

Airbus A300B4-203 Performance

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FLAP SETTING

Data is provided for takeoff at flaps 0, 8, and 15. Flaps 8 will normally be used for takeoff except when the TOGW requires either 0 or 15 flaps. Landing data is provided for both flaps 15 and 25. Flaps 25 will normally be used for landing.

TAKEOFF WEIGHT LIMITS

The primary means of computing TOGW limits uses the table in the Route and Airport Manual (RAM) for the particular runway. For runways not covered in the RAM or for special conditions, generalized charts in this section are used.

THRUST LIMITS

Use the thrust limit charts in this chapter to compute the bug sheet thrust settings. In-flight the N1 limit computer may be used in lieu of these charts.

DETERMINING TAKEOFF PERFORMANCE LIMITS

Two methods of determining performance limited TOGW are illustrated and described below.

T-Page Method

The T-page method utilizes tables in the RAM. There is one table for each runway and flap setting.

The 0/16 tables are computed in such a way to produce optimum TOGW limits.

In order to keep V-speeds as low as possible on routine non-performance limited takeoffs, the flaps/slats 8/16 T-page tables do not increase V-speeds to optimize performance. Consequently, flaps/slats 8/16 T-pages do not normally provide the highest possible takeoff gross weights.

Chart Method

The Chart method utilizes charts in this chapter of the AOM. These charts enable the crew to quickly determine takeoff performance out of an airport for which no T-page tables have been established. These charts are obviously conservative and usually indicate a limiting weight less than a flaps/slats 0/16 T-page calculation.

PRESSURE ALTITUDE CORRECTION

Performance data in this manual are based on pressure altitude. When the QNH is above or below standard (29.92 inches or 1013.2 millibars), field elevation should be corrected to reflect pressure altitude.

T-PAGE METHOD DETAILS

The format of the T-page is designed for the most common calculation of determining the max assumed temperature. The same table is also used to determine the maximum TOGW.

An example of the T-page table is shown below. Each page is labeled with the airport, runway and flap setting. The runway length, slope and elevation upon which the table is based is also printed. Obstacles have been considered but are not shown.

A300 Example of Weight Limit T-Page (This table is very hard to read - my apologies.)

EXAMPLE OF WEIGHT LIMIT T-PAGE

Pan Am Route and Airport Manual

Toulouse T (A300)-5

Weight Information

Apt. Elev. 499 Ft.

FLAPS/SLATS 8/16
-50C2 THRUST

RWY 15L

LENGTH: 9843 ft.

SLOPE: .13 UP

TOGW lb × 1000	WIND COMPONENT (KNOTS)					F S VFTO
	- 5	0	5	10	15	
335.0						
330.0	29 0 145-145-149	26 0 145-145-149	23 0 144-144-149	20 0 144-144-149	17 0 144-144-149	165 204 237
325.0	31 0 145-145-149	28 0 145-145-149	25 0 145-145-149	22 0 145-145-149	19 0 145-145-149	181 203 235
320.0	33 0 145-145-149	30 0 145-145-149	27 0 145-145-149	24 0 145-145-149	21 0 145-145-149	160 201 233
315.0	34 0 145-145-149	31 0 145-145-149	28 0 145-145-149	25 0 145-145-149	22 0 145-145-149	168 199 231
310.0	35 0 145-145-149	32 0 145-145-149	29 0 145-145-149	26 0 145-145-149	23 0 145-145-149	157 197 229
305.0	36 0 145-145-149	33 0 145-145-149	30 0 145-145-149	27 0 145-145-149	24 0 145-145-149	155 195 227
300.0	37 0 145-145-149	34 0 145-145-149	31 0 145-145-149	28 0 145-145-149	25 0 145-145-149	155 195 224
290.0	40 0 145-145-149	37 0 145-145-149	34 0 145-145-149	31 0 145-145-149	28 0 145-145-149	153 191 222
280.0	42 0 145-145-149	39 0 145-145-149	36 0 145-145-149	33 0 145-145-149	30 0 145-145-149	150 188 218
270.0	44 0 145-145-149	41 0 145-145-149	38 0 145-145-149	35 0 145-145-149	32 0 145-145-149	148 185 214
260.0	46 0 145-145-149	43 0 145-145-149	40 0 145-145-149	37 0 145-145-149	34 0 145-145-149	145 181 210
250.0	48 0 145-145-149	45 0 145-145-149	42 0 145-145-149	39 0 145-145-149	36 0 145-145-149	143 177 206
240.0	50 0 145-145-149	47 0 145-145-149	44 0 145-145-149	41 0 145-145-149	38 0 145-145-149	141 174 202

Table assumes QNH 29.81 in. Hg (1009.6 mb) or above, both engine bleed valves open.
Use corrections below.

Weight/Temperature gradient	Below 2 °C	0 lb per °C
Low QNH	Sub from limit:	- 1200 lb/100 ft. press. alt. or - 1 °C per 150 ft. press. alt.
Nacelle anti-ice	Sub from limit	- 3300 lb or - 2 °C
Both engine bleed valves closed	Add to limit:	+ 4400 lb or + 2 °C
Runway surface:	See AOM	

For each wind and TOGW is a box containing data in the following format:

34 C-B
1.7
166 - 170 - 173

34 = Maximum Temperature

C-B = Limitation

1.7 = Weight Increment

166 - 170 - 173 = Takeoff Speeds V1 - Vr - V2

Maximum Temperature at which the listed TOGW can be used for takeoff. This is also the assumed temperature for reduced thrust.

Limitation is a letter code denoting the type of limitation as follows:

S - Structural

C - Climb

R - Runway

O - Obstacle

T - Tire Speed

B - Brake Energy

Weight Increment is added to the TOGW in the left hand column to compute the maximum permissible TOGW corresponding to the maximum temperature shown in the box.

Takeoff Speeds are the V1, Vr and V2 for corresponding TOGW and wind.

Max Assumed Temperature

The following procedure is used to compute the maximum assumed temperature and takeoff speeds:

1. Enter table with runway wind component and trace down to actual TOGW.
2. Read assumed temperature, and make corrections to temp for low QNH and engine bleed, as applicable. If actual OAT is warmer than assumed temperature, TOGW is heavier than max allowable.
3. Read V1, Vr, and V2 from that box and trace right to read F, S and Vfto.
4. Check assumed temperature with Minimum and Maximum Assumed Temperature table (see below). If assumed temperature is colder than the minimum, reduced thrust is not allowed - use the takeoff speeds computed above and maximum takeoff thrust.

Maximum TOGW

The following procedure is used to compute the maximum allowable takeoff gross weight and takeoff speeds:

1. Enter table with runway wind component and trace down to airport OAT.
2. Read corresponding TOGW in left hand column and add to weight increment found in the box.
3. If actual OAT is between two boxes, interpolate between the two boxes. If actual OAT is colder than the OAT in the top box, extrapolate using the Weight-Temperature Gradient data at the bottom of the diagram.
4. Make corrections to max TOGW for low QNH and engine bleed, as applicable.
5. Read V1, Vr and V2 and trace right to read F, S and Vfto.

CHART METHOD DETAILS

The chart method uses charts located below. Two computation procedures are described below - one to compute max assumed temp and the other to compute max TOGW.

Max Assumed Temperature

The following procedure is used to compute the maximum assumed temperature and takeoff speeds:

1. If an obstacle is present, enter the Obstacle Clearance chart and add the correction to the actual TOGW. If no obstacle is present, do not correct actual TOGW and proceed.
2. Enter TOGW limit chart with actual TOGW from step 1, runway length, slope, pressure altitude, and wind, and determine max OAT. This is the assumed temperature.
3. If actual OAT is warmer than assumed temperature, TOGW is heavier than max allowable. Also check assumed temperature with Minimum and Maximum Assumed Temperature table (see below). If assumed temperature is colder than the minimum, reduced thrust is not allowed. If assumed temperature is hotter than the maximum, use the maximum as the assumed temperature.
4. Read the takeoff speeds from the takeoff speeds chart.

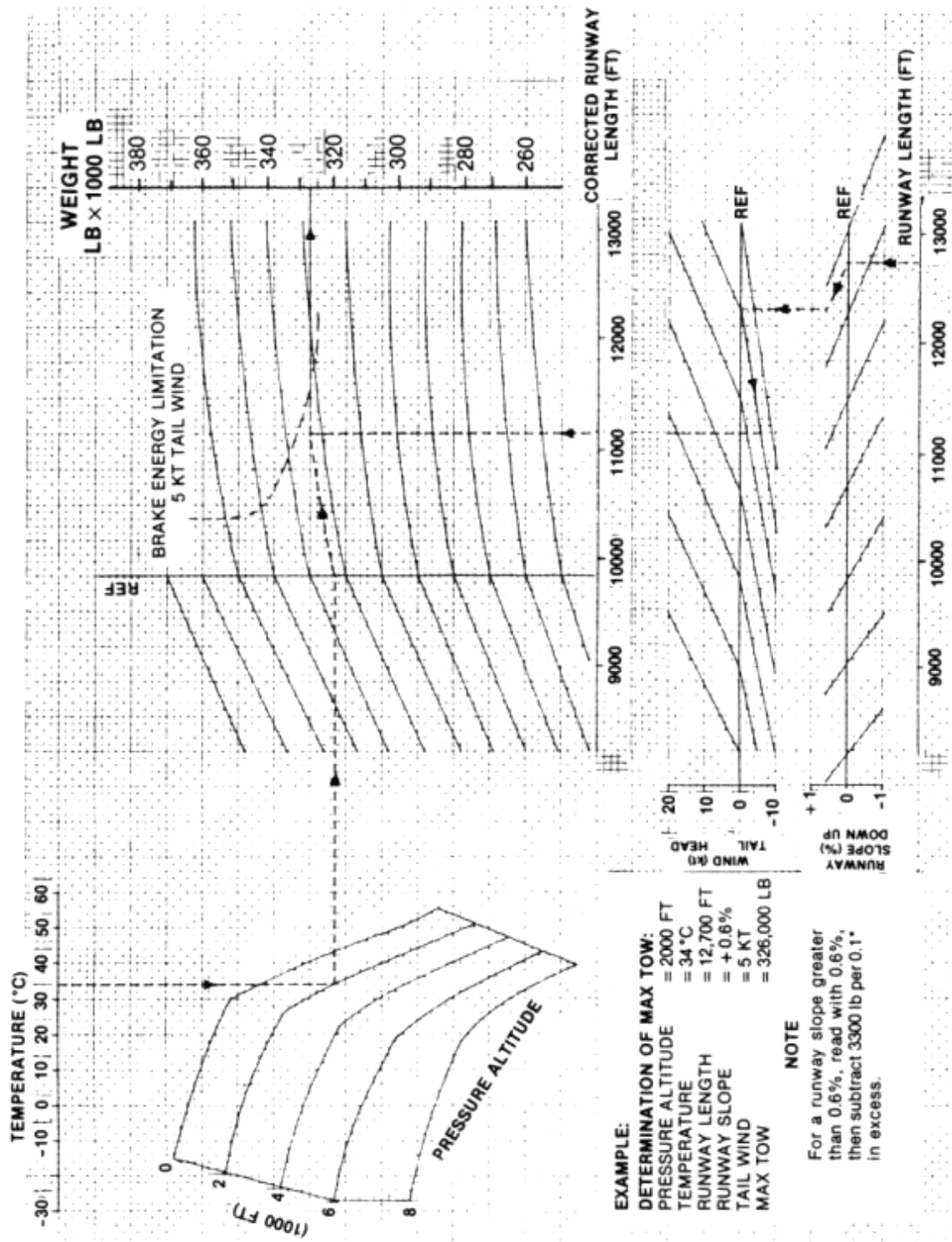
Maximum TOGW

The following procedure is used to compute the maximum allowable TOGW and takeoff speeds.

