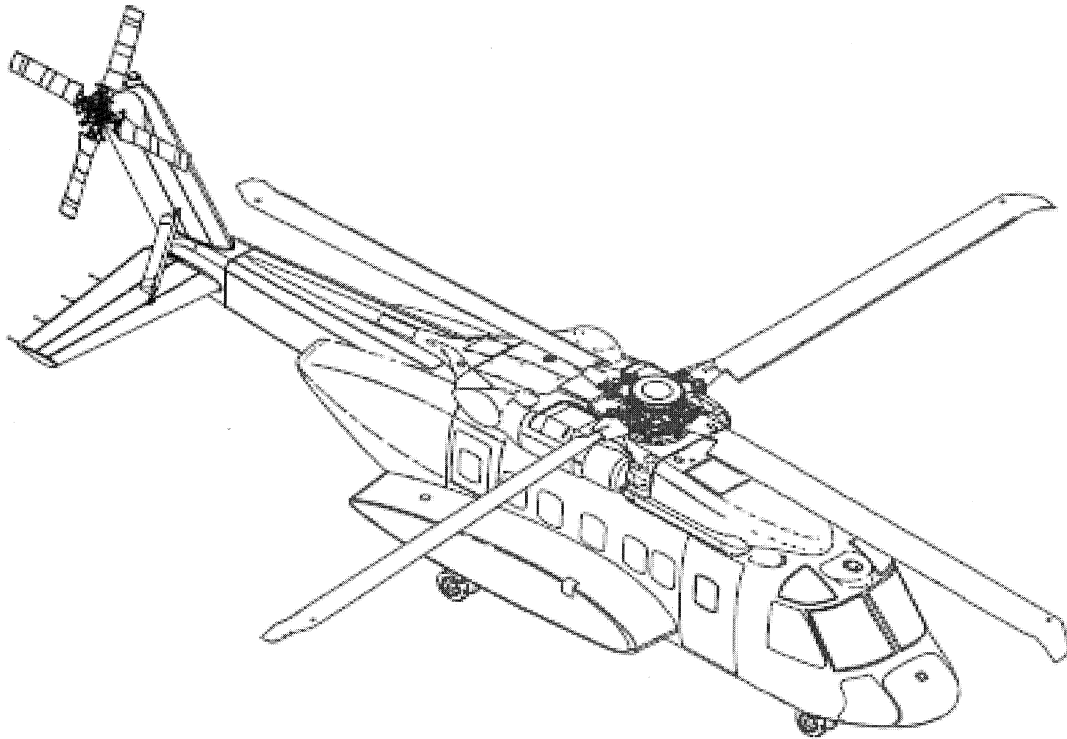


Computer examination supplement for Airline Transport Pilot Licence (Helicopter) flight performance and planning

Version 2

09/12/2011

S-92S



South African Civil Aviation Authority

Testing Standards Section

This document is for examination purposes only and must not be used for flight or damaged in any way

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AIRSPPEED LIMITS

V_{NE} power on (maximum airspeed) is 165 KIAS.

NOTE

The air data computers automatically calculate V_{NE} as a function of temperature, pressure altitude and gross weight for display on the airspeed indicator (PFD display mode).

Maximum airspeed with the landing gear down or in transit is 165 KIAS.

Maximum airspeed with the APU operating is 150 KIAS.

V_{NE} power off is 120 KIAS. If V_{NE} power on is less than 120 KIAS, the lower V_{NE} shall apply for the power off case as well.

Maximum airspeed with one engine inoperative is 120 KIAS.

Maximum airspeed with one or both SAS inoperative is 120 KIAS.

Maximum airspeed with one primary flight control servo inoperative is 120 KIAS.

Maximum airspeed with the hydraulic boost inoperative is 120 KIAS.

Maximum airspeed with any sliding door or window pinned open is 120 KIAS. This includes the upper sliding SAR doors/windows, the inward opening lower door, and the full length SAR door.

Maximum airspeed for activation of the landing gear emergency blowdown is 90 KIAS.

Maximum airspeed for opening or closing any sliding door or window is 80 KIAS. This includes the upper sliding SAR doors/windows, the inward opening lower door, and the full length SAR door.

RECALL Maximum airspeed with floats armed is 80 KIAS.

Maximum groundspeed for landing or takeoff is 65 knots.

V_{mini} (minimum airspeed for instrument flight) is 50 KIAS.

RECALL Maximum airspeed after inadvertent float deployment is 50 KIAS in a climb, 55 KIAS in level flight, and 60 KIAS in descent/autorotation.

Maximum airspeed for windshield wiper operations is 40 knots.

Maximum airspeed for sideward flight or crosswind hover is 35 knots.

Maximum airspeed for rearward flight or tailwind hover is 35 knots.

Maximum groundspeed for taxi operations is 35 knots.

Maximum groundspeed for brake application is 35 knots.

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CATEGORY 'B' OPERATIONS

See Figure 1-3 for the variation of allowable takeoff gross weight with altitude and temperature.

**CATEGORY B
MAXIMUM TAKEOFF AND LANDING GROSS WEIGHT
BLEED AIR OFF
CONFIGURED WITH 9 OR LESS PASSENGER SEATS**

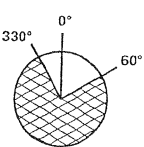
REDUCE GROSS WEIGHT DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE:

AMBIENT TEMPERATURE - °C	AIR CONDITIONER ON	ANTI ICE ON
-40	*	475
-30	*	975
-20	*	1500
-10	*	1550
0	400	1525
10	400	1300
20	400	*
30	400	*
40	425	*
50	425	*

EXAMPLE 1:
9000 FT
10°C
10 KTS DIRECT HEADWIND
MAX GW = 25,225 LB

EXAMPLE 2:
4000 FT
30°C
15 KTS WIND DIRECTLY FROM THE RIGHT
MAX GW = 25,650 LB

WIND DIRECTION RELATIVE TO NOSE



IF RELATIVE WIND IS IN THE HASHED AREA ABOVE, USE WIND SPEED INFLUENCE LINES TO REDUCE MAXIMUM GROSS WEIGHT

15 KTS AND GREATER

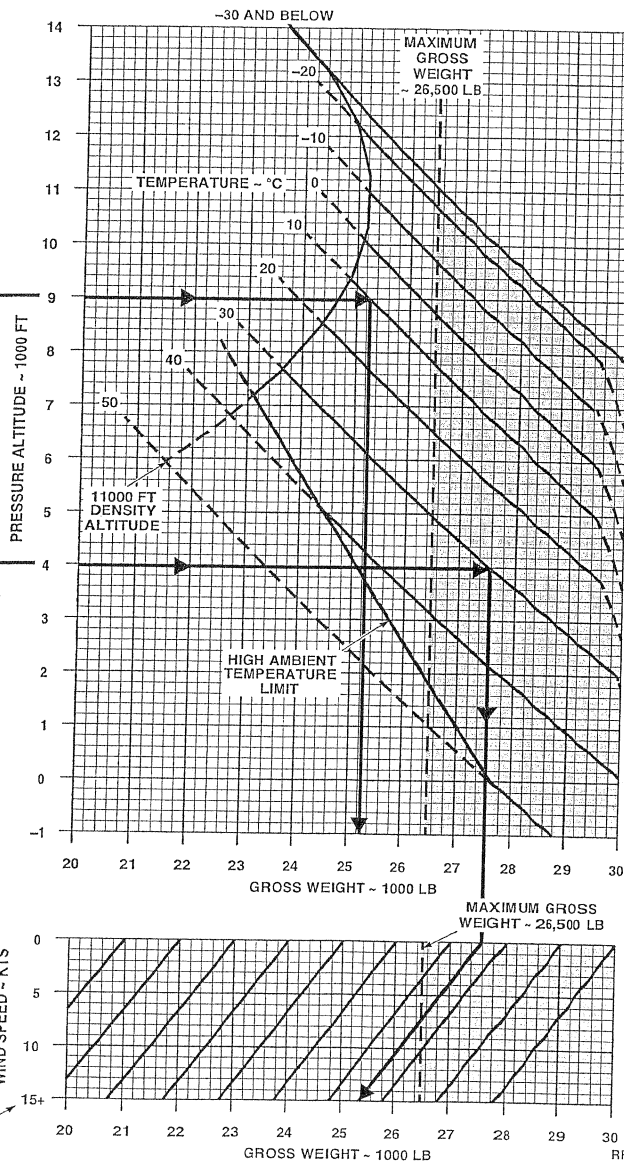


Figure 1-3. Cat 'B' Takeoff and Landing Gross Weight (Sheet 1 of 2)

