7	30.0	30.3

ADJUSTMENTS: TAS (knots) is for standard temperature. Add 1 knot/°C above standard. Subtract 1 knot/°C below standard.

Fuel consumption (1000#/hr) $\frac{\text{TAS for actual temperature}}{\text{NAM/1000\#}}$

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4 - ENGINE LONG-RANGE - JT3D - 3B

FLT LVL	STD. TEMP	GROSS WEIGHT (1000 LBS)																						
		325	315	305	295	285	275	265	255	245	235	225	215	205	195	185	175	165						
410	EPR												1.95	1.88	1.82	1.76	1.71	1.65						
-57°C	M/TAS												.796/458					.746/429						
	NAM/1000#												40.4	43.1	46.1	48.7	51.4	54.8						
390	EPR											1.94	1.88	1.83	1.78	1.72	1.67	1.64						
-57°C	M/TAS											.798/459						.736/424						
	NAM/1000#											37.1	39.5	41.6	43.8	46.6	48.9	51.0	53.9					
390	EPR										1.99	1.91	1.86	1.82	1.77	1.73	1.69	1.54						
-57°C	M/TAS							.805/463			.791/455				.784/451			.717/413						
	NAM/1000#							32.2			34.7	36.5	38.3	40.3	42.1	44.0	46.5	48.3	50.1	52.8				
350	EPR							1.94	1.89	1.85	1.80	1.76	1.72	1.68	1.64	1.61	1.56	1.54	1.51	1.47				
-54°C	M/TAS							.798/461			.781/452				.768/444			.729/422		.695/402				
	NAM/1000#							30.7	32.3	33.8	35.6	37.2	38.7	40.6	42.0	43.4	45.7	47.2	48.6	50.8				
330	EPR							1.97	1.92	1.88	1.82	1.78	1.74	1.70	1.67	1.64	1.60	1.57	1.55	1.50	1.48	1.46		
-50°C	M/TAS							.810/463			.784/457				.766/447			.748/437		.709/414		.668/390		
	NAM/1000#							27.2	28.6	29.8	31.8	33.0	34.3	35.9	37.2	38.4	39.9	41.2	42.3	44.4	45.6	46.7	48.6	
310	EPR							1.87	1.83	1.80	1.77	1.72	1.69	1.66	1.62	1.60	1.57	1.54	1.52	1.50	1.46	1.44	1.42	
-46°C	M/TAS							.802/472			.796/468				.766/451			.748/440		.730/430		.682/402		.636/375
	NAM/1000#							27.3	28.6	29.6	30.6	32.2	33.3	34.3	35.6	36.6	37.6	38.9	39.9	40.9	42.7	43.7	44.7	46.6
290	EPR							1.76	1.73	1.70	1.67	1.64	1.61	1.59	1.56	1.54	1.52	1.48	1.47	1.45	1.41	1.40	1.38	
-42°C	M/TAS							.780/463			.776/461				.751/446			.728/433		.704/418		.654/388		.611/363
	NAM/1000#							28.0	29.0	29.9	30.8	31.9	32.8	33.7	34.9	35.7	36.6	37.8	38.6	39.4	40.9	41.8	42.8	44.7
280	EPR							1.71	1.68	1.66	1.64	1.60	1.58	1.56	1.53	1.51	1.49	1.46	1.44	1.43	1.39	1.38	1.36	
-40°C	M/TAS							.770/459			.765/456				.745/444			.718/428		.686/409		.641/383		.602/359
	NAM/1000#							28.2	29.1	29.9	30.6	31.7	32.5	33.2	34.4	35.2	36.0	37.1	37.9	38.6	40.0	41.0	41.9	43.8