1. Enter the TOGW limit chart with runway length, slope, wind, pressure altitude, and temperature and read maximum TOGW.
2. If an obstacle is present, subtract the correction from the Obstacle Clearance Correction chart.
3. Read the takeoff speeds from the takeoff speeds chart.

TOGW LIMITED BY PERFORMANCE, FLAPS/SLATS 0/16
ENGINE BLEED VALVES OPEN

CORRECTIONS	
Bleed Condition	TOGW Correction
Both engine bleed valves closed.	+ 4400 lb
Nacelle anti-ice on.	- 3300 lb



A300 Flaps/Slats 0/16 Obstacle Clearance (Close-In Obstacles)

FLAPS/SLATS 0/16 OBSTACLE CLEARANCE (CLOSE-IN OBSTACLES)

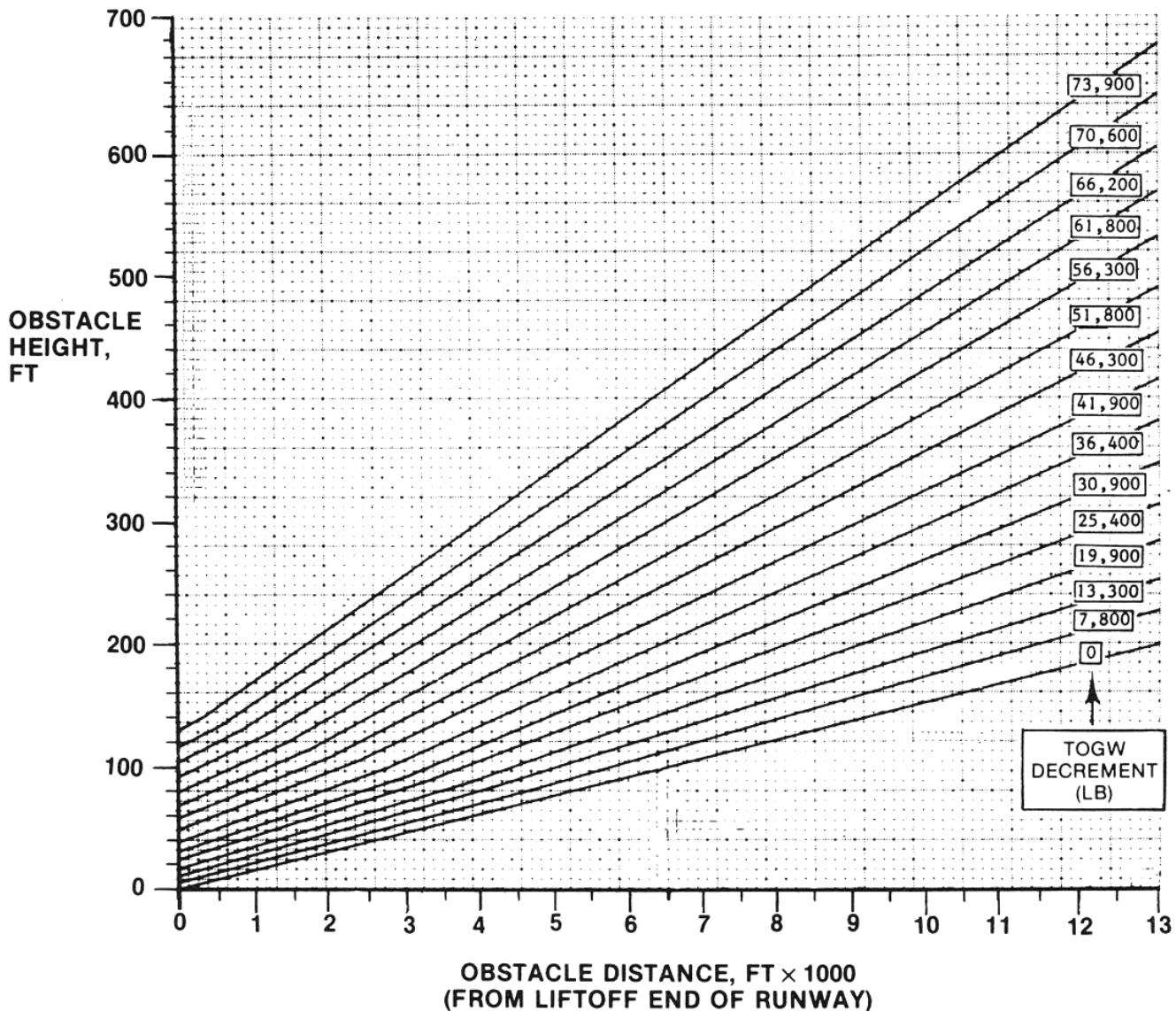


CHART USE

- Before entering the chart, correct the obstacle DISTANCE FROM BRAKE RELEASE obtained from the RAM by subtracting the runway length to obtain obstacle distance.
- Enter with obstacle distance, trace up to intercept obstacle height and read TOGW decrement.
- If the intercept point occurs below the 0 TOGW decrement line, the obstacle does not limit the airplane's performance and no TOGW decrement is required.

A300 Flaps/Slats 0/16 Obstacle Clearance (Distant Obstacles)

FLAPS/SLATS 0/16 OBSTACLE CLEARANCE (DISTANT OBSTACLES)