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1-12B



CATEGORY B
MAXIMUM TAKEOFF AND LANDING GROSS WEIGHT
BLEED AIR ON
CONFIGURED WITH 9 OR LESS PASSENGER SEATS

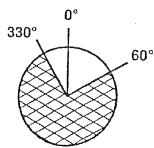
REDUCE GROSS WEIGHT DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE:

AMBIENT TEMPERATURE ~ °C	ANTI ICE ON
-40	1000
-30	1925
-20	2425
-10	2425
0	2225
10	1800

EXAMPLE 1:
9000 FT
-10°C
10 KTS DIRECT HEADWIND
MAX GW = 25,700 LB

EXAMPLE 2:
4000 FT
0°C
15 KTS WIND DIRECTLY FROM THE RIGHT
MAX GW = 26,500 LB

WIND DIRECTION RELATIVE TO NOSE



IF RELATIVE WIND IS IN THE HASHED AREA ABOVE, USE WIND SPEED INFLUENCE LINES TO REDUCE MAXIMUM GROSS WEIGHT

15 KTS AND GREATER

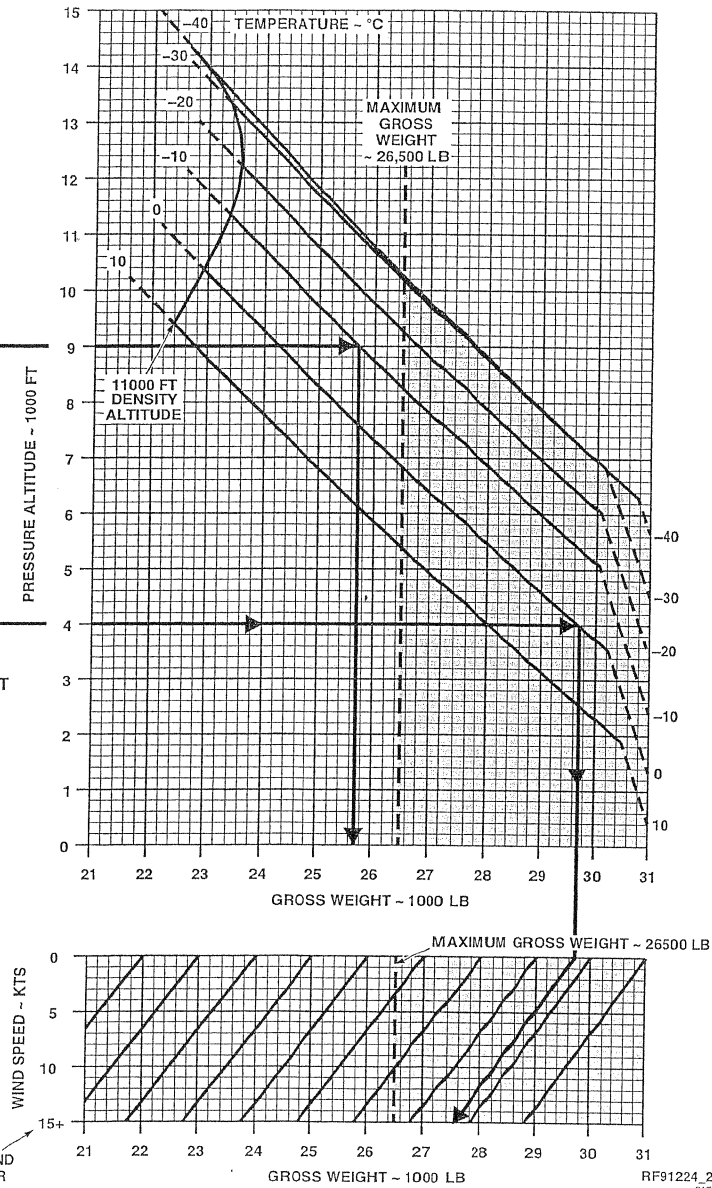
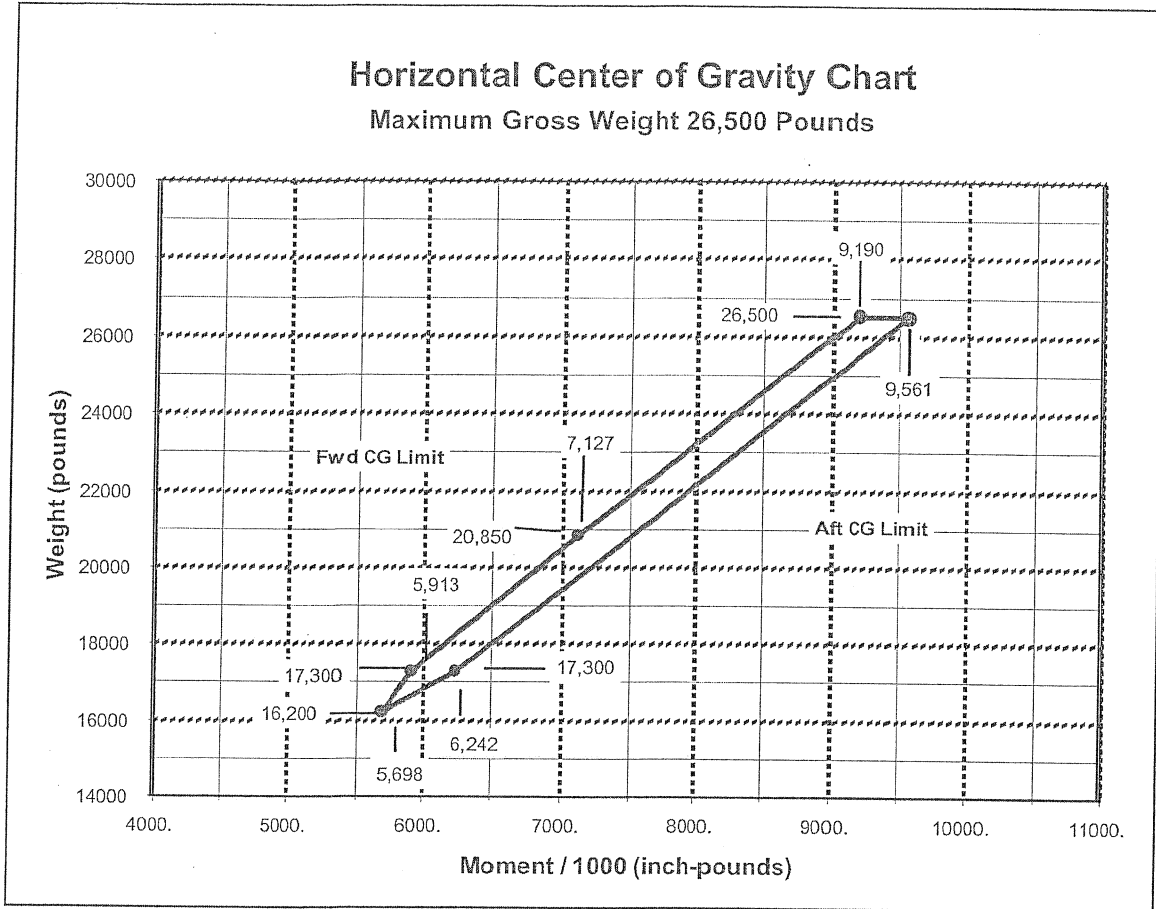