270	EPR							1.67	1.65	1.62	1.60	1.57	1.55	1.54	1.50	1.49	1.47	1.44	1.42	1.41	1.37	1.36	1.34	
-38°C	M/TAS							.761/455			.754/452				.738/442			.710/425		.670/401		.630/378		.594/359
	NAM/1000#							28.2	28.9	29.7	30.4	31.3	32.0	32.7	33.9	34.6	35.2	36.3	37.1	37.8	39.2	40.2	41.1	42.9
260	EPR							1.64	1.61	1.59	1.57	1.55	1.53	1.51	1.48	1.46	1.45	1.42	1.40	1.39	1.35	1.34	1.32	
-37°C	M/TAS							.752/452			.744/447				.730/439			.701/422		.656/395		.622/374		.588/354
	NAM/1000#							28.0	28.7	29.4	30.1	30.9	31.5	32.2	33.2	33.0	34.5	35.6	36.3	37.0	38.4	39.3	40.2	41.8
250	EPR							1.60	1.58	1.56	1.55	1.52	1.50	1.49	1.46	1.45	1.43	1.40	1.38	1.37	1.34	1.32	1.21	
-35°C	M/TAS							.743/449			.738/446				.721/435			.692/418		.646/390		.613/371		.580/350
	NAM/1000#							27.8	28.5	29.1	29.6	30.5	31.1	31.6	32.6	33.1	33.7	34.8	35.5	36.3	37.6	38.5	39.4	40.7
240	EPR							1.57	1.55	1.54	1.52	1.49	1.48	1.47	1.44	1.43	1.42	1.38	1.37	1.35	1.32	1.31	1.29	
-33°C	M/TAS							.736/446			.730/443				.709/430			.682/414		.639/388		.604/367		.571/346
	NAM/1000#							27.5	28.1	28.7	29.2	30.0	30.6	31.1	31.9	32.4	32.9	34.1	34.8	35.5	36.9	37.7	38.5	39.6
230	EPR							1.54	1.53	1.51	1.50	1.47	1.46	1.44	1.42	1.41	1.40	1.36	1.35	1.34	1.30	1.29	1.28	
-31°C	M/TAS							.729/444			.723/440				.695/423			.668/407		.634/386		.599/365		.559/341
	NAM/1000#							27.1	27.7	28.2	28.7	29.5	30.0	30.5	31.2	31.8	32.3	33.4	34.0	34.7	36.1	36.8	37.5	38.6
220	EPR							1.52	1.50	1.49	1.48	1.45	1.44	1.42	1.40	1.39	1.38	1.35	1.34	1.32	1.29	1.28	1.27	
-29°C	M/TAS							.723/442			.716/438				.680/416			.652/399		.627/384		.590/361		.544/333
	NAM/1000#							26.7	27.3	27.7	28.2	28.4	29.4	29.8	30.6	31.1	31.7	32.7	33.3	33.9	35.2	35.8	36.4	37.7
210	EPR							1.50	1.48	1.47	1.46	1.43	1.42	1.41	1.38	1.37	1.36	1.33	1.32	1.31	1.28	1.27	1.26	
-27°C	M/TAS							.717/440			.708/435				.669/411			.640/393		.620/381		.580/357		.529/324
	NAM/1000#							26.3	26.8	27.2	27.6	28.3	28.8	29.1	30.4	30.6	31.1	32.0	32.6	33.2	34.3	34.9	35.5	36.9
130	EPR							1.35	1.33	1.32	1.31	1.29	1.29	1.28	1.26	1.25	1.24	1.22	1.21	1.20	1.18	1.17	1.16	
-11°C	M/TAS							.632/399			.619/391				.597/377			.567/358		.529/334		.490/309		.454/287
	NAM/1000#							22.6	23.0	23.3	23.7	24.2	24.5	24.8	25.3	25.7	26.0	26.8	27.3	27.7	28.7	29.4	29.8	30.9