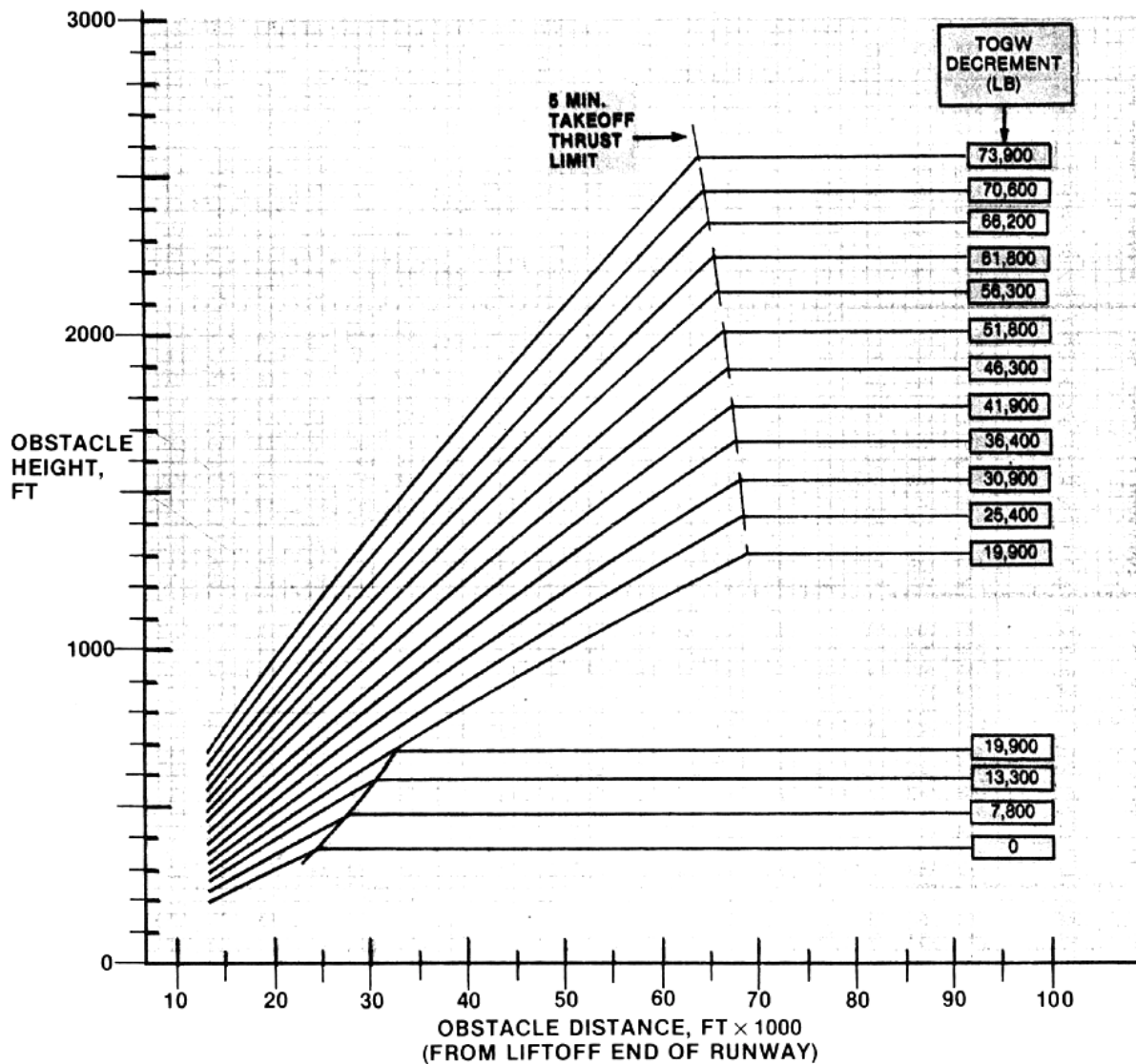


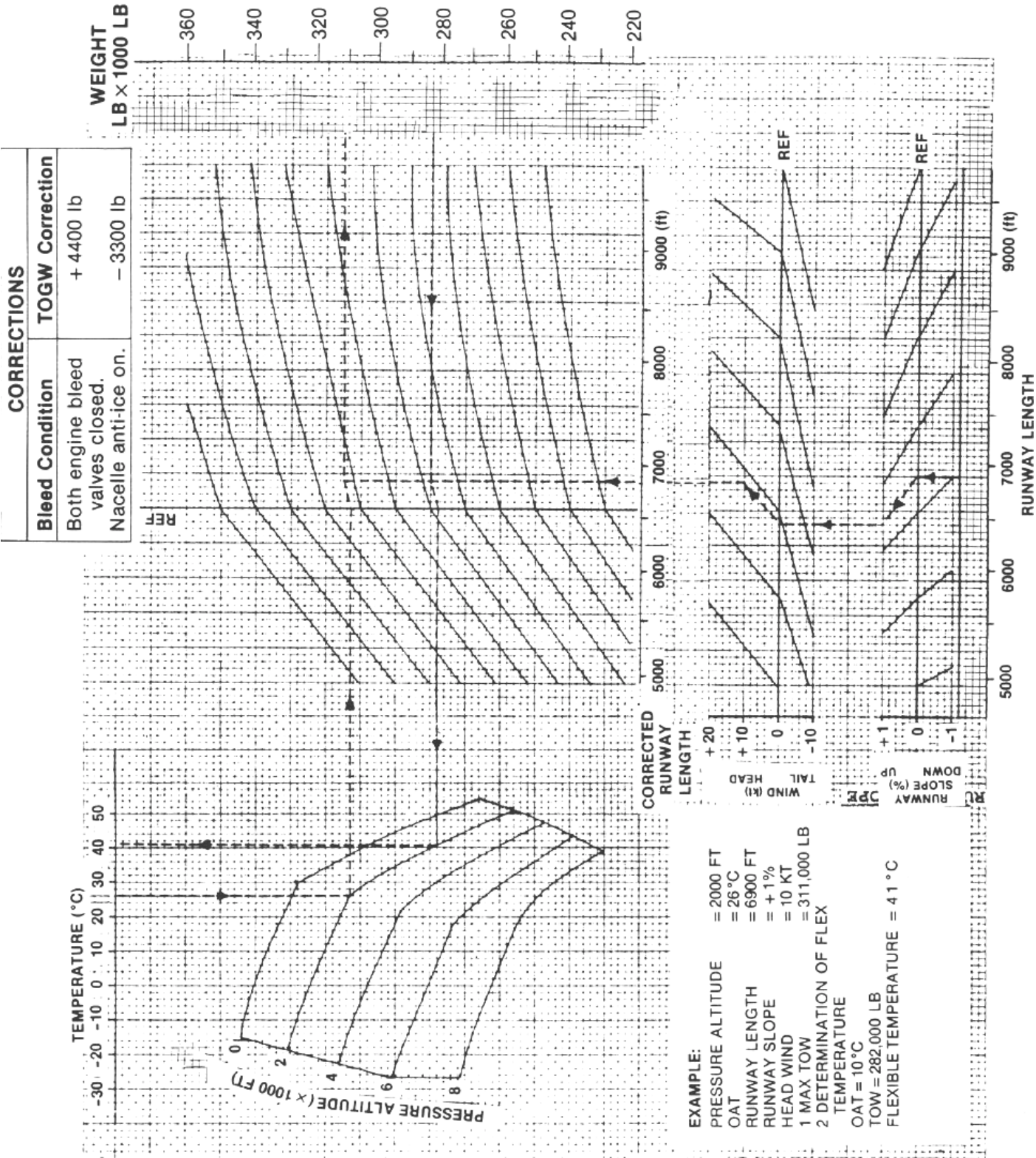
CHART USE

- Before entering the chart, correct the obstacle DISTANCE FROM BRAKE RELEASE obtained from the RAM by subtracting the runway length to obtain obstacle distance.
- Enter with obstacle distance, trace up to intercept obstacle height and read TOGW decrement.
- If the intercept point occurs below the 0 TOGW decrement line, the obstacle does not limit the airplane's performance and no TOGW decrement is required.

A300 -50C2 Takeoff Speeds Flaps/Slats 0/16

	TAKEOFF WEIGHT LB X 1000	RUNWAY LENGTH							
		8000 Ft Rwy or Less	9000 Ft Rwy	10000 Ft Rwy	11000 Ft Rwy	12000 Ft Rwy	13000 Ft Rwy & Longer		
		V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	S	VFTO
0-2000 Ft Press. Alt.	364		165 168 172	167 170 174	168 173 177	169 176 180	168 176 180	214	249
	360	161 164 168	164 167 171	166 169 173	167 172 176	168 175 179	167 175 179	213	245
	350	159 162 166	162 165 169	164 167 171	166 170 174	167 173 177	166 173 177	210	244
	340	157 160 164	160 163 167	162 165 169	165 168 172	167 171 175	166 171 175	207	240
	330	154 157 161	159 161 165	161 163 167	164 166 170	166 169 173	165 169 173	204	237
	320	152 155 159	156 158 162	159 161 165	162 164 168	165 167 171	165 167 171	201	233
	310	151 153 157	154 156 160	158 159 163	161 162 166	165 165 169	165 165 169	198	230
	300	149 151 155	153 154 158	156 157 161	159 160 164	162 163 167	162 163 167	195	226
	290	147 149 153	150 151 155	154 155 159	158 159 163	161 162 166	161 162 166	192	222
	280	145 147 151	148 149 153	152 153 157	157 158 162	160 161 165	160 161 165	188	218
	270	142 144 148	146 147 151	151 152 156	155 156 160	158 159 163	159 159 163	185	214
	260	139 141 145	143 144 148	149 150 154	155 155 159	158 158 162	158 158 162	181	210
	250	137 139 143	142 142 146	147 147 151	154 154 158	157 157 161	157 157 161	178	206
	240	136 137 141	140 140 144	145 145 149	153 153 157	156 156 160	156 156 160	174	202
	364		163 166 170	165 168 172	166 171 175	166 173 177	167 175 179	214	249
	360	161 164 168	162 165 169	164 167 171	165 170 174	165 172 176	166 174 178	213	245
	350	159 162 166	160 163 167	162 165 169	164 168 172	164 170 174	165 172 176	210	244
2000- 4000Ft Press. Alt.	340	157 160 164	158 161 165	160 163 167	163 166 170	164 168 172	165 170 174	207	240
	330	154 157 161	156 158 162	158 160 164	162 164 168	163 166 170	164 168 172	204	237
	320	152 155 159	154 156 160	156 158 162	160 162 166	162 164 168	164 166 170	201	233
	310	151 153 157	153 154 158	155 156 160	159 160 164	161 162 166	163 164 168	198	230
	300	149 151 155	151 152 156	153 154 158	157 158 162	159 160 164	161 162 166	195	226
	290	147 149 153	149 150 154	151 152 156	155 156 160	158 159 163	160 161 165	192	222
	280	145 147 151	147 148 152	149 150 154	153 154 158	156 157 161	159 160 164	188	218
	270	142 144 148	144 145 149	146 147 151	151 152 156	155 155 159	158 158 162	185	214
	260	139 141 145	141 142 146	143 144 148	150 150 154	154 154 158	157 157 161	181	210
	250	137 139 143	140 140 144	142 142 146	148 148 152	152 152 156	156 156 160	178	206
	240	136 137 141	138 138 142	140 140 144	146 146 150	150 150 154	155 155 159	174	202
	364		163 166 170	164 167 171	164 169 173	164 171 175	166 174 178	214	249
	360	161 164 168	162 165 169	163 166 170	163 168 172	163 170 174	165 173 177	213	245
	350	159 162 166	160 163 167	161 164 168	162 166 170	162 168 172	164 171 175	210	244
	340	157 160 164	158 161 165	159 162 166	161 164 168	162 166 170	164 169 173	207	240
	330	154 157 161	156 158 162	157 159 163	159 161 165	161 164 168	163 167 171	204	237
	320	152 155 159	154 156 160	155 157 161	157 159 163	160 162 166	163 165 169	201	233
4000- 6000Ft Press. Alt.	310	151 153 157	153 154 158	154 155 159	156 157 161	159 160 164	162 163 167	198	230
	300	149 151 155	151 152 156	152 153 157	154 155 159	157 158 162	160 161 165	195	226
	290	147 149 153	149 150 154	150 151 155	152 153 157	155 155 159	159 160 164	192	222
	280	145 147 151	147 148 152	148 149 153	150 151 155	152 153 157	158 159 163	188	218
	270	142 144 148	144 145 149	145 146 150	148 149 153	150 151 155	157 157 161	185	214
	260	139 141 145	141 142 146	142 143 147	146 146 150	149 149 153	156 156 160	181	210
	250	137 139 143	140 140 144	141 141 145	144 144 148	147 147 151	155 155 159	178	206
	240	136 137 141	138 138 142	139 139 143	142 142 146	145 145 149	153 153 157	174	202
	364		163 166 170	164 167 171	162 167 171	162 169 173	165 173 177	214	249
	360	161 164 168	162 165 169	163 166 170	161 166 170	161 168 172	164 172 176	213	245
	350	159 162 166	160 163 167	161 164 168	160 164 168	160 166 170	163 170 174	210	244
	340	157 160 164	158 161 165	159 162 166	159 162 166	160 164 168	163 168 172	207	240
	330	154 157 161	156 158 162	157 159 163	158 160 164	159 162 166	162 166 170	204	237
	320	152 155 159	154 156 160	155 157 161	156 158 162	158 160 164	162 164 168	201	233
	310	151 153 157	153 154 158	154 155 159	155 156 160	157 158 162	161 162 166	198	230
	300	149 151 155	151 152 156	152 153 157	153 154 158	155 156 160	160 161 165	195	226
	290	147 149 153	149 150 154	150 151 155	151 152 156	153 154 158	158 159 163	192	222
6000- 8000Ft Press. Alt.	280	145 147 151	147 148 152	148 149 153	148 149 153	151 152 156	156 157 161	188	218
	270	142 144 148	144 145 149	145 146 150	146 147 151	149 150 154	155 155 159	185	214
	260	139 141 145	141 142 146	142 143 147	145 145 149	148 148 152	154 154 158	181	210
	250	137 139 143	140 140 144	141 141 145	142 142 146	145 145 149	153 153 157	178	206
	240	136 137 141	138 138 142	139 139 143	140 140 144	143 143 147	151 151 155	174	202
	364		163 166 170	164 167 171	162 167 171	162 169 173	165 173 177	214	249
	360	161 164 168	162 165 169	163 166 170	161 166 170	161 168 172	164 172 176	213	245
	350	159 162 166	160 163 167	161 164 168	160 164 168	160 166 170	163 170 174	210	244
	340	157 160 164	158 161 165	159 162 166	159 162 166	160 164 168	163 168 172	207	240
	330	154 157 161	156 158 162	157 159 163	158 160 164	159 162 166	162 166 170	204	237
	320	152 155 159	154 156 160	155 157 161	156 158 162	158 160 164	162 164 168	201	233
	310	151 153 157	153 154 158	154 155 159	155 156 160	157 158 162	161 162 166	198	230
	300	149 151 155	151 152 156	152 153 157	153 154 158	155 156 160	160 161 165	195	226
	290	147 149 153	149 150 154	150 151 155	151 152 156	153 154 158	158 159 163	192	222
	280	145 147 151	147 148 152	148 149 153	148 149 153	151 152 156	156 157 161	188	218
	270	142 144 148	144 145 149	145 146 150	146 147 151	149 150 154	155 155 159	185	214
	260	139 141 145	141 142 146	142 143 147	145 145 149	148 148 152	154 154 158	181	210
	250	137 139 143	140 140 144	141 141 145	142 142 146	145 145 149	153 153 157	178	206
	240	136 137 141	138 138 142	139 139 143	140 140 144	143 143 147	151 151 155	174	202