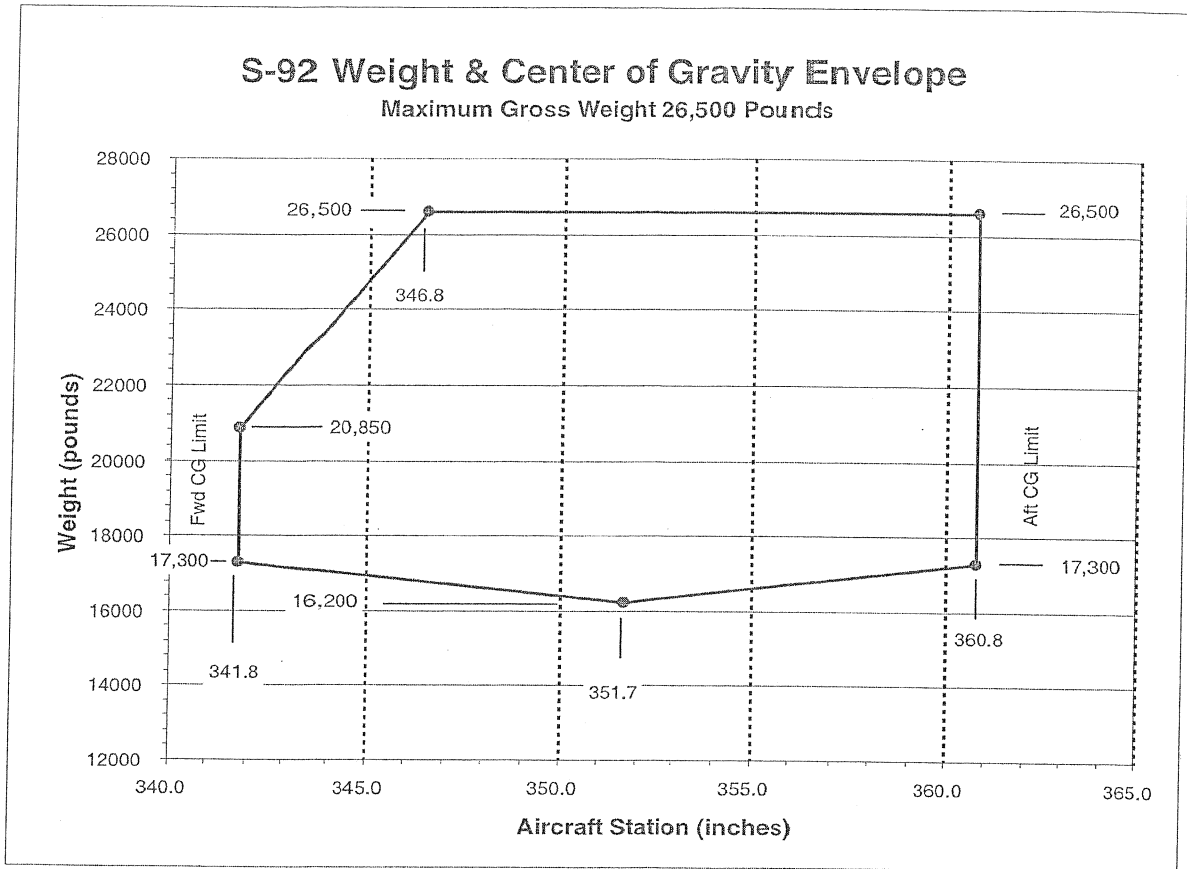
Figure 1-3. Cat 'B' Takeoff and Landing Gross Weight (Sheet 2 of 2)

FAA APPROVED: NOVEMBER 8, 2005
Revised: April 9, 2008



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Figure 2-1. Horizontal Center of Gravity Chart