- NOTES:**
- EPR and NAM/1000# are for listed indicated Mach number. When operating in region of shaded EPR determine and set Max. Cruise Thrust EPR if less than listed value.
 - TAS (knots) is for standard temperature. Add 1 knot/°C above standard. Subtract 1 knot/°C above standard.
 - Fuel consumption (1000#/hr) = $\frac{\text{TAS for actual temperature}}{\text{NAM/1000\#}}$

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MAXIMUM CRUISE EPR

DC-8-62 JT3D-3B

RAT °C	SL - 30T		35T	40T
50	1.36	ANY		
45	1.40	ICING		
40	1.43	BLEED		
35	1.47	ON		
30	1.50	↓		
25	1.54			
20	1.57			
15	1.61	↓		
10	1.65	1.59	1.62	1.59
5	1.69	1.62	1.65	1.62
0	1.72	1.65	1.69	1.66
-5	1.76	1.67	1.73	1.70
-10	1.79	1.70	1.76	1.74
-15	1.83	1.73	1.80	1.78
-20	1.86	1.75	1.83	1.81
-25	1.89	1.78	1.86	1.85
-30	1.92	1.80	1.90	1.87
-35	1.95	1.82	1.93	1.91
-40	1.97	1.85	1.95	1.93
-45	1.99		1.97	1.95
-50	2.01		1.99	1.97

ADJUSTMENTS: IF RAIN REMOVAL IS ON, SUBTRACT .01.

FOR EACH 3° ABOVE STANDARD TEMPERATURE, ADD .01 UP TO A TOTAL MAXIMUM INCREASE OF .05 FOR T_s + 15°C AND ABOVE.

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DC-8/62 JT3D-3B 3- ENGINE LONG-RANGE CRUISE