TOGW LIMITED BY PERFORMANCE, FLAPS/SLATS 8/16
ENGINE BLEED VALVES OPEN



A300 Flaps/Slats 8/16 Obstacle Clearance (Close-In Obstacles)

FLAPS/SLATS 8/16 OBSTACLE CLEARANCE (CLOSE-IN OBSTACLES)

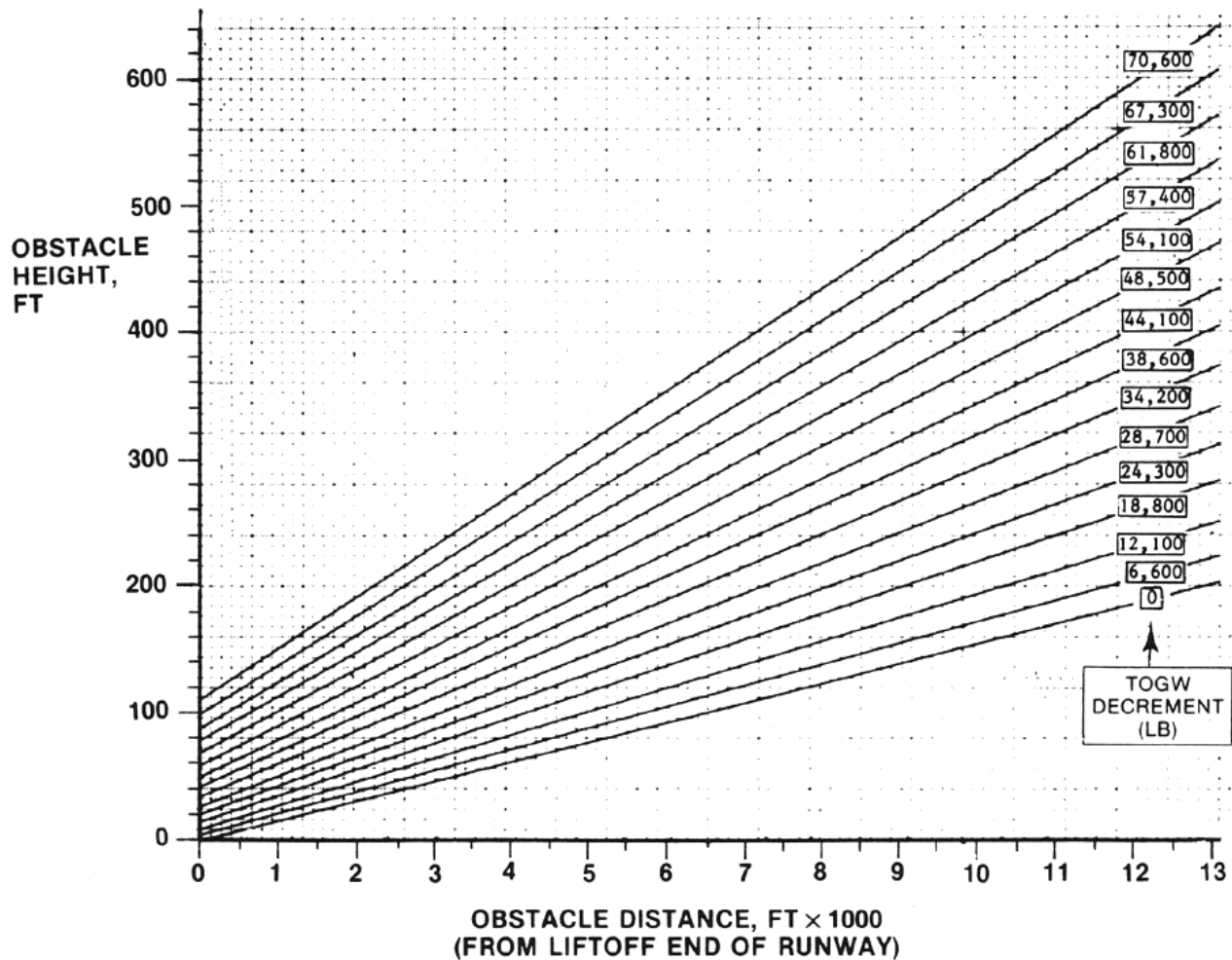


CHART USE

- Before entering the chart, correct the obstacle DISTANCE FROM BRAKE RELEASE obtained from the RAM by subtracting the runway length to obtain obstacle distance.
- Enter with obstacle distance, trace up to intercept obstacle height and read TOGW decrement.
- If the intercept point occurs below the 0 TOGW decrement line, the obstacle does not limit the airplane's performance and no TOGW decrement is required.

A300 Flaps/Slats 8/16 Obstacle Clearance (Distant Obstacles)

FLAPS 8 OBSTACLE CLEARANCE (DISTANT OBSTACLES)

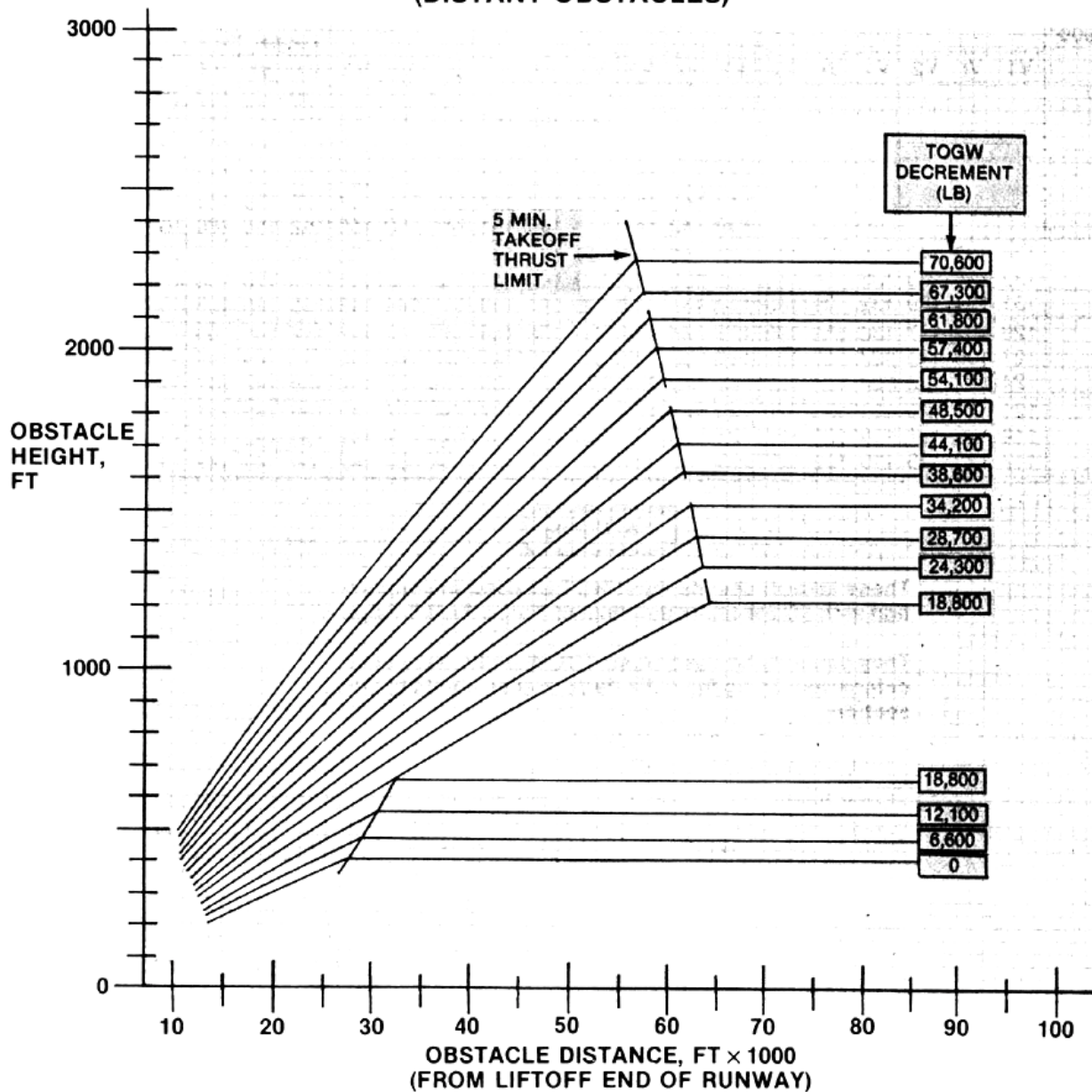


CHART USE

- Before entering the chart, correct the obstacle **DISTANCE FROM BRAKE RELEASE** obtained from the RAM by subtracting the runway length to obtain obstacle distance.
- Enter with obstacle distance, trace up to intercept obstacle height and read TOGW decrement.
- If the intercept point occurs below the 0 TOGW decrement line, the obstacle does not limit the airplane's performance and no TOGW decrement is required.

A300 -50C2 Takeoff Speeds Flaps/Slats 8/16

TAKEOFF WEIGHT LB X 1000	RUNWAY LENGTH								
	5000 Ft Rwy	6000 Ft Rwy	7000 Ft Rwy	8000 Ft Rwy	9000 Ft Rwy	10000 Ft & Longer Rwy			
	V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	V1 Vr V2	F	S	VFTO
364 360 350				155 158 163 147 150 155	156 159 164 152 155 160	159 162 167 158 151 166 157 160 165	170 169 167	214 213 210	249 248 244
340 330 320			144 147 152 142 145 150 139 142 147	146 149 154 146 149 154 143 146 151	151 154 159 149 152 157 147 150 155	156 159 164 153 156 161 152 155 160	165 163 160	207 204 201	240 237 233
310 300 290	134 137 142 132 135 140 131 134 139	135 138 143 133 136 141 132 135 140	138 140 145 135 138 143 134 137 142	141 144 149 139 142 147 138 141 146	145 148 153 143 146 151 141 144 149	149 152 157 147 150 155 145 148 153	158 156 153	198 195 192	230 226 222
280 270 260	129 132 137 127 130 135 124 127 132	130 133 138 127 130 135 124 127 132	131 134 139 129 132 137 126 129 134	135 138 143 133 136 141 131 134 139	139 142 147 137 140 145 134 137 142	142 145 150 141 144 149 139 142 147	150 148 146	188 185 181	218 214 210
250 240 230	121 124 129 119 122 127 117 120 125	121 124 129 119 122 127 119 122 127	123 126 131 123 126 131 123 126 131	129 132 137 129 132 137 129 132 137	134 137 142 134 137 142 134 137 142	139 142 147 139 142 147 139 142 147	143 141 139	178 174 171	206 202 198

CLIMB AND DESCENT CHARTS

A300 Climb Speeds

GW	363	300	250
IAS	320	310	300
MACH	.78	.78	.78

A300 Descent Chart

PA	IAS	DIST	TIME	FUEL
39	.78M	110	24	2.3
37	.78M	106	23	2.3
35	.78M	101	23	2.3
33	.78M	97	22	2.3
31	280	92	21	2.3
29	280	87	20	2.3
27	280	81	20	2.2
25	280	76	19	2.2
23	280	70	18	2.2
21	280	65	17	2.1
19	280	59	16	2.1
15	280	49	14	2.0
10	280	33	12	1.9
5	250	18	8	1.7

Additional time (4 min) and fuel (1300 lb) for approach is included in table.