RF91022B
SA

Figure 2-2. Weight and Center of Gravity Envelope

November 10, 2005
Revised: March 1, 2006

II-1-3

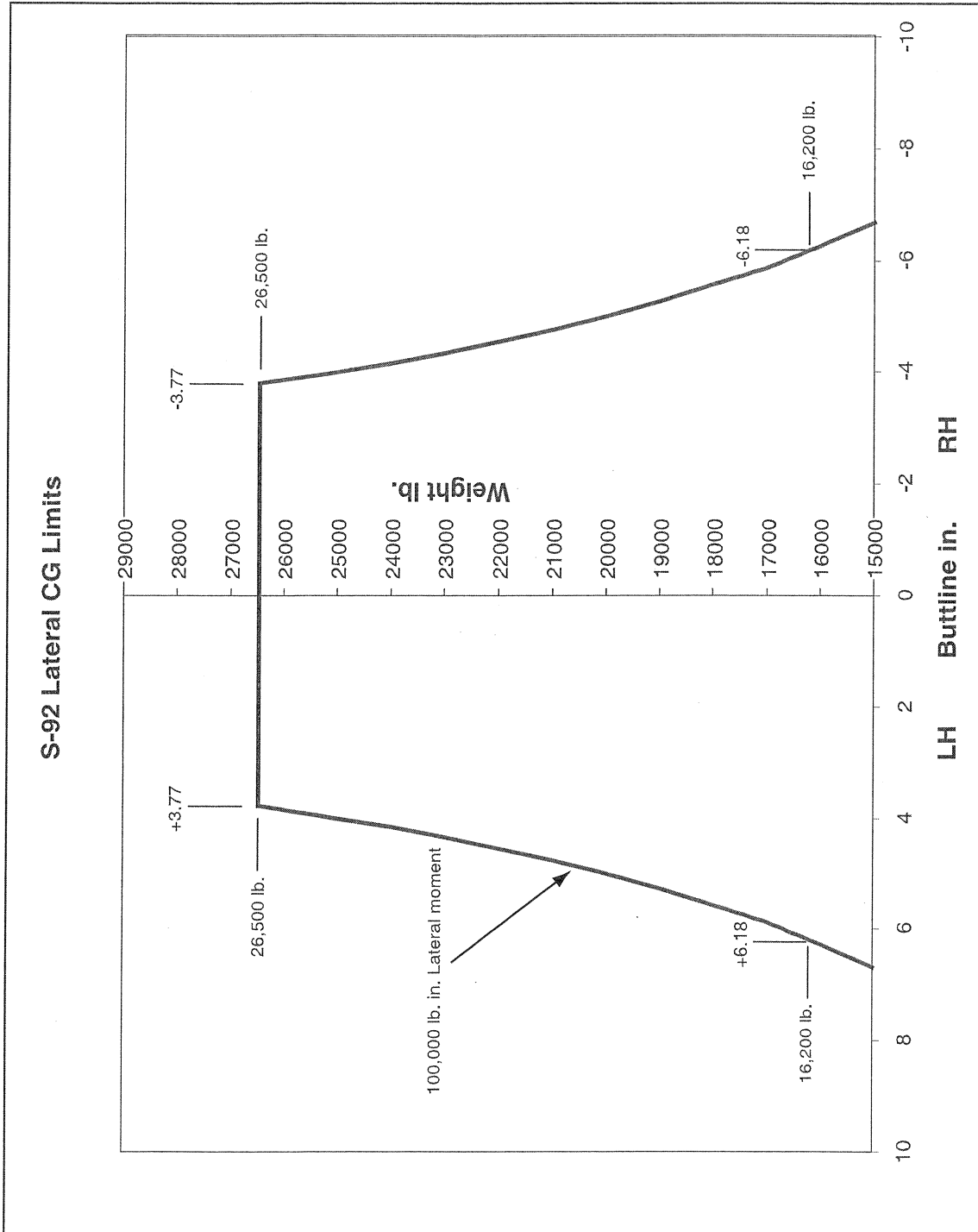


Figure 2-3. S-92 Lateral CG Limits





COCKPIT AND CABIN WEIGHT AND MOMENT TABLE

WEIGHT (LBS)	COCKPIT PILOT & COPILOT		COCKPIT OBSERVER		CABIN PASSENGERS										TRANSITION BAGGAGE/CARGO				
	B1		B2		D0	D1	D2	D3	D4	D5	D6	D7	D0	D1 THRU D7		E1	E2	E1 & E2	
	HORIZONTAL ARMA=18A.0 MOM/1000	LATERAL ARMA=V22.3 MOM/1000	HORIZONTAL ARMA=228.7 MOM/1000	LATERAL ARMA=00.0 MOM/1000	HORIZONTAL ARMA=232.8 MOM/1000	HORIZONTAL ARMA=245.9 MOM/1000	HORIZONTAL ARMA=283.3 MOM/1000	HORIZONTAL ARMA=317.3 MOM/1000	HORIZONTAL ARMA=348.3 MOM/1000	HORIZONTAL ARMA=391.3 MOM/1000	HORIZONTAL ARMA=413.3 MOM/1000	HORIZONTAL ARMA=455.3 MOM/1000	LATERAL ARMA=18.5 MOM/1000	LATERAL ARMA=H.9.5 MOM/1000	LATERAL ARMA=V28.0 MOM/1000	HORIZONTAL ARMA=81.0 MOM/1000	HORIZONTAL ARMA=50.0 MOM/1000	LATERAL ARMA=H.4.0 MOM/1000	MOM/1000
50	9	+/-1	11	0	12	14	16	17	19	21	22	-1	+/-1	+/-1	24	25	+/-1		
60	11	+/-1	14	0	14	17	19	21	23	25	27	27	+/-1	+/-2	29	30	+/-1		
70	13	+/-2	16	0	16	20	22	24	27	29	31	31	+/-1	+/-2	34	35	+/-1		
80	15	+/-2	18	0	19	23	25	28	31	33	36	36	+/-1	+/-2	38	40	+/-1		
90	17	+/-2	21	0	21	26	29	31	34	37	40	40	+/-1	+/-3	43	45	+/-1		
100	18	+/-2	23	0	23	29	32	35	38	41	45	45	+/-1	+/-3	48	50	+/-1		
110	20	+/-2	25	0	26	31	35	38	42	45	49	49	+/-1	+/-3	53	55	+/-2		
120	22	+/-3	27	0	30	34	38	42	46	50	54	54	+/-1	+/-3	58	60	+/-2		
130	24	+/-3	30	0	32	37	41	45	50	54	58	58	+/-1	+/-4	63	65	+/-2		
140	26	+/-3	32	0	33	34	44	49	53	58	62	62	+/-1	+/-4	67	70	+/-2		
150	28	+/-3	34	0	35	37	43	48	57	62	67	67	+/-1	+/-4	72	75	+/-2		
160	29	+/-4	37	0	37	46	51	56	61	66	71	71	+/-1	+/-4	77	80	+/-2		
170	31	+/-4	39	0	40	42	49	54	65	70	76	76	+/-1	+/-5	82	85	+/-2		
180	33	+/-4	41	0	42	44	51	57	69	74	80	80	+/-2	+/-5	87	90	+/-3		
190	35	+/-4	43	0	44	47	54	60	72	79	85	85	+/-4	+/-5	91	95	+/-3		
200	37	+/-4	46	0	47	49	57	63	76	83	89	89	+/-2	+/-6	96	100	+/-3		
210	39	+/-5	48	0	49	52	60	67	80	87	94	94	+/-2	+/-6	101	105	+/-3		
220	40	+/-5	50	0	51	63	70	77	84	91	98	98	+/-2	+/-6	106	110	+/-3		
230	42	+/-5	52	0	66	66	73	80	88	95	102	102	+/-2	+/-6	111	115	+/-3		
240	44	+/-5	54	0	68	68	76	84	92	99	107	107	+/-2	+/-7	115	120	+/-3		
250	46	+/-6	57	0	71	74	82	91	99	107	116	116	+/-2	+/-7	120	125	+/-4		
260	48	+/-6	59	0	77	77	86	94	103	112	120	120	+/-2	+/-8	130	135	+/-4		
270	50	+/-6	61	0	80	83	92	101	111	120	129	129	+/-2	+/-8	140	140	+/-4		
280	52	+/-6	63	0	86	86	95	105	114	124	134	134	+/-2	+/-8	145	145	+/-4		
290	53	+/-6	65	0	88	88	98	108	118	128	138	138	+/-2	+/-8	149	149	+/-4		
300	55	+/-7	67	0	91	91	102	112	122	132	142	142	+/-3	+/-9	155	155	+/-4		
310	57	+/-7	69	0	94	94	105	115	126	136	147	147	+/-3	+/-9	160	160	+/-4		
320	59	+/-7	71	0	97	97	108	119	130	141	151	151	+/-3	+/-10	165	165	+/-4		
330	61	+/-8	73	0	100	100	111	122	133	145	156	156	+/-3	+/-10	170	170	+/-5		
340	63	+/-8	75	0	103	103	114	126	137	149	160	160	+/-3	+/-10	175	175	+/-5		
350	64	+/-8	77	0	106	106	117	129	141	153	165	165	+/-3	+/-10	180	180	+/-5		
360	66	+/-8	79	0	108	108	121	133	145	157	169	169	+/-3	+/-11	185	185	+/-5		
370	68	+/-8	81	0	111	111	124	136	149	161	174	174	+/-3	+/-11	190	190	+/-5		
380	70	+/-8	83	0	114	114	127	140	153	165	178	178	+/-3	+/-11	195	195	+/-5		
390	72	+/-9	85	0	117	117	130	143	156	169	183	183	+/-4	+/-11	200	200	+/-6		
400	74	+/-9	87	0	120	120	133	147	160	174	187	187	+/-4	+/-12	205	205	+/-6		
410	75	+/-9	89	0	123	123	136	150	164	178	191	191	+/-4	+/-12	210	210	+/-6		
420	77	+/-10	91	0	126	126	140	154	168	182	196	196	+/-4	+/-12	215	215	+/-6		
430	79	+/-10	93	0	128	128	143	157	172	186	200	200	+/-4	+/-13	220	220	+/-6		
440	81	+/-10	95	0	131	131	146	161	175	190	205	205	+/-4	+/-13	225	225	+/-6		
450					134	134	149	164	179	194	209	209	+/-4	+/-13	230	230	+/-6		
460					137	137	152	168	183	198	214	214	+/-4	+/-13	235	235	+/-6		
470					140	140	155	171	187	203	218	218	+/-4	+/-14	240	240	+/-7		
480					143	143	159	175	191	207	223	223	+/-4	+/-14	245	245	+/-7		
490					146	146	162	178	194	211	227	227	+/-4	+/-14	250	250	+/-7		
500					148	148	165	182	198	215	232	232	+/-4	+/-15	255	255	+/-7		
510					151	151	168	185	202	219	236	236	+/-5	+/-15	260	260	+/-7		
520					154	154	171	189	206	223	240	240	+/-5	+/-15	265	265	+/-7		
530															270	270	+/-8		
540																		+/-8	

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Figure 2-9. (Sheet 1 of 2) Cockpit and Cabin Weight and Moment Table - 19 Passenger