FLT LVL STD TEMP		GROSS WEIGHT - X -1000 LBS																												
		325	315	305	295	285	275	265	255	245	235	225	215	205	195	185	175	165												
370 -57°C	EPR														1.96	1.91	1.87	1.81												
	M/TAS														.740/426			.703/405												
	NAM/1000#														43.4	45.4	47.2	50.2												
350 -54°C	EPR													2.00	1.96	1.93	1.87	1.73												
	M/TAS													.754/436			.718/415	.671/388												
	NAM/1000#													37.8	39.4	40.9	43.2	44.8	46.5	49.4										
330 -50°C	EPR													2.00	1.96	1.92	1.88	1.85	1.78	1.75	1.72	1.66								
	M/TAS													.759/443			.738/431	.690/403	.645/376											
	NAM/1000#													34.7	36.1	37.5	38.8	40.1	42.5	44.1	45.5	48.0								
310 -46°C	EPR													1.99	1.94	1.91	1.88	1.83	1.80	1.77	1.71	1.69	1.66	1.60						
	M/TAS													.772/455			.738/434	.712/419	.667/393	.625/368										
	NAM/1000#													31.8	33.3	34.4	35.5	37.1	38.3	39.4	41.5	42.9	44.2	46.6						
290 -42°C	EPR													1.97	1.94	1.91	1.85	1.83	1.80	1.75	1.73	1.70	1.65	1.63	1.60	1.55				
	M/TAS													.754/448			.709/421	.680/404	.649/385	.609/362										
	NAM/1000#													29.7	30.6	31.4	33.1	34.1	35.1	36.5	37.6	38.6	40.3	41.5	42.7	44.9				
280 -40°C	EPR													1.99	1.96	1.93	1.90	1.87	1.81	1.79	1.76	1.72	1.69	1.67	1.62	1.60	1.58	1.52		
	M/TAS													.758/452			.743/443	.696/415	.667/398	.640/382	.598/357									
	NAM/1000#													27.8	28.6	29.6	30.4	31.2	32.9	33.8	34.7	36.1	37.1	38.1	39.7	40.8	41.9	44.0		
270 -38°C	EPR													1.97	1.95	1.92	1.88	1.86	1.83	1.78	1.75	1.73	1.69	1.66	1.64	1.59	1.57	1.55	1.49	
	M/TAS													.747/448			.730/437	.686/411	.655/393	.631/378	.585/351									
	NAM/1000#													27.0	27.7	28.5	29.5	30.2	31.0	32.5	33.4	34.3	35.6	36.6	37.6	39.1	40.2	41.2	43.2	
260 -37°C	EPR	1.96	1.93	1.91	1.88	1.84	1.82	1.80	1.74	1.72	1.70	1.66	1.63	1.61	1.57	1.54	1.52	1.46	1.44	1.43	1.37	1.35	1.33	1.27	1.25	1.19	1.17	1.11	1.05	
	M/TAS	.751/451		.739/443			.720/432			.679/407			.646/389			.619/372			.570/343											
	NAM/1000#	26.1	26.9	27.6	28.3	29.3	30.0	30.8	32.2	33.0	33.8	35.1	36.1	37.0	38.5	39.5	40.5	42.4												
250 -35°C	EPR	1.92	1.89	1.87	1.85	1.81	1.78	1.76	1.71	1.69	1.67	1.63	1.60	1.58	1.54	1.52	1.50	1.44	1.42	1.41	1.35	1.33	1.31	1.25	1.23	1.17	1.15	1.09	1.03	0.97
	M/TAS	.743/448		.730/440			.709/427			.669/403			.639/385			.608/366			.559/337											
	NAM/1000#	26.0	26.8	27.4	28.1	29.1	29.8	30.5	31.8	32.6	33.3	34.7	35.5	36.4	37.9	38.8	39.7	41.6												