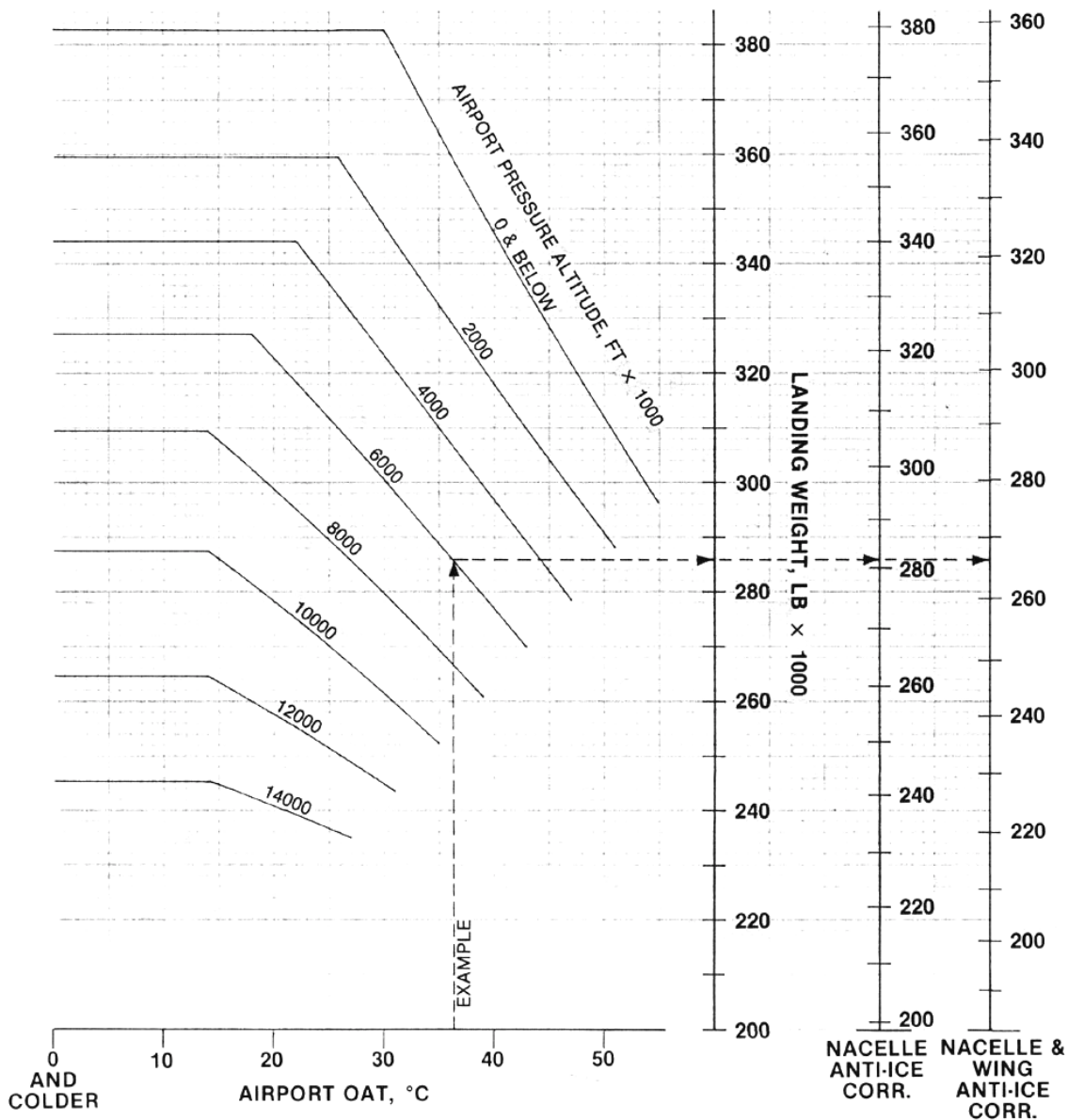
DETERMINING LANDING PERFORMANCE LIMITS

The performance limited landing gross weight is computed by using the charts below. The following procedure is used to compute max landing gross weight:

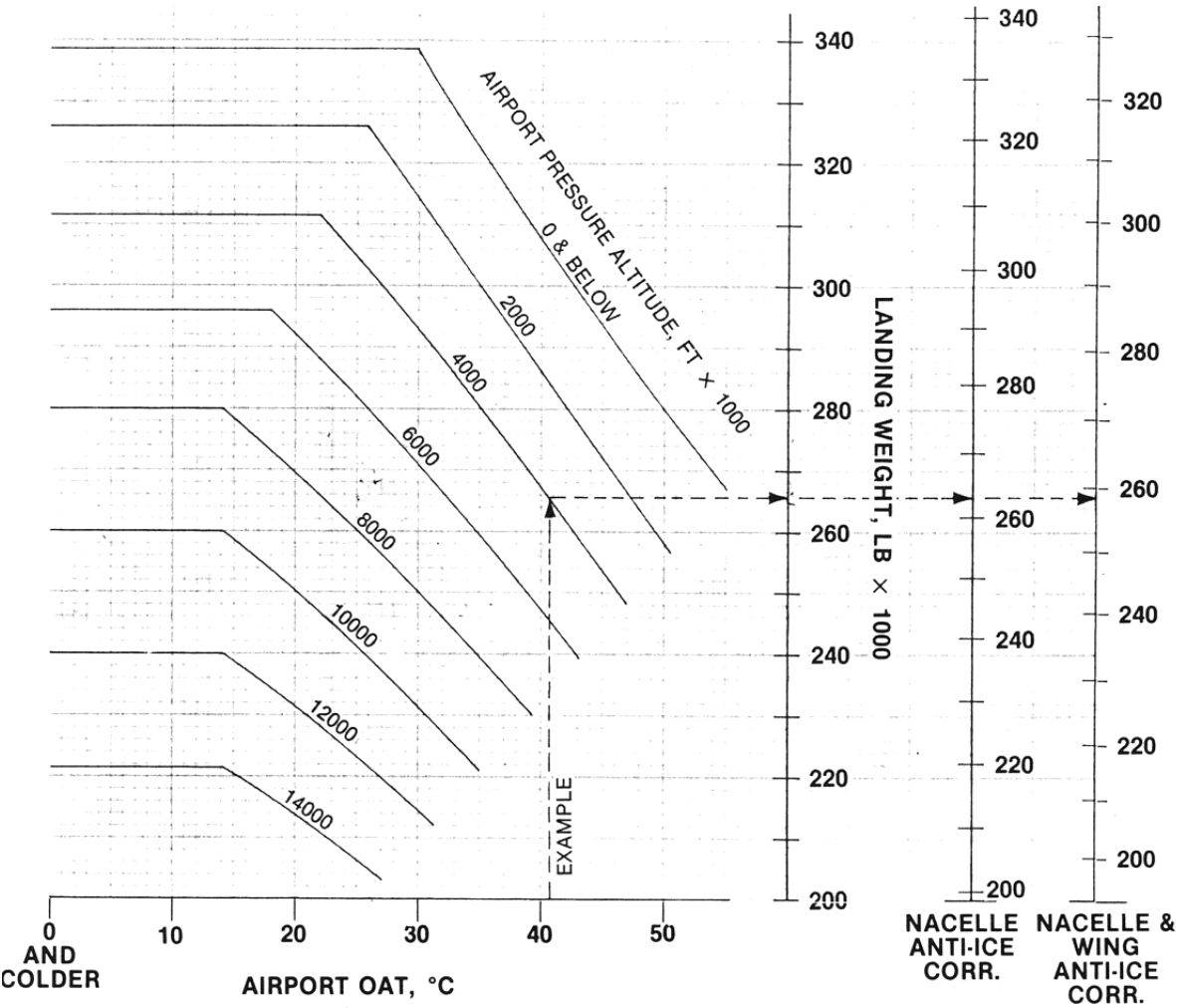
1. Enter LGW Limited by Climb chart with airport OAT and pressure altitude and read max landing gross weight.
2. Enter LGW Limited by Runway chart with airport pressure altitude and runway length and read max landing gross weight.
3. The maximum landing gross weight limit is the lighter of the two weights determined in steps 1 and 2.

A300 LGW Limited by Climb, Flaps 15/Slats 16

LGW LIMITED BY CLIMB FLAPS 15/SLATS 16



LGW LIMITED BY CLIMB
FLAPS 25/SLATS 25



LGW LIMITED BY RUNWAY (FLAPS 15/16)

CHART USE

Enter with landing gross weight and trace to airport pressure altitude. Trace right to the wind component reference line. Trace up left slope for tail wind or down right for headwind. Continue trace right for landing field length (dry or wet). Use brake deactivation and antiskid inoperative scales as appropriate.