November 10, 2005
Revised: March 1, 2006

II-1-10



COCKPIT AND CABIN WEIGHT AND MOMENT TABLE

WEIGHT (LBS)	COCKPIT PILOT & COPILOT				COCKPIT OBSERVER				CABIN PASSENGERS												TRANSITION BAGGAGE/CARGO			
	HORIZONTAL		LATERAL		HORIZONTAL		LATERAL		HORIZONTAL		HORIZONTAL		HORIZONTAL		HORIZONTAL		HORIZONTAL		HORIZONTAL		HORIZONTAL			
	ARM=184.0 MOM/1000	ARM=222.3 MOM/1000	ARM=228.7 MOM/1000	ARM=292.3 MOM/1000	ARM=232.8 MOM/1000	ARM=245.9 MOM/1000	ARM=285.3 MOM/1000	ARM=317.3 MOM/1000	ARM=348.3 MOM/1000	ARM=381.3 MOM/1000	ARM=413.3 MOM/1000	ARM=445.3 MOM/1000	ARM=478.3 MOM/1000	ARM=511.3 MOM/1000	ARM=544.3 MOM/1000	ARM=577.3 MOM/1000	ARM=610.3 MOM/1000	ARM=643.3 MOM/1000	ARM=676.3 MOM/1000	ARM=709.3 MOM/1000	ARM=742.3 MOM/1000	ARM=775.3 MOM/1000		
550					157	175	192	210	227	245														
560					160	178	196	214	231	249														
570					163	181	199	217	236	254														
580					165	184	203	221	240	258														
590					168	187	206	225	244	263														
600					171	190	210	229	248	267														
610					174	194	213	233	252	272														
620					177	197	217	236	256	276														
630					180	200	220	240	260	281														
640					183	203	224	244	265	285														
650					185	206	227	248	269	289														
660					188	209	231	252	273	294														
670										298														
680										303														
690										307														
700										312														
710										316														
720										321														
730										325														
740										330														
750										334														
760										338														
770										343														
780										347														
790										352														
800										356														
810										361														
820										365														
830										370														
840										374														
850										379														
860										383														
870										387														
880										392														
890																								
900																								
910																								
920																								
930																								
940																								
950																								
960																								
970																								
980																								
990																								
1000																								

NOTE:
CAUTION MUST BE TAKEN TO ENSURE THAT PASSENGER OR BAGGAGE/CARGO COMPARTMENT LOADING DOES NOT CAUSE THE AIRCRAFT MAXIMUM WEIGHT OR CENTER OF GRAVITY OR CENTER OF GRAVITY LIMITS TO BE EXCEEDED.

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Figure 2-9. (Sheet 2 of 2) Cockpit and Cabin Weight and Moment Table - 19 Passenger

November 10, 2005
Revised: March 1, 2006

II-1-11



Usable Fuel Weight and Moment Table

FUEL SYSTEM - 2 TANKS								
CAPACITY = 760 GALLONS								
TOTAL WT (LB)	HORIZONTAL MOM/1000	LAT=+/-60.3 MOM/1000	TOTAL WT (LB)	HORIZONTAL MOM/1000	LAT=+/-60.3 MOM/1000	TOTAL WT (LB)	HORIZONTAL MOM/1000	LAT=+/-60.3 MOM/1000
100	36	+/-6	1900	685	+/-115	3600	1303	
200	73	+/-12	2000	722	+/-121	3700	1339	
300	109	+/-18	2100	758	+/-127	3800	1375	
400	144	+/-24	2200	794	+/-133	3900	1412	
500	180	+/-30	2300	831	+/-139	4000	1448	
600	215	+/-36	2400	867	+/-145	4100	1484	
700	251	+/-42	2500	903	+/-151	4200	1521	
800	287	+/-48	**2565		+/-155	4300	1557	
900	323	+/-54	2600	940		4400	1593	
1000	359	+/-60	2700	976		4500	1630	
1100	395	+/-66	2800	1012		4600	1666	
1200	431	+/-72	2900	1049		4700	1702	
1300	468	+/-78	3000	1085		4800	1739	
1400	504	+/-84	3100	1121		4900	1775	
1500	540	+/-90	3200	1158		5000	1812	
1600	577	+/-96	3300	1194		5100	1848	
1700	613	+/-103	3400	1230		*5130	1859	
1800	649	+/-109	3500	1267				

* THIS REPRESENTS THE APPROXIMATE MAXIMUM WEIGHT AND MOMENT / 1000 FOR FULL FUEL WITH JET-A AT STANDARD CONDITIONS (60° F / 15° C).

** THIS REPRESENTS THE APPROXIMATE MAXIMUM WEIGHT AND MOMENT / 1000 FOR FULL FUEL IN ONE SPONSON, LEFT OR RIGHT HAND SIDE

NOTE:

- THE TOTAL USABLE CAPACITY OF 380 U.S. GALLONS PER TANK IS BASED ON CALCULATION.
- SEE FIGURE 2-15 FOR A PLOT OF FUEL C.G. AT VARIOUS FUEL WEIGHTS

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Figure 2-12. Usable Fuel Weight and Moment Table

November 10, 2005
Revised: June 18, 2010

II-1-16A/(II-1-16B Blank)



Engine Oil Weight and Moment Table

ENGINE OIL SYSTEM - 2 TANKS				
TOTAL CAPACITY = 4.8 U.S. GALLONS *				
GALLONS	WEIGHT (POUNDS)	HORIZONTAL ARM=376.1 MOM/1000	LATERAL ARM=29.9 MOM/1000	LATERAL ARM=-30.2 MOM/1000
1	7.7	3	0	0
2	15	6	0	0
3	23	9	1	-1
4.8	37	14	1	-1

* TWO OILER COOLERS / TANKS CONTAIN 2.4 GALLONS EACH
FOR A TOTAL CAPACITY OF 4.8 GALLONS.

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Figure 2-13. Engine Oil Weight and Moment Table

November 10, 2005

II-1-17



CATEGORY "A"
LANDING DISTANCE FROM 50FT HEIGHT TO STOP
 VAPPR = 50 KIAS
 ROD = 600 FPM
 ANTI-ICE ON OR OFF
 BLEED AIR OFF
 ONE ENGINE INOPERATIVE
 HARD SURFACE RUNWAY
 35 KNOTS OF CROSSWIND COMPONENT OR LESS

