

5-26 CRUISE PERFORMANCE

(Refer to the Tables on the following pages)

The following information is applicable to all Cruise Performance Charts contained in this section.

NOTES:

- *The highest torque value for each temperature and RPM value represents the maximum allowable cruise power. Do not exceed this torque value, 740°C ITT, or 101.6% Ng, whichever occurs first.*
- *The lowest torque value provided for each temperature and RPM represents the recommended torque setting to attain best range in zero wind conditions. With the inertial air particle separator placed in BYPASS and the power set below the cruise torque limit of 1840 foot-pounds, decrease the maximum cruise torque by 55 foot-pounds. Do not exceed 740°C ITT or 101.6% Ng.*



5-27 CRUISE PERFORMANCE (PRESSURE ALTITUDE SEA LEVEL)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL



NOTE: Do not exceed maximum cruise torque or 740°C ITT.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
50	1050	325	149	1170	326	151	-10	1670	413	169	1840	416	171	
	1000	315	146	1000	298	141		1600	401	166	1800	409	169	
	800	279	132	800	264	127		1400	366	158	1600	374	162	
	600	242	110	625	234	110		1200	331	149	1400	342	154	
40	1210	350	157	1370	355	160		1000	297	138	1200	311	144	
	1000	312	145	1200	328	152		800	261	125	1000	279	134	
	800	276	131	1000	295	140		600	226	109	800	247	121	
	600	239	109	800	262	126		520	211	99	600	214	105	
	590	239	108	615	230	108		550			550	205	99	
30	1390	378	165	1570	386	168		-20	1670	409	167	1840	411	169
	1200	344	155	1400	356	160			1600	397	164	1800	404	167
	1000	309	144	1200	324	150			1400	362	156	1600	370	160
	800	273	130	1000	292	139			1200	327	147	1400	339	152
	600	236	109	800	259	125			1000	293	137	1200	307	143
	580	232	107	600	224	106			800	258	125	1000	276	132
20	1560	405	170	1750	413	173			600	223	108	800	244	120
	1400	376	163	1600	387	167	510		207	97	600	211	104	
	1200	341	154	1400	353	159	540				540	201	98	
	1100	323	148	1200	321	149	-30		1670	405	165	1840	406	167
	1000	306	143	1000	289	138			1600	393	162	1800	400	165
	800	270	129	800	256	124			1400	358	154	1600	366	158
	600	234	109	600	222	106		1200	324	145	1400	335	150	
	570	228	104	590	222	105		1000	290	135	1200	304	141	
10	1670	421	173	1840	425	175		800	255	124	1000	273	131	
	1600	408	170	1800	418	173		600	221	107	800	241	119	
	1400	373	162	1600	383	165		500	203	95	600	209	103	
	1200	338	152	1400	349	157	-40	520			520	195	95	
	1000	303	141	1200	317	147		1670	402	163	1840	402	165	
	800	267	128	1000	286	137		1600	390	160	1800	395	163	
	600	231	109	800	253	124		1400	355	152	1600	362	156	
	560	223	103	600	219	106		1200	321	144	1400	331	148	
0	1670	417	171	1840	420	173		1000	287	134	1200	300	139	
	1600	404	168	1800	413	171		800	253	122	1000	270	130	
	1400	369	160	1600	379	164		600	218	107	800	238	118	
	1200	331	151	1400	346	155	485	198	93	600	206	103		
	1000	300	140	1200	314	146	-50	1670	398	161	1840	397	162	
	800	263	127	1000	282	135		1600	386	158	1800	390	161	
	600	228	108	800	250	122		1400	352	150	1600	359	154	
	545	218	101	600	217	105		1200	318	142	1400	328	146	
		560	210	101	560	210		101	1000	284	132	1200	297	138
		800	248	121	1000	267		128	800	248	121	1000	267	128
600		215	106	800	236	117		600	215	106	800	236	117	
475		194	91	600	203	102		600	203	102	600	203	102	
510		189	93	510	189	93		510	189	93	510	189	93	