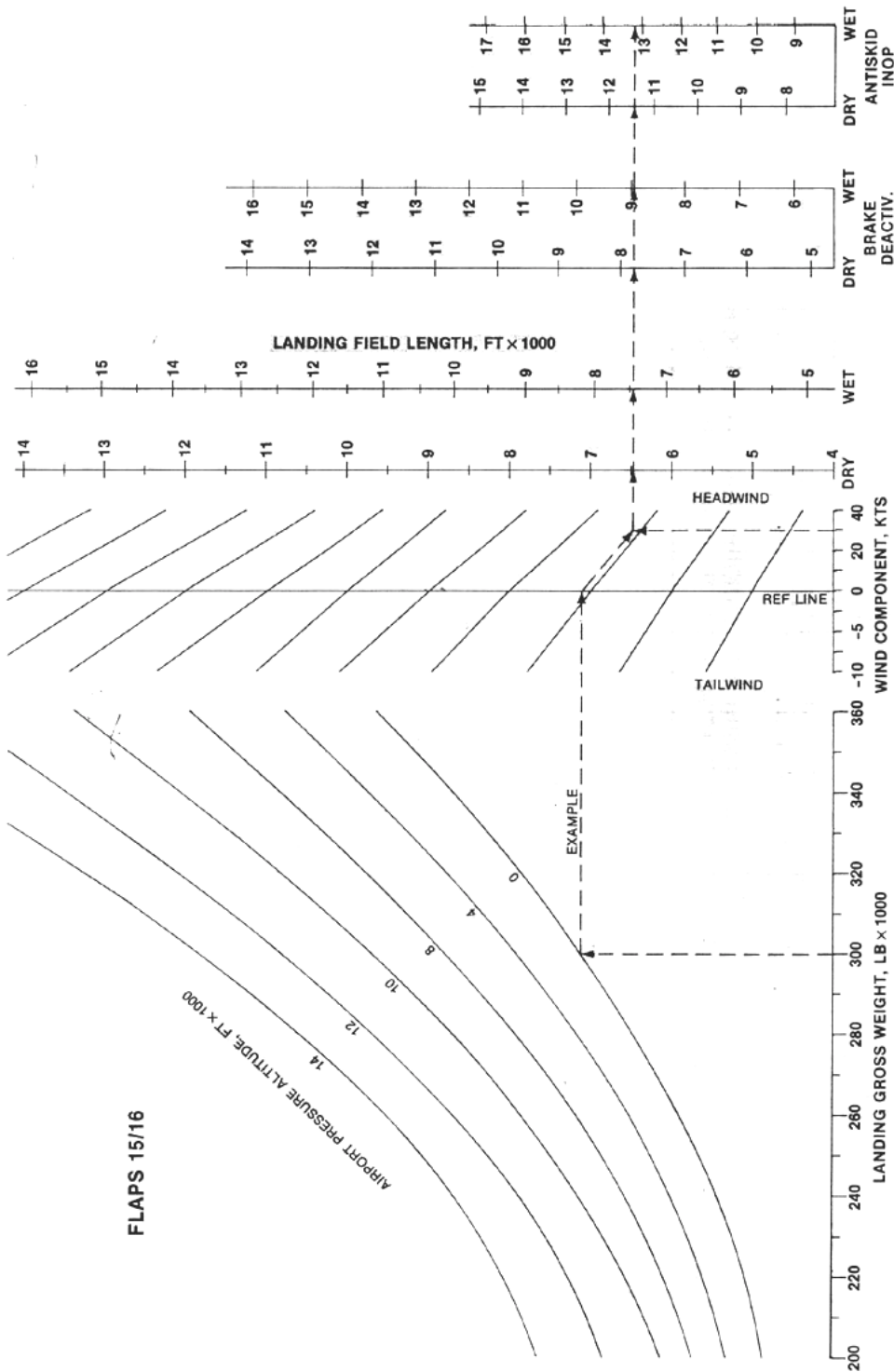
PERFORMANCE NOTES

RUNWAY CONDITION FOR DISPATCH

- If destination runway is forecast dry, use runway condition dry.
- If destination runway is forecast wet, use runway condition wet.
- If alternate runway is forecast dry or wet, use runway condition dry.

For Landing With Visibility Less Than 3/4 Mile:

- With either wet or dry runway, use runway condition wet.



LGW LIMITED BY RUNWAY (FLAPS 25/25)

CHART USE

Enter with landing gross weight and trace to airport pressure altitude. Trace right to the wind component reference line. Trace up left slope for tail wind or down right for headwind. Continue trace right for landing field length (dry or wet). Use brake deactivation and antiskid inoperative scales as appropriate.

PERFORMANCE NOTES

RUNWAY CONDITION FOR DISPATCH

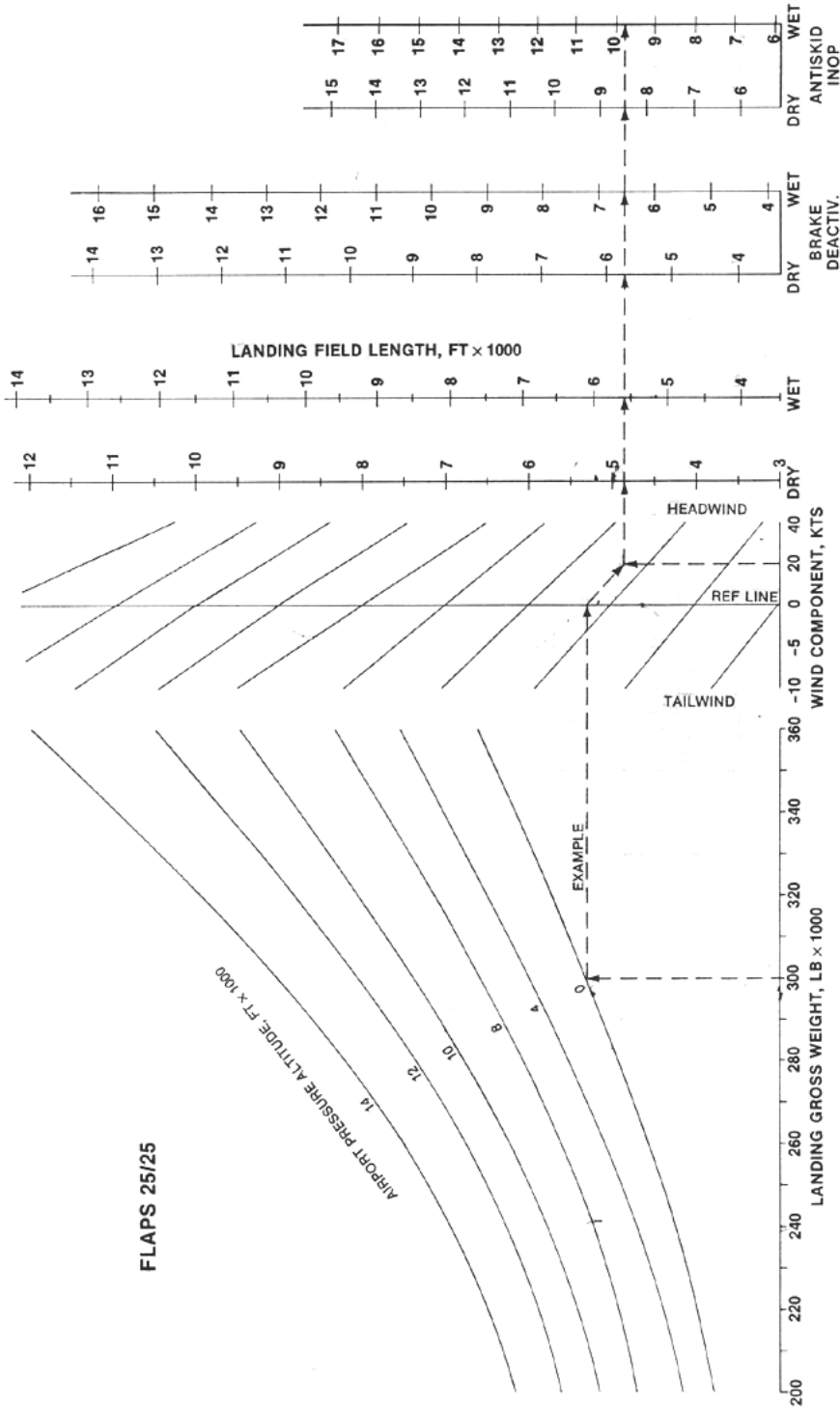
— If destination runway is forecast dry, use runway condition dry.

— If destination runway is forecast wet, use runway condition wet.

— If alternate runway is forecast dry or wet, use runway condition dry.

For Landing With Visibility Less Than 3/4 Mile:

— With either wet or dry runway, use runway condition wet.



A300 Landing Speeds (Vth)

A300 SPEED PLACARD, KIAS		
GROSS WEIGHT 1000 LB	Vth	
	FLAPS 25	FLAPS 15
360	151	157
350	149	155
340	147	153
330	145	151
320	143	148
310	140	146
300	138	144
290	136	142
280	134	139
270	131	137
260	129	134
250	127	132
240	124	129
230	122	127
220	119	124
210	116	121
200	113	118

THRUST AND SPEED DATA

A300 -50C2 Max Continuous Thrust (MCT), %N1

TAT °C	PRESSURE ALTITUDE, FT X 1000														
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30 & ABOVE
55	104.7														104.7
50	104.8														104.8
45	105.0														105.0
40	105.6														105.6
35	106.6														106.6
30	107.6	107.9													107.9
25	106.7	108.0	109.5												109.5
20	105.8	107.1	108.6	110.4	110.9										110.9
15	104.9	106.2	107.7	109.4	111.2	112.3									112.3
15	104.0	105.2	106.7	108.5	110.2	111.6	112.8	113.1							113.1
5	103.1	104.3	105.8	107.5	109.2	110.6	111.9	112.9	113.6						113.6
0	102.2	103.4	104.8	106.6	108.2	109.6	110.9	111.9	112.8	113.6	113.7				113.7
-5	101.2	102.5	103.8	105.6	107.2	108.6	109.8	110.9	111.8	112.6	113.1	113.7	114.1		114.1
-10	100.3	101.5	102.8	104.6	106.2	107.6	108.8	109.9	110.8	111.5	112.0	112.6	113.2	114.0	114.4
-15	99.3	100.6	101.8	103.6	105.2	106.6	107.8	108.8	109.7	110.5	111.0	111.5	112.2	112.9	113.4
-20	98.4	99.6	100.9	102.6	104.1	105.5	106.7	107.8	108.6	109.4	109.9	110.4	111.1	111.8	112.3
-25	97.4	98.6	99.9	101.6	103.1	104.5	105.7	106.7	107.5	108.3	108.8	109.3	110.0	110.7	111.2
-30	96.4	97.6	98.9	100.5	102.1	103.4	104.6	105.6	106.4	107.2	107.7	108.2	108.9	109.6	110.0
-35	95.4	96.6	97.9	99.5	101.0	102.4	103.5	104.5	105.3	106.1	106.6	107.1	107.8	108.5	108.9
-40	94.4	95.6	96.9	98.5	100.0	101.3	102.4	103.4	104.2	105.0	105.5	106.0	106.7	107.4	107.8

Table is based on operating with one-pack per engine, with engine and wing anti-ice off.

Enter table with TAT and pressure altitude to obtain N1.

Apply Bleed Correction, as applicable. Note: FL300 and above at cold temperatures, it is not necessary to correct N1 for bleed.