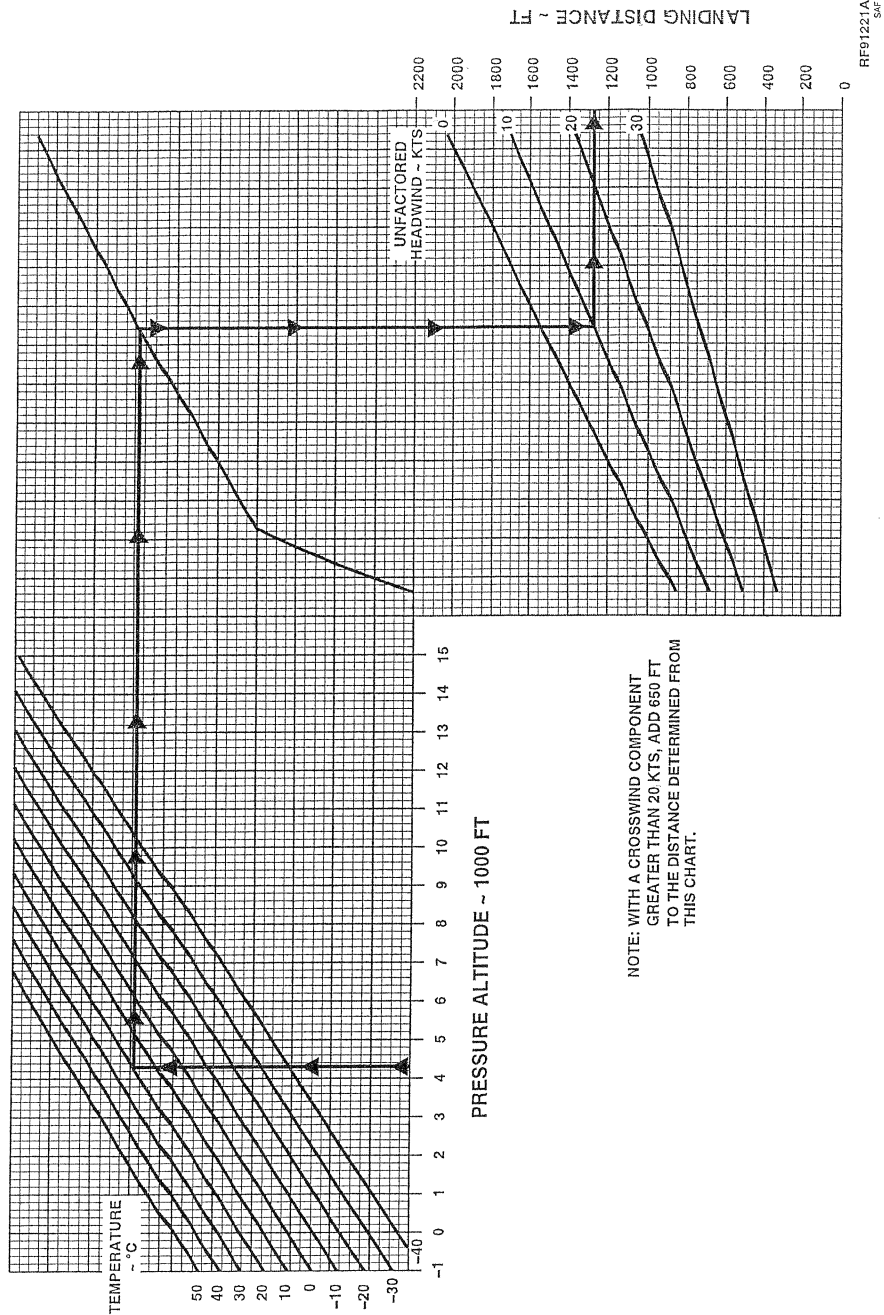


Figure 4-14A. Cat 'A' Landing Distance

FAA APPROVED: NOVEMBER 8, 2005
 Revised: July 17, 2007



CATEGORY "B"
TAKEOFF DISTANCE
ANTI-ICE OFF

TEMP - ° C	PRESSURE ALTITUDE - 1000 FT	GROSS WEIGHT LB								
		16000	18000	20000	22000	24000	26000	28000	26500	
0	0 & BELOW	883	912	941	969	998	1027	1053	1075	1097
	1	902	931	960	988	1017	1046	1075	1097	1119
	2	923	952	981	1010	1038	1067	1095	1118	1139
	3	946	974	1003	1032	1061	1090	1119	1158	1183
	4	966	997	1025	1054	1083	1111	1139	1168	1192
	5	990	1019	1047	1075	1104	1132	1158	1183	1206
	6	1012	1040	1068	1096	1123	1151	1178	1206	1226
	7	1033	1060	1087	1115	1142	1169	1192	1217	1236
	8	1057	1084	1111	1137	1164	1191	1217	1242	1260
	9	1082	1108	1133	1159	1182	1206	1229	1251	1270
	10	1106	1130	1154	1179	1202	1224	1246	1267	1286
11	* 1128	* 1151	* 1174	* 1197	* 1218	* 1239	* 1259	* 1278	* 1296	
0 & BELOW	922	950	979	1008	1037	1066	1095	1124	1153	
1	944	973	1002	1031	1060	1089	1118	1147	1176	
2	966	995	1024	1052	1081	1110	1137	1165	1192	
3	988	1017	1045	1073	1102	1130	1157	1185	1212	
4	1009	1037	1065	1093	1121	1149	1176	1204	1231	
5	1030	1057	1085	1112	1140	1167	1194	1221	1248	
6	1054	1081	1107	1134	1161	1188	1215	1242	1269	
7	1078	1104	1130	1156	1182	1209	1235	1262	1289	
8	1102	1126	1151	1176	1201	1226	1251	1276	1301	
9	* 1124	* 1147	* 1170	* 1194	* 1217	* 1240	* 1263	* 1286	* 1309	

TEMP - ° C	PRESSURE ALTITUDE - 1000 FT	GROSS WEIGHT LB							
		16000	18000	20000	22000	24000	26000	28000	26500
-40	0 & BELOW	800	827	855	882	909	936	963	990
	1	819	847	875	902	930	958	986	1014
	2	839	867	895	923	951	979	1007	1035
	3	858	886	915	943	971	1000	1027	1055
	4	877	906	934	963	992	1020	1047	1075
	5	896	925	954	983	1012	1040	1068	1096
	6	917	946	975	1003	1032	1061	1089	1118
	7	940	969	998	1027	1056	1085	1114	1143
	8	964	992	1021	1050	1078	1107	1136	1165
	9	986	1015	1043	1072	1100	1129	1158	1187
	10	1009	1037	1065	1093	1121	1149	1178	1206
11	1030	1058	1085	1112	1140	1168	1196	1224	
12	1055	1082	1109	1135	1162	1189	1216	1243	
13	1081	1106	1132	1158	1184	1210	1236	1262	
14	1105	1130	1154	1179	1204	1229	1254	1279	
15	* 1128	* 1151	* 1174	* 1197	* 1220	* 1243	* 1266	* 1289	
0 & BELOW	844	872	900	928	956	984	1012	1040	
1	863	891	919	948	976	1005	1032	1060	
2	882	910	939	968	996	1025	1052	1080	
3	901	929	958	987	1016	1045	1073	1102	
4	921	950	979	1008	1037	1066	1095	1124	
5	945	973	1002	1031	1060	1089	1118	1147	
6	967	996	1025	1053	1082	1111	1140	1169	
7	990	1018	1047	1075	1103	1132	1161	1190	
8	1012	1040	1068	1095	1123	1151	1179	1207	
9	1033	1060	1087	1115	1142	1169	1196	1224	
10	1058	1085	1111	1138	1164	1191	1218	1245	
11	1083	1109	1134	1160	1185	1211	1237	1263	
12	1107	1131	1156	1180	1204	1228	1252	1276	
13	* 1129	* 1152	* 1175	* 1198	* 1221	* 1244	* 1267	* 1290	

NOTES

ADD 320 FT TO CAT "B" TAKEOFF DISTANCE WITH ANTI-ICE ON
PRESENTED FOR INTERPOLATION ONLY.
DATA ABOVE 11,000 FT DENSITY ALTITUDE LIMIT OR HIGH
AMBIENT TEMPERATURE LIMIT.

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Figure 4-15A. Cat 'B' Takeoff Distance (Sheet 1 of 2)

FAA APPROVED: NOVEMBER 8, 2005
Revised: March 16, 2007



**CATEGORY "B"
TAKEOFF DISTANCE
ANTI-ICE OFF**

TEMP - ° C	PRESSURE ALTITUDE - 1000 FT 0 & BELOW	GROSS WEIGHT LB							
		16000	18000	20000	22000	24000	25000	26500	
40	1	962	991	1020	1048	1077	1106	1113	
	2	1005	1033	1061	1089	1117	1217	1303	
	3	1025	1053	1081	1108	1136	1429	1553	
	4	1048	1075	1102	1129	1274	1740	1892	
	5	1072	1098	1124	1151	1503	2108	2280	
	6	* 1096	* 1121	* 1146	* 1321	* 1817	* 2527	* 2723	
50	0 & BELOW	981	1009	1038	1067	1095	1214	1289	
	1	* 1002	* 1030	* 1058	* 1087	* 1115	* 1399	* 1487	

TEMP - ° C	PRESSURE ALTITUDE - 1000 FT 0 & BELOW	GROSS WEIGHT LB							
		16000	18000	20000	22000	24000	26000	26500	
30	1	964	993	1022	1051	1079	1108	1115	
	2	986	1015	1043	1072	1100	1128	1136	
	3	1007	1035	1063	1092	1120	1148	1155	
	4	1028	1055	1083	1110	1138	1264	1394	
	5	1051	1078	1105	1132	1158	1578	1728	
	6	1076	1102	1127	1153	1334	1942	2113	
	7	1099	1124	1149	1173	1652	2358	2553	
	8	* 1123	* 1145	* 1168	* 1379	* 2027	* 2833	* 3055	

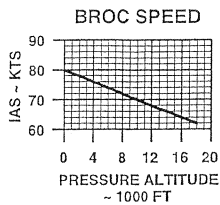
NOTES

ADD 320 FT TO CAT "B" TAKEOFF DISTANCE WITH ANTI-ICE ON
PRESENTED FOR INTERPOLATION ONLY.
DATA ABOVE 11,000 FT DENSITY ALTITUDE LIMIT OR
ISA+35° C HIGH AMBIENT TEMPERATURE LIMIT.