240 -33°C	EPR	1.88	1.85	1.83	1.81	1.77	1.75	1.73	1.69	1.67	1.65	1.60	1.58	1.56	1.51	1.49	1.47	1.42	1.40	1.39	1.33	1.31	1.29	1.23	1.21	1.15	1.13	1.07	1.01	0.95
	M/TAS	.735/445		.723/437			.699/423			.664/402			.631/382			.593/359			.546/330											
	NAM/1000#	25.8	26.6	27.2	27.8	28.8	29.5	30.1	31.3	32.0	32.8	34.1	35.0	35.8	37.2	38.1	39.1	40.8												
230 -31°C	EPR	1.85	1.82	1.80	1.78	1.74	1.72	1.70	1.66	1.64	1.62	1.57	1.55	1.53	1.49	1.47	1.45	1.40	1.38	1.37	1.31	1.29	1.27	1.21	1.19	1.13	1.11	1.05	0.99	0.93
	M/TAS	.727/442		.713/433			.687/417			.656/398			.623/378			.583/354			.536/325											
	NAM/1000#	25.6	26.4	27.0	27.6	28.5	29.1	29.7	30.9	31.5	32.2	33.6	34.3	35.1	36.5	37.4	38.3	40.1												
220 -29°C	EPR	1.81	1.78	1.78	1.74	1.71	1.69	1.67	1.63	1.61	1.59	1.55	1.53	1.51	1.46	1.44	1.43	1.37	1.35	1.33	1.27	1.25	1.23	1.17	1.15	1.09	1.07	1.01	0.95	0.89
	M/TAS	.716/437		.701/427			.675/412			.646/394			.613/374			.570/347			.527/321											
	NAM/1000#	25.4	26.2	26.8	27.3	28.2	28.8	29.3	30.4	31.1	31.7	33.0	33.7	34.4	35.8	36.7	37.6	39.3												
210 -27°C	EPR	1.76	1.75	1.73	1.71	1.68	1.66	1.64	1.60	1.58	1.56	1.52	1.51	1.49	1.44	1.42	1.41	1.35	1.33	1.31	1.25	1.23	1.21	1.15	1.13	1.07	1.05	0.99	0.93	0.87
	M/TAS	.703/430		.688/421			.661/405			.635/389			.602/368			.561/343			.518/317											
	NAM/1000#	25.3	25.9	26.5	27.0	27.9	28.4	29.0	30.0	30.7	31.3	32.4	33.1	33.8	35.1	35.9	36.8	38.5												
200 -25°C	EPR	1.74	1.72	1.70	1.68	1.65	1.63	1.61	1.57	1.55	1.54	1.50	1.48	1.47	1.42	1.40	1.39	1.33	1.31	1.29	1.23	1.21	1.19	1.13	1.11	1.05	1.03	0.97	0.91	0.85
	M/TAS	.690/424		.675/415			.650/399			.623/383			.591/363			.553/340			.509/313											
	NAM/1000#	25.0	25.7	26.2	26.6	27.5	28.0	28.6	29.6	30.2	30.8	31.8	32.5	33.2	34.4	35.2	36.0	37.7												
190 -23°C	EPR	1.71	1.68	1.67	1.66	1.62	1.60	1.58	1.54	1.53	1.51	1.47	1.46	1.44	1.40	1.39	1.37	1.31	1.29	1.27	1.21	1.19	1.17	1.11	1.09	1.03	1.01	0.95	0.89	0.83
	M/TAS	.679/419		.663/409			.640/395			.611/377			.580/358			.548/338			.499/308											
	NAM/1000#	24.7	25.4	25.8	26.3	27.1	27.7	28.2	29.1	29.7	30.2	31.2	31.9	32.5	33.7	34.5	35.2	36.9												
180 -21°C	EPR	1.68	1.66	1.64	1.62	1.59	1.57	1.56	1.52	1.51	1.49	1.45	1.44	1.42	1.38	1.37	1.35	1.29	1.27	1.25	1.19	1.17	1.15	1.09	1.07	1.01	0.99	0.93	0.87	0.81
	M/TAS	.669/414		.653/404			.631/391			.600/372			.569/352			.539/334			.489/303											
	NAM/1000#	24.4	25.0	25.5	25.9	26.7	27.2	27.7	28.6	29.1	29.7	30.7	31.3	31.9	33.1	33.8	34.6	36.2												