BLEED CORRECTIONS		
BLEED CONDITION	CORRECTION, %N1	FL300 & ABOVE USE NO CORRECTION WHEN TAT COLDER THAN
Both engine bleed valves closed.	+0.8	-9°C
Nacelle anti-ice	-0.9	-11°C
Nacelle & wing anti-ice (2-eng)	-1.6	-13°C
Nacelle & wing anti-ice (1-eng)	-2.0	-14°C

A300 -50C2 Max Climb Thrust (CL), %N1

TAT °C	PRESSURE ALTITUDE, FT X 1000																	
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	35 & Above
50	103.9																	103.9
45	104.3																	104.3
40	104.9																	104.9
35	105.7																	105.7
30	105.1	106.3	106.6															106.6
25	104.2	105.4	106.4	107.5	107.7													107.7
20	103.3	104.5	105.5	106.6	107.6	108.7	108.9											108.9
15	102.4	103.6	104.6	105.7	106.7	107.7	108.6	109.6	110.2									110.2
10	101.5	102.7	103.7	104.8	105.8	106.8	107.7	108.6	109.6	110.5	111.3							111.3
5	100.6	101.8	102.8	103.8	104.8	105.8	106.7	107.7	108.6	109.5	110.3	111.2	111.9	112.4				112.4
0	99.7	100.9	101.9	102.9	103.9	104.9	105.8	106.7	107.6	108.5	109.4	110.2	110.9	111.6	112.3	113.3	113.4	113.4
-5	98.8	100.0	100.9	101.9	102.9	103.9	104.8	105.7	106.6	107.5	108.4	109.2	109.9	110.6	111.3	112.3	113.1	113.5
-10	97.9	99.0	100.0	101.0	101.9	102.9	103.8	104.8	105.7	106.5	107.4	108.2	108.9	109.6	110.2	111.2	112.1	112.5
-15	97.0	98.1	99.1	100.0	101.0	102.0	102.9	103.8	104.7	105.5	106.4	107.2	107.9	108.5	109.2	110.2	111.0	111.4
-20	96.0	97.1	98.1	99.1	100.0	101.0	101.9	102.8	103.7	104.5	105.3	106.1	106.8	107.5	108.2	109.1	109.9	110.4
-25	95.0	96.2	97.1	98.1	99.0	100.0	100.9	101.7	102.6	103.5	104.3	105.1	105.8	106.5	107.1	108.0	108.8	109.3
-30	94.1	95.2	96.2	97.1	98.0	98.9	99.9	100.7	101.6	102.5	103.3	104.0	104.7	105.4	106.0	106.9	107.7	108.2
-35	93.1	94.3	95.2	96.1	97.0	97.9	98.8	99.7	100.5	101.4	102.2	102.9	103.6	104.3	104.9	105.8	106.6	107.1
-40	92.2	93.3	94.2	95.1	96.0	96.9	97.8	98.7	99.5	100.4	101.1	101.9	102.6	103.3	103.8	104.7	105.5	105.9

Table is based on operating with one-pack per engine, with engine and wing anti-ice off.
Enter table with TAT and pressure altitude to obtain N1.
Apply Bleed Correction, as applicable. Note: FL350 and above at cold temperatures, it is not necessary to correct N1 for bleed.

BLEED CORRECTIONS		
BLEED CONDITION	CORRECTION, %N1	FL350 & ABOVE USE NO CORRECTION WHEN TAT COLDER THAN
Both engine bleed valves closed.	+0.8	-1°C
Nacelle anti-ice	-0.9	-5°C
Nacelle & wing anti-ice (2-eng)	-1.6	-8°C
Nacelle & wing anti-ice (1-eng)	-2.0	-9°C

A300 -50C2 Max Takeoff Thrust (TO), %N1

TAT °C	PRESSURE ALTITUDE, FT X 1000													
	-500	SL	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000 & Above
55	107.3													
50	107.7													
45	108.9													
40	110.4													
35	112.2													
32	113.4													
30	113.1	114.1												
28	112.8	113.8	114.4	114.8										
26	112.4	113.4	114.0	114.5	115.0	115.5								
24	112.0	113.0	113.6	114.1	114.6	115.1	115.6	116.1						
22	111.6	112.6	113.2	113.7	114.2	114.7	115.1	115.7	116.2	116.6	116.7			
20	111.2	112.2	112.8	113.3	113.8	114.3	114.7	115.3	115.8	116.2	116.7	117.1		
18	110.8	111.8	112.3	112.9	113.4	113.9	114.3	114.9	115.4	115.8	116.3	116.7	117.2	117.7
16	110.4	111.4	111.9	112.5	113.0	113.5	113.9	114.4	115.0	115.4	115.9	116.3	116.8	117.8
14	110.0	111.0	111.5	112.1	112.6	113.1	113.5	114.1	114.5	115.0	115.4	115.9	116.4	117.4
12	109.6	110.6	111.1	111.7	112.2	112.7	113.1	113.6	114.1	114.6	115.0	115.5	116.0	117.0
10	109.2	110.2	110.7	111.3	111.8	112.2	112.7	113.2	113.7	114.2	114.6	115.1	115.5	116.6
5	108.2	109.2	109.7	110.2	110.8	111.2	111.7	112.2	112.7	113.2	113.6	114.1	114.5	115.6
0	107.2	108.2	108.7	109.2	109.7	110.2	110.6	111.2	111.6	112.1	112.6	113.1	113.4	114.5
-5	106.2	107.2	107.7	108.2	108.7	109.2	109.6	110.2	110.6	111.1	111.5	112.0	112.4	113.5
-10	105.2	106.2	106.7	107.2	107.7	108.2	108.6	109.1	109.6	110.0	110.5	111.0	111.4	112.4
-15	104.2	105.1	105.7	106.2	106.7	107.1	107.5	108.0	108.5	109.0	109.5	109.9	110.3	111.3
-20	103.2	104.1	104.6	105.1	105.6	106.1	106.6	107.0	107.5	107.9	108.4	108.8	109.2	110.2
-25	102.2	103.1	103.6	104.1	104.6	105.0	105.5	105.9	106.4	106.9	107.3	107.7	108.1	109.1
-30	101.1	102.0	102.5	103.0	103.5	103.9	104.4	104.9	105.3	105.8	106.2	106.6	107.0	108.0

Table is based on operating with one-pack per engine, with engine and wing anti-ice off.

Enter table with TAT and pressure altitude to obtain N1.

Apply Bleed Correction, as applicable. Note: 6000 feet and above at cold temperatures, it is not necessary to correct N1 for bleed.

BLEED CORRECTIONS		
BLEED CONDITION	CORRECTION, %N1	6000 Ft & ABOVE USE NO CORRECTION WHEN OAT COLDER THAN
Both engine bleed valves closed. Nacelle anti-ice on	+0.6	18°C
	-0.7	16°C

A300 -50C2 Reduced Takeoff Thrust (FLX TO), %N1

TAT °C	ASSUMED TEMPERATURE, °C																		
	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
54																			107.3
52																		107.5	107.0
50																	107.6	107.0	106.6
48																			
46																			
44																			
42																			
40																			
38																			
36																			
34																			
32																			
30																			
28																			
26																			
24																			
22																			
20																			
18																			
16																			
14																			
12																			
10																			
5																			
0																			
-5																			
-10																			
-15																			
-20																			

Table is based on operating with one-pack per engine, with engine and wing anti-ice off.

Enter table with TAT and pressure altitude to obtain N1.

Apply Bleed Correction, as applicable.

Gray shaded area indicates that assumed temperature may be less than the minimum assumed temperature. Check the Minimum and Maximum Assumed Temperature Chart.

Minimum N1 is 100%

BLEED CORRECTIONS	
BLEED CONDITION	CORRECTION, %N1
Both engine bleed valves closed.	+0.6
Nacelle anti-ice on	-0.7

MINIMUM AND MAXIMUM ASSUMED TEMPERATURE		
Airport Pressure Altitude, Feet	Minimum Assumed Temperature, °C	Maximum Assumed Temperature, °
14000	18	27
12000	18	31
10000	18	35
8000	18	39
6000	18	43
5000	20	45
4000	22	47
3000	24	49
2000	26	51
1000	28	53
S.L.	30	55
-500	32	56
-1000	34	57

CRUISE OPERATING CHARTS

The cruise charts in this section, all reflect standard day conditions. IAS and mach remain constant with variations in temperature. Since NM, N1, TAS, N2 and fuel flow do vary with temperature, notes are included on the charts to calculate these values at other than standard temperature.