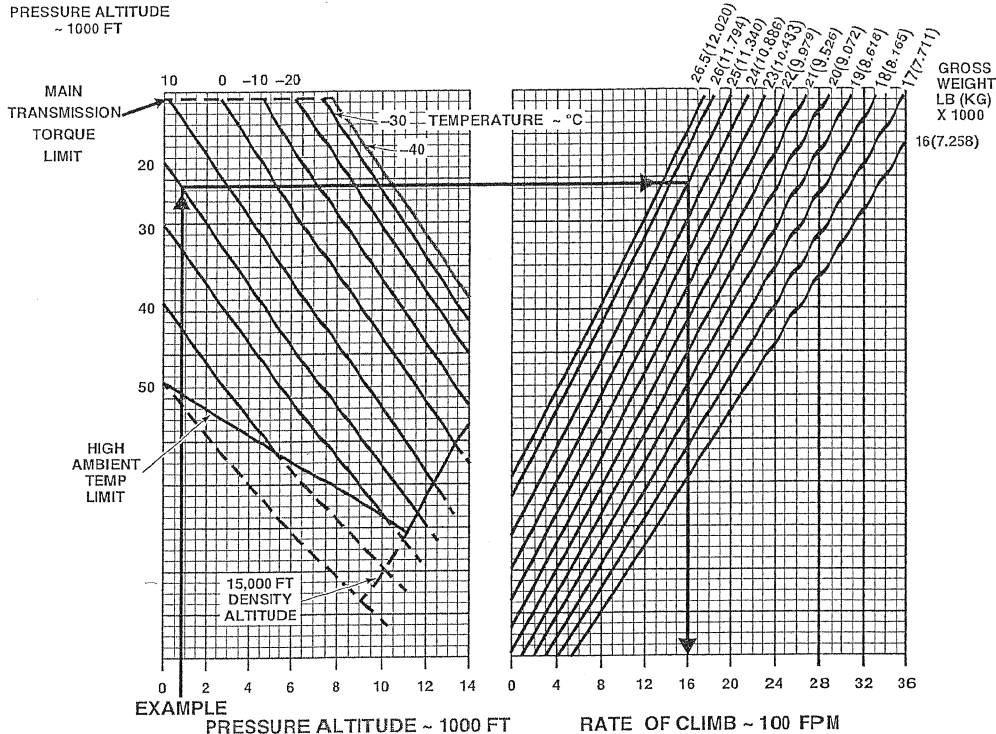
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Figure 4-15A. Cat 'B' Takeoff Distance (Sheet 2 of 2)

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FORWARD CLIMB PERFORMANCE
DUAL ENGINE MAXIMUM CONTINUOUS POWER
BEST RATE OF CLIMB SPEED 105% Nr
GEAR UP < 14,000 FT HP



DASHED LINES ARE FOR INTERPOLATION ONLY

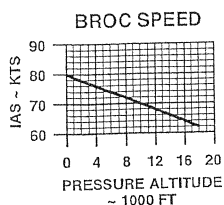
RF91128_1N
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REDUCE RATE OF CLIMB DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE

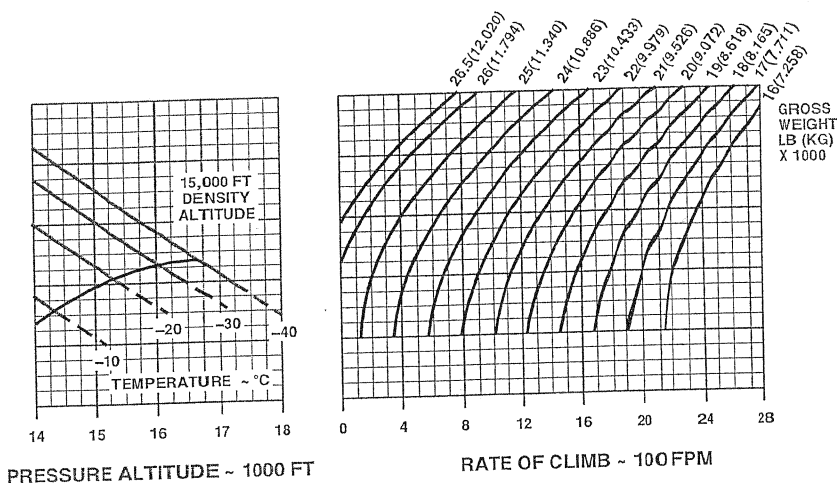
Gross Weight - LBS	Reduction Anti-Ice On	Reduction Air Conditioner On	Reduction Bleed Air On	Reduction Bleed Air & Anti-Ice On	Reduction Landing Gear Down	Reduction RIPS and Anti-Ice On For Altitudes ≤4000 Ft	Reduction RIPS and Anti-Ice On For Altitudes 0t;4000 Ft
16,000	100	105	750	750	45	1225	1225
18,000	90	90	600	650	40	1100	1100
20,000	85	80	500	600	40	975	975
22,000	75	75	475	550	35	850	950
24,000	75	75	450	500	35	725	1125
26,000	70	70	450	450	35	600	1275
26,500	70	70	450	450	35	600	1300

Figure 4-16. AEO Forward Climb Performance, Best Rate of Climb Speed (Sheet 1 of 2)

FAA APPROVED: NOVEMBER 8, 2005
Revised: April 9, 2008



FORWARD CLIMB PERFORMANCE
DUAL ENGINE MAXIMUM CONTINUOUS POWER
BEST RATE OF CLIMB SPEED 105% Nr
GEAR UP > 14,000 FT HP



DASHED LINES ARE FOR INTERPOLATION ONLY

RF91128_2L
SAF

REDUCE RATE OF CLIMB DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE

Gross Weight - LBS	Reduction Anti-Ice On	Reduction Air Conditioner On	Reduction Bleed Air On	Reduction Bleed Air & Anti-Ice On	Reduction Landing Gear Down
16,000	100	105	750	750	45
18,000	90	90	600	650	40
20,000	85	80	500	600	40
22,000	75	75	475	550	35
24,000	75	75	450	500	35
26,000	70	70	450	450	35
26,500	70	70	450	450	35

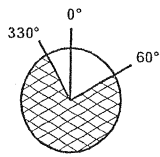
Figure 4-16. AEO Forward Climb Performance, Best Rate of Climb Speed (Sheet 2 of 2)