- NOTES:**
- EPR and NAM/1000# are for listed indicated Mach number. When operating in region of shaded EPR's, determine and set Max. Continuous Thrust EPR if less than listed value.
 - TAS (knots) is for standard temperature. Add 8 knots/10°C above standard. Subtract 8 knots/10°C below standard.
 - Fuel consumption (1000#/hr) = $\frac{\text{TAS for actual temperature}}{\text{NAM/1000\#}}$

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2- ENGINE LONG-RANGE CRUISE DC-8/62 JT3D-3B

FLT LVL STD TEMP		GROSS WEIGHT - X -1000 LBS																
		325	315	305	295	285	275	265	255	245	235	225	215	205	195	185	175	165
270 -38°C	EPR															1.98	1.95	1.87
	M/TAS															.597/358		.563/337
	NAM/1000#															36.9	38.3	40.7
250 -35°C	EPR														1.93	1.90	1.88	1.78
	M/TAS														.573/346		.536/324	
	NAM/1000#														35.0	36.4	37.8	40.1
230 -31°C	EPR											1.96	1.93	1.85	1.82	1.79		1.70
	M/TAS											.592/360		.552/336		.511/311		
	NAM/1000#											31.6	32.7	34.5	35.8	37.1		39.2
210 -27°C	EPR										1.91	1.88	1.85	1.78	1.75	1.72		1.64
	M/TAS										.569/350		.536/329		.493/302			
	NAM/1000#										30.2	31.2	32.2	33.9	35.1	36.2		38.2
190 -23°C	EPR									1.92	1.89	1.83	1.80	1.78	1.71	1.69	1.66	1.58
	M/TAS									.580/359		.550/341		.523/324		.479/296		
	NAM/1000#									27.6	28.4	29.7	30.6	31.6	33.1	34.1	35.1	37.0
170 -19°C	EPR						1.92	1.87	1.84	1.82	1.76	1.74	1.71	1.66	1.63	1.61		1.53
	M/TAS					.577/360		.558/348		.535/334		.510/318		.466/290				
	NAM/1000#						25.5	26.4	27.2	28.0	29.2	30.0	30.8	32.1	33.0	33.9		35.7
150 -15°C	EPR					1.88	1.85	1.80	1.77	1.75	1.70	1.68	1.65	1.60	1.58	1.56		1.48
	M/TAS					.569/358		.541/340		.520/327		.494/310		.451/283				
	NAM/1000#					24.4	25.0	26.0	26.7	27.4	28.5	29.2	30.0	31.2	32.0	32.8		34.4
130 -11°C	EPR			1.87	1.83	1.80	1.78	1.74	1.72	1.70	1.64	1.62	1.60	1.54	1.52	1.50		1.44
	M/TAS		.570/360		.549/348		.533/338		.504/319		.473/299		.436/276					
	NAM/1000#			22.7	23.4	24.0	24.5	25.4	26.0	26.6	27.7	28.4	29.0	30.3	31.0	31.8		33.4
110 -7°C	EPR		1.84	1.82	1.80	1.76	1.74	1.72	1.68	1.66	1.64	1.58	1.56	1.54	1.49	1.47	1.45	1.39
	M/TAS		.550/351		.535/342		.518/331		.484/309		.452/289		.436/276					
	NAM/1000#		21.3	21.8	22.3	23.0	23.5	24.0	24.8	25.3	25.9	27.0	27.6	28.2	29.2	30.0	30.7	32.2
90 -3°C	EPR	1.82	1.78	1.76	1.74	1.70	1.69	1.67	1.62	1.60	1.59	1.53	1.51	1.49	1.44	1.42	1.41	1.36
	M/TAS	.556/358		.537/346		.524/337		.499/320		.466/299		.438/281		.410/263				
	NAM/1000#	20.3	21.0	21.4	21.8	22.5	22.9	23.4	24.1	24.6	25.1	26.1	26.7	27.3	28.4	29.1	29.7	31.0
70 1°C	EPR	1.75	1.72	1.70	1.68	1.65	1.63	1.62	1.56	1.55	1.53	1.48	1.47	1.45	1.40	1.39	1.37	1.33
	M/TAS	.540/348		.527/340		.510/331		.482/312		.450/292		.424/274		.399/258				
	NAM/1000#	19.9	20.5	20.9	21.2	21.8	22.2	22.7	23.5	24.0	24.4	25.2	25.8	26.3	27.4	28.1	28.7	29.7
50 5°C	EPR	1.69	1.66	1.65	1.64	1.59	1.58	1.56	1.52	1.50	1.49	1.44	1.42	1.41	1.37	1.35	1.34	1.30
	M/TAS	.523/341		.513/335		.490/320		.465/304		.437/285		.410/268		.387/253				
	NAM/1000#	19.5	19.9	20.3	20.6	21.3	21.7	22.1	22.7	23.2	23.6	24.4	25.0	25.5	26.4	27.0	27.6	28.6
30 9°C	EPR	1.64	1.61	1.59	1.56	1.54	1.52	1.51	1.47	1.46	1.45	1.40	1.39	1.38	1.34	1.33	1.32	1.28
	M/TAS	.507/328		.495/325		.471/309		.452/297		.426/280		.400/263		.377/248				
	NAM/1000#	19.0	19.4	19.8	20.1	20.7	21.1	21.4	22.0	22.4	22.8	23.7	24.2	24.6	25.4	25.9	26.4	27.5
10 13°C	EPR	1.59	1.55	1.54	1.53	1.49	1.48	1.46	1.43	1.42	1.41	1.37	1.36	1.35	1.31	1.30	1.29	1.26
	M/TAS	.495/326		.478/316		.454/300		.438/290		.415/274		.390/257		.368/243				
	NAM/1000#	18.5	18.9	19.2	19.5	20.0	20.4	20.7	21.3	21.7	22.1	22.8	23.3	23.7	24.5	25.0	25.4	26.3

- NOTES:
- EPR and NAM/1000# are for listed indicated Mach number. When operating in region of shaded EPR's, determine and set Max. Continuous Thrust EPR if less than listed value.
 - TAS (knots) is for standard temperature. Add 8 knots/10°C above standard. Subtract 8 knots/10°C below standard.
 - Fuel consumption (1000#/hr) = $\frac{\text{TAS for actual temperature}}{\text{NAM/1000\#}}$

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DC-8/62 - JT3D-3B

TIME, DISTANCE AND FUEL FOR NORMAL DESCENT

FINAL CRUISE ALTITUDE	TIME (MIN.)	DISTANCE (N.MI.)	FUEL (POUNDS)
41,000	26	160	2950
39,000	24	144	2720
37,000	22	127	2460
35,000	20	110	2150
33,000	19	99	2000
31,000	18	94	1970
29,000	18	90	1940
28,000	17	88	1930
27,000	17	86	1910
26,000	17	85	1900
25,000	16	81	1880
24,000	16	78	1860
23,000	16	75	1840
22,000	15	72	1820
21,000	15	70	1800
20,000	14	67	1790
19,000	14	65	1770
18,000	14	65	1750
17,000	14	60	1730
16,000	13	58	1710
15,000	13	56	1700
10,000	12	45	1520
5,000	7	21	1290