A300 .78 Mach or 300 KIAS Cruise

FLT LVL ISA °C IAS TAS	GROSS WEIGHT, LB X 1000														
	350	340	330	320	310	300	290	280	270	260	250	240	230	220	210
390 -57 241 447	NM N1 FF/ENG N2									37.7 105.7 5.94 98.0	40.1 103.4 5.57 96.7	42.6 101.2 5.25 95.4	45.1 99.3 4.97 94.7	47.5 97.5 4.71 94.0	49.6 96.2 4.51 93.5
370 -57 252 447								35.8 104.3 6.26 97.2	37.9 102.2 5.91 96.0	39.9 100.4 5.61 95.1	41.9 98.6 5.33 94.4	43.9 97.1 5.09 93.8	45.7 96.0 4.99 93.4	47.4 94.9 4.72 92.9	49.1 94.0 4.56 92.4
350 -54 264 450					32.4 106.0 6.95 98.4	34.1 104.3 6.60 97.4	35.8 101.7 6.29 95.9	37.5 99.8 5.99 95.1	39.3 98.3 5.73 94.6	40.8 97.1 5.51 94.1	42.2 96.1 5.32 93.7	43.7 95.1 5.14 93.2	45.1 94.2 4.99 92.7	46.4 93.5 4.85 92.4	47.7 92.7 4.71 92.0
330 -50 277 454		29.7 105.7 7.65 98.5	31.1 104.1 7.29 97.6	32.6 102.6 6.96 96.8	34.0 101.0 6.68 96.1	35.4 99.6 6.41 95.6	36.8 98.2 6.16 95.0	38.1 97.2 5.96 94.6	39.2 96.3 5.78 94.2	40.4 95.5 5.61 93.8	41.5 94.8 5.47 93.5	42.6 94.1 5.33 93.1	43.7 93.4 5.20 92.8	44.8 92.8 5.07 92.5	45.8 92.2 4.95 92.2
310 -46 289 458		29.9 103.1 7.65 97.4	31.2 101.8 7.35 96.9	32.3 100.5 7.08 96.4	33.5 99.4 6.84 96.0	34.6 98.3 6.62 95.6	35.7 97.3 6.41 95.1	36.7 96.6 6.24 94.8	37.6 95.8 6.09 94.4	38.5 95.2 5.95 94.1	39.4 94.6 5.82 93.8	40.2 94.0 5.69 93.5	41.1 93.4 5.57 93.2	41.9 92.9 5.46 93.0	42.8 92.4 5.35 92.7
290 -42 300 459		30.7 100.0 7.46 96.7	31.7 99.1 7.24 96.3	32.7 98.2 7.02 95.9	33.6 97.4 6.82 95.5	34.5 96.6 6.65 95.1	35.2 96.0 6.51 94.8	36.0 95.4 6.38 94.6	36.7 94.9 6.25 94.3	37.4 94.3 6.13 94.0	38.1 93.8 6.02 93.8	38.8 93.4 5.92 93.6	39.4 92.9 5.82 93.4	40.1 92.5 5.72 93.2	40.8 92.1 5.63 93.0
280 -40 300 452		31.1 98.4 7.27 96.1	32.0 97.6 7.06 95.7	32.9 96.9 6.87 95.4	33.7 96.2 6.71 95.0	34.4 95.6 6.56 94.7	35.1 95.0 6.44 94.5	35.7 94.5 6.32 94.2	36.4 94.0 6.21 94.0	37.1 93.5 6.10 93.7	37.7 93.1 5.99 93.6	38.4 92.6 5.89 93.3	39.0 92.2 5.79 93.1	39.7 91.8 5.69 92.9	40.3 91.4 5.60 92.8
270 -38 300 445		31.1 97.4 7.15 95.7	31.9 96.7 6.97 95.4	32.6 96.0 6.83 95.0	33.4 95.4 6.66 94.7	34.1 94.7 6.52 94.4	34.7 94.2 6.40 94.2	35.4 93.7 6.29 93.9	36.0 93.2 6.17 93.7	36.7 92.8 6.06 93.5	37.3 92.3 5.96 93.3	37.9 91.9 5.87 93.1	38.5 91.5 5.77 92.9	39.1 91.2 5.69 92.8	39.7 90.8 5.60 92.6
260 -37 300 438		30.9 96.4 7.09 95.3	31.6 95.7 6.93 95.0	32.3 95.1 6.78 94.7	33.1 94.4 6.62 94.4	33.8 93.9 6.49 94.2	34.3 93.4 6.38 93.9	34.9 92.9 6.27 93.7	35.5 92.5 6.16 93.5	36.1 92.1 6.06 93.3	36.7 91.7 5.97 93.1	37.3 91.3 5.88 93.0	37.9 90.9 5.78 92.8	38.5 90.5 5.70 92.6	39.0 90.1 5.62 92.4
250 -35 300 432		30.6 95.4 7.05 94.9	31.3 94.8 6.90 94.7	32.0 94.2 6.75 94.4	32.6 93.6 6.61 94.1	33.2 93.2 6.49 94.0	33.8 92.7 6.38 93.7	34.4 92.3 6.27 93.5	35.0 91.9 6.16 93.4	35.6 91.4 6.07 93.1	36.2 91.0 5.97 93.0	36.7 90.6 5.88 92.8	37.3 90.1 5.79 92.6	37.8 89.7 5.71 92.4	38.3 89.3 5.63 92.2
240 -33 300 425		30.2 94.6 7.04 94.7	30.9 94.0 6.89 94.4	31.5 93.5 6.75 94.2	32.2 92.9 6.61 93.9	32.7 92.4 6.49 93.7	33.3 92.0 6.38 93.6	33.9 91.6 6.27 93.4	34.5 91.2 6.17 93.2	35.0 90.7 6.07 93.0	35.6 90.2 5.98 92.8	36.1 89.8 5.89 92.6	36.6 89.4 5.80 92.4	37.2 89.0 5.72 92.3	37.7 88.6 5.64 92.1
230 -31 300 419		29.8 93.8 7.02 94.5	30.5 93.2 6.87 94.2	31.1 92.7 6.74 94.0	31.7 92.2 6.61 93.8	32.2 91.7 6.49 93.5	32.8 91.3 6.38 93.4	33.4 90.9 6.28 93.2	33.9 90.4 6.18 93.0	34.4 89.9 6.08 92.8	35.0 89.5 5.99 92.6	35.5 89.0 5.90 92.4	36.0 88.6 5.82 92.2	36.5 88.2 5.73 92.1	37.0 87.9 5.66 92.0

NOTES:

- NM decreases 0.6% for + 10°C and increases 0.6% for -10°C from ISA.

- N1 is nominal and increases 2% for +10°C and decreases 2% for -10°C from ISA.
- FF increases 3% for +10°C and decreases 3% for -10°C from ISA.
- TAS increases 1 kt per degree above ISA and decreases 1 kt per degree below ISA.
- N2 is nominal and increases 2% for +10°C and decreases 2% for -10°C from ISA.

A300 .79 Mach Cruise

FLT LVL ISA °C IAS TAS	GROSS WEIGHT, LB X 1000														
	350	340	330	320	310	300	290	280	270	260	250	240	230	220	210
390 -57 244 453	NM N1 FF/ENG N2									37.4 106.1 6.05 98.2	39.9 103.8 5.68 97.0	42.4 101.7 5.34 95.8	44.8 99.8 5.06 95.0	47.1 98.1 4.81 94.3	49.4 96.5 4.58 93.7
370 -57 256 453								35.5 104.6 6.38 97.4	37.6 102.7 6.03 96.3	39.7 100.9 5.71 95.4	41.6 99.2 5.45 94.8	43.5 97.6 5.20 94.2	45.4 96.2 4.99 93.6	47.1 95.2 4.81 93.1	48.7 94.3 4.66 92.7
350 -54 268 455					32.2 105.4 7.08 98.0	33.9 103.6 6.72 97.0	35.6 101.9 6.39 96.1	37.2 100.3 6.12 95.5	38.9 98.8 5.86 94.9	40.5 97.4 5.63 94.4	42.0 96.3 5.43 93.9	43.3 95.4 5.25 93.5	44.6 94.6 5.10 93.1	45.9 93.9 4.96 92.7	47.1 93.2 4.83 92.4
330 -50 281 459		29.5 106.1 7.79 98.8	30.9 104.5 7.43 97.9	32.4 102.9 7.10 97.0	33.7 101.5 6.81 96.4	35.1 100.0 6.55 95.9	36.4 98.7 6.31 95.4	37.7 97.6 6.09 94.9	38.9 96.7 5.90 94.5	40.0 95.9 5.74 94.1	41.1 95.2 5.59 93.8	42.1 94.6 5.45 93.5	43.2 93.9 5.32 93.2	44.3 93.3 5.19 92.9	45.2 92.7 5.08 92.6
310 -46 293 464	29.8 103.6 7.78 97.8	30.9 102.3 7.50 98.2	32.0 100.9 7.24 96.7	33.2 99.7 6.99 96.3	34.3 98.6 6.76 95.8	35.3 97.8 6.57 95.4	36.2 97.0 6.40 95.1	37.1 96.4 6.24 94.8	38.0 95.7 6.10 94.5	38.9 95.1 5.96 94.2	39.8 94.6 5.83 93.9	40.7 94.0 5.70 93.6	41.5 93.5 5.59 93.4	42.2 93.0 5.49 93.1	43.0 92.5 5.40 92.9
290 -42 306 468	30.5 100.5 7.68 97.1	31.4 99.5 7.45 96.7	32.2 98.7 7.25 96.3	33.1 98.0 7.07 95.9	33.8 97.3 6.92 95.6	34.5 96.7 6.77 95.4	35.3 96.2 6.62 95.1	36.0 95.6 6.49 94.8	36.8 95.1 6.36 94.6	37.5 94.6 6.24 94.3	38.2 94.1 6.13 94.1	38.8 93.7 6.03 93.9	39.4 93.3 5.93 93.7	40.0 92.8 5.84 93.5	40.6 92.5 5.76 93.3
280 -40 313 470	30.5 99.4 7.69 96.9	31.3 98.7 7.50 96.5	32.0 98.1 7.34 96.2	32.7 97.5 7.18 95.9	33.4 96.9 7.04 95.6	34.1 96.4 6.90 95.4	34.7 95.9 6.76 95.1	35.4 95.4 6.63 94.9	36.0 94.9 6.52 94.7	36.6 94.4 6.41 94.5	37.2 94.0 6.31 94.3	37.8 93.6 6.21 94.1	38.4 93.2 6.12 93.9	38.9 92.9 6.04 93.7	39.4 92.5 5.96 93.5
270 -38 320 472	30.4 98.7 7.77 96.7	31.0 98.2 7.61 96.5	31.6 97.6 7.46 96.2	32.2 97.1 7.31 95.9	32.9 96.6 7.17 95.7	33.5 96.1 7.04 95.5	34.1 95.6 6.91 95.2	34.7 95.1 6.80 95.0	35.2 94.7 6.69 94.8	35.8 94.3 6.59 94.6	36.3 93.9 6.50 94.4	36.8 93.6 6.41 94.3	37.3 93.2 6.32 94.1	37.8 92.9 6.24 93.9	38.2 92.6 6.17 93.8
260 -37 326 474	30.0 98.2 7.89 96.7	30.6 97.7 7.74 96.5	31.2 97.2 7.59 96.2	31.8 96.7 7.46 96.0	32.3 96.3 7.32 95.8	32.9 95.8 7.20 95.5	33.4 95.4 7.09 95.3	33.9 95.0 6.99 95.1	34.4 94.6 6.89 95.0	34.9 94.2 6.79 94.8	35.3 93.9 6.70 94.6	35.8 93.6 6.62 94.5	36.2 93.3 6.54 94.3	36.6 93.0 6.46 94.2	37.0 92.7 6.40 94.1
250 -35 333 476	29.6 97.9 8.02 96.7	30.2 97.4 7.88 96.5	30.7 96.9 7.75 96.3	31.2 96.5 7.62 96.1	31.7 96.1 7.50 95.9	32.2 95.7 7.39 95.7	32.6 95.3 7.29 95.5	33.1 94.9 7.19 95.3	33.5 94.5 7.09 95.1	33.9 94.2 7.01 95.0	34.4 93.9 6.92 94.8	34.8 93.6 6.84 94.7	35.1 93.3 6.77 94.6	35.5 93.1 6.70 94.4	35.9 92.8 6.63 94.3

NOTES:

- NM decreases 0.6% for + 10°C and increases 0.6% for -10°C from ISA.
- N1 is nominal and increases 2% for +10°C and decreases 2% for -10°C from ISA.
- FF increases 3% for +10°C and decreases 3% for -10°C from ISA.
- TAS increases 1 kt per degree above ISA and decreases 1 kt per degree below ISA.
- N2 is nominal and increases 2% for +10°C and decreases 2% for -10°C from ISA.

NOTE

The break-even wind is that required to give equal nm per lb at both altitudes. If the actual wind is greater than the break-even wind, greater range can be gained by going to the new altitude.

- Example:
- At present altitude
- (A) ground speed is 485 kt
 - (B) fuel flow is 4750 lb per engine per hour
 - (C) new fuel flow is 5000 lb per engine per hour
 - (D) new TAS is 440 kt
- At new altitude
- Find
- (E) The break-even wind at new altitude = 52 kt tailwind