FAA APPROVED: NOVEMBER 8, 2005
 Revised: April 9, 2008

HOVER OUT OF GROUND EFFECT MAXIMUM GROSS WEIGHT TAKEOFF POWER BLEED OFF

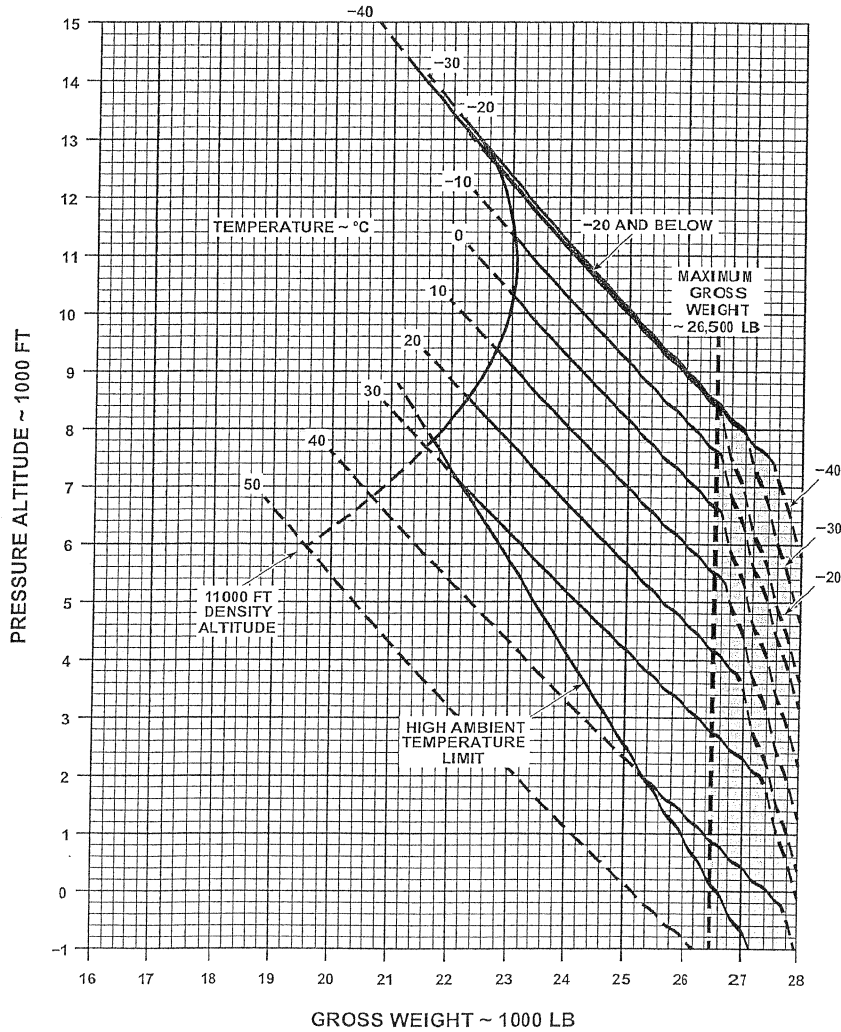
REDUCE GROSS WEIGHT DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE:

WIND DIRECTION
RELATIVE TO NOSE



FOR OTHER THAN CALM WIND CONDITIONS, IF RELATIVE WIND IS IN THE HACHED AREA SHOWN TO THE LEFT, REDUCE MAXIMUM GROSS WEIGHT BY AMOUNT SHOWN IN THE TABLE TO THE RIGHT.

AMBIENT TEMPERATURE ~ °C	CROSSWIND OR TAILWIND	AIR CONDITIONER ON	ANTI ICE ON
-40	600	*	425
-30	600	*	925
-20	600	*	1275
-10	600	*	1450
0	575	375	1400
10	575	350	1150
20	600	350	*
30	600	400	*
40	625	425	*
50	675	425	*



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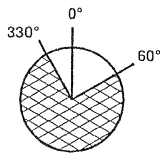
Figure 4-18. Hover OGE, Takeoff Power (Sheet 1 of 2)



HOVER OUT OF GROUND EFFECT MAXIMUM GROSS WEIGHT TAKEOFF POWER BLEED ON

REDUCE GROSS WEIGHT DETERMINED FROM CHART BY AMOUNT SHOWN IN TABLE:

WIND DIRECTION
RELATIVE TO NOSE



FOR OTHER THAN CALM WIND CONDITIONS, IF RELATIVE WIND IS IN THE HASHED AREA SHOWN TO THE LEFT, REDUCE MAXIMUM GROSS WEIGHT BY AMOUNT SHOWN IN THE TABLE TO THE RIGHT.

AMBIENT TEMPERATURE - °C	CROSSWIND OR TAILWIND	ANTI ICE ON
-40	600	900
-30	600	1670
-20	600	2125
-10	600	2200
0	575	1975
10	575	1650

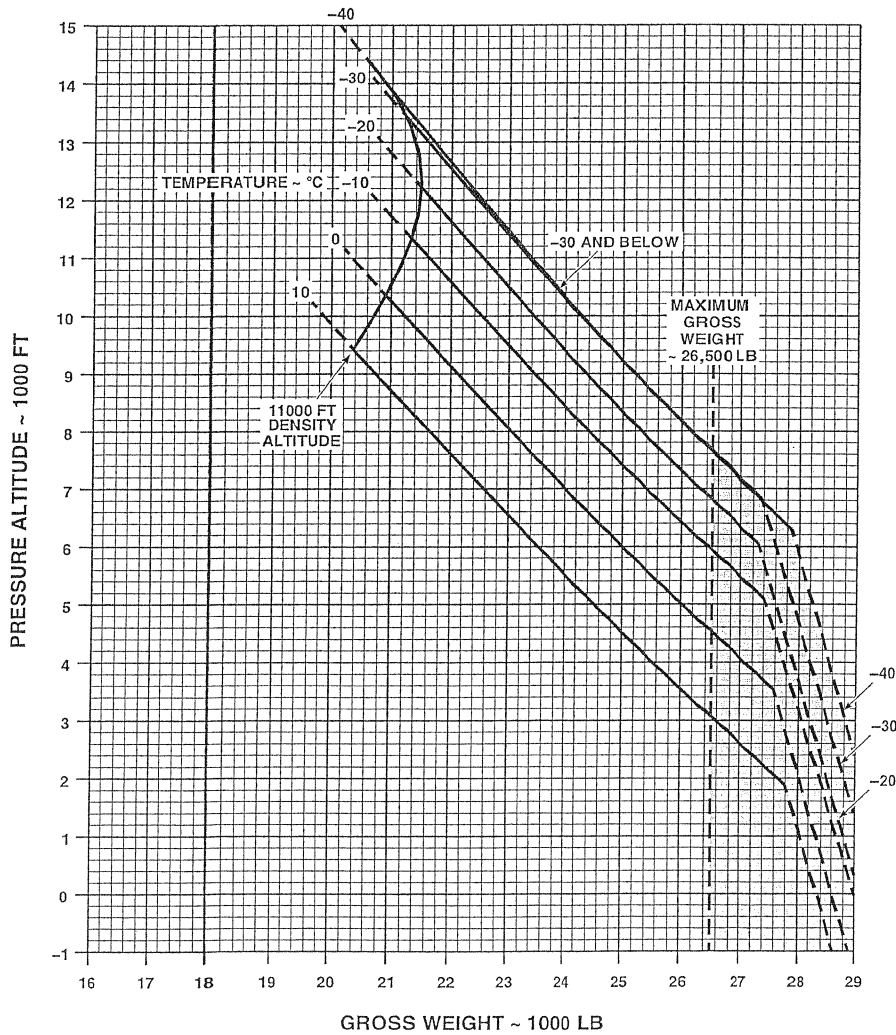


Figure 4-18. Hover OGE, Takeoff Power (Sheet 2 of 2)

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FAA APPROVED: NOVEMBER 8, 2005
Revised: April 9, 2008

ANNEX A

OPERATING CONDITIONS	BL-1	BL-2	BL-3	BL-4	BL-5
AIRCRAFT BASIC WEIGHT	16200	17300	16200	17300	16200
CREW WEIGHT	340	400	360	380	370
PASSENGER WT					
ROW D2	700	620	-	180	680
ROW D3	630	700	750	800	950
ROW D4	600	680	810	720	850
ROW D5	580	400	650	200	500
ROW D6	-	-	-	-	-
ROW D7	250	-	-	-	-
BAGGAGE E1 -Shelf	200	550	300	200	450
BAGGAGE E2 - Ramp	500	250	-	100	-
FUEL					
US GALLONS	310	250	360	400	260
TYPE	JETA1	JETA1	JETA1	JETA1	JETA1

ANNEX B

OPERATING CONDITIONS		BL-1	BL-2	BL-3	BL-4	BL-5
AIRCRAFT BASIC WEIGHT		16200	17300	16200	17300	16200
CREW WEIGHT		340	400	360	380	370
PASSENGER WT						
	ROW D2	700	620	-	180	680
	ROW D3	630	700	750	800	950
	ROW D4	600	680	810	720	850
	ROW D5	580	400	650	200	500
	ROW D6	-	-	-	-	-
	ROW D7	250	-	-	-	-
BAGGAGE E1 -Shelf		200	550	300	200	450
BAGGAGE E2 - Ramp		500	250	-	100	-
FUEL						
US GALLONS		310	250	360	400	260
TYPE		JETA1	JETA1	JETA1	JETA1	JETA1