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DC-8/62 - JT3D-3B HOLDING SPEEDS AND FUEL FLOW

4 ENGINE

GROSS WEIGHT	205	215	225	235	245
PRESS. ALT	F/F IAS	F/F IAS	F/F IAS	F/F IAS	F/F IAS
1,000	9840 195	10260 200	10604 200	11332 200	11332 200
3,000	9692 197	10068 201	10480 201	10760 201	11148 201
5,000	9496 198	9932 201	10192 201	10552 201	10980 201
7,000	9364 200	9656 206	10048 210	10380 210	10734 210
9,000	9120 202	9438 209	9882 211	10220 211	10576 211
11,000	8992 205	9376 211	9700 211	10040 211	10396 211
13,000	8848 208	9336 212	9896 212	9896 212	10232 212
15,000	8848 212	9304 219	9736 226	10144 231	10420 231
17,000	8564 202	8960 207	9348 213	9748 219	10174 225
19,000	8460 203	8848 210	9276 216	9708 223	9708 223
21,000	8384 206	8804 212	9220 219	9664 227	10068 230
23,000	8332 209	8744 216	9224 224	9680 231	10016 231
25,000	8340 214	8816 223	9308 231	9628 231	9964 231
27,000	8056 196	8608 203	8946 211	9393 219	9872 228
29,000	8080 201	8512 209	8984 218	9440 227	9860 231
31,000	8112 208	8568 218	9072 227	9492 231	9852 231

TEMPERATURE STANDARD + 10° ADD 2%

TEMPERATURE STANDARD - 10° SUBTRACT 2%

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DC-8-62 JT3D-3B NORMAL LANDING SPEEDS (KNOTS I.A.S.)

Weight (1000 Lb.)	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	355
Flare (Vth) 50° FL	119	122	125	128	131	134	137	140	143	146	148	149	154	156	159	161	163	165	167
Flare (Vth) 35° FL	124	127	130	133	136	139	142	145	148	151	153	154	159	161	164	166	168	170	172
Flare (Vth) 23° FL	130	132	135	139	141	145	148	151	154	157	159	161	165	167	170	171	175	178	182
Maneuver 23° Flaps	146	150	154	158	161	165	168	172	175	178	180	181	187	190	193	196	199	202	203
Maneuver 12° Flaps	159	163	167	171	176	180	184	188	192	196	200	204	207	210	213	217	221	223	225
Maneuver 0° Flaps	172	177	181	186	190	194	198	202	206	210	212	214	222	226	229	233	246	239	241

4 ENGINE GO-AROUND

Temp °C	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45
P.A. - S.L.	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.81	1.78	1.73	1.68
1000'	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
2000'	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
3000'	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
4000'	2.02	2.02	2.02	2.02	2.02	2.02	2.02	1.99	1.98	1.98	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68
5000' and above	2.08	2.08	2.07	2.06	2.04	2.03	2.01	1.99	1.96	1.93	1.90	1.86	1.83	1.83	1.83	1.81	1.78	1.73	1.68

Adjustments: A/C Ice Protection reduce EPR by .02
Rain Removal - reduce EPR by .01
3-Engine Go-Around - reduce EPR by .01

STALL AND LANDING SPEEDS

GROSS WEIGHT 1000 LBS	STALL SPEED (KIAS) 0' TO 15,000' MSL																			
	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350
0° FLAPS	112	116	119	122	125	128	131	134	137	140	143	145	148	151	153	156	158	161	163	165
12° FLAPS	103	107	109	112	115	118	121	124	127	129	131	134	137	139	141	143	146	148	150	152
18° FLAPS	99	102	104	107	110	113	115	118	121	123	126	128	130	132	134	137	139	141	143	145
23° FLAPS	96	99	101	104	107	109	112	115	117	119	122	124	126	128	130	132	134	136	138	140
35° FLAPS	91	93	96	99	102	104	106	108	111	113	115	118	120	122	124	126	128	130	132	134
50° FLAPS	88	91	93	96	98	101	103	105	108	110	112	114	116	118	120	122	124	126	128	130

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LEFT

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