5-28 CRUISE PERFORMANCE (PRESSURE ALTITUDE 2000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL



NOTE: Shaded torques may produce calibrated speeds in excess of V_{MO} , and may have to be reduced slightly.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM				
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		
46	1030	311	151	1150	313	153	-15	1670	404	172	1840	408	174		
	1000	305	149	1000	288	144		1600	391	169	1800	401	172		
	800	269	134	800	255	129		1400	356	161	1600	366	165		
	620	236	113	645	229	113		1200	322	151	1400	333	156		
35	1200	337	160	1350	342	162		1000	287	141	1200	301	147		
		302	148	1200	318	154		800	252	128	1000	270	136		
		266	133	1000	285	143		600	217	109	800	238	123		
		231	111	800	252	128		545	207	101	600	206	106		
	605	231	111	635	224	111		560	199	101	560	199	101		
25	1400	370	168	1540	371	169		-25	1670	401	170	1840	404	172	
	1200	334	158	1400	347	163			1600	388	167	1800	396	170	
	1000	299	146	1200	314	153			1400	352	159	1600	362	163	
	800	264	132	1000	282	141			1200	318	150	1400	329	154	
	600	227	110	800	249	127			1000	284	139	1200	297	145	
	595	227	109	625	220	109			800	250	127	1000	267	135	
	15	1560	395	174	1720	400			175	600	215	109	800	236	122
1400		366	166	1600	378	170	530		202	100	600	203	105		
1200		330	156	1400	344	161	550		195	100	550	195	100		
1000		296	145	1200	311	151	-35		1670	397	168	1840	399	170	
900		279	138	1000	279	140			1600	384	165	1800	392	168	
800		261	131	800	247	126			1400	349	157	1600	358	161	
600		225	110	610	215	108			1200	315	148	1400	326	152	
585		222	107	5	1670	417			178	1000	281	137	1200	294	143
1600	399	173	1840		409	176		800	247	125	1000	264	133		
1400	362	165	1600		373	168		600	212	108	800	234	121		
1200	327	155	1400		340	160		520	198	98	600	201	104		
1000	293	144	1200		308	150	-45	1670	393	166	535	190	98		
800	258	130	1000		276	139		1600	381	163	1840	395	167		
605	223	105	800		244	125		1600	381	163	1800	387	166		
-5	1670	407	174		1840	413		176	1400	346	155	1600	354	158	
		395	171	1800	405	174		1200	312	146	1400	322	150		
		359	163	1600	369	166		1000	278	136	1200	291	142		
		325	153	1400	337	158		800	244	124	1000	261	132		
		290	142	1200	304	148		600	209	108	800	230	120		
		255	129	1000	273	137	505	193	96	600	198	104			
		220	110	800	241	124	-54	1670	390	163	530	186	97		
		211	103	600	208	106		1600	377	161	1840	391	165		
		580	205	104	580	205		104	1600	377	161	1800	383	164	
			580	205	104	1400		343	153	1400	343	153	1600	350	157
						1200		310	144	1200	310	144	1400	319	149
						1000		275	134	1000	275	134	1200	289	140
800	241					123		800	241	123	1000	258	130		
600	207					107		600	207	107	800	227	118		
490	188					93	490	188	93	600	196	103			
510	181					94	510	181	94	510	181	94			

5-29 CRUISE PERFORMANCE (PRESSURE ALTITUDE 4000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
42	1010	298	152	1120	299	154	-20	1670	396	175	1840	402	177	
	800	261	136	1000	279	146		1600	383	172	1800	394	175	
	640	232	117	800	246	131		1400	347	164	1600	358	167	
30				670	225	117		1200	313	154	1400	324	159	
	1180	324	161	1330	330	164		1000	278	143	1200	292	149	
	1000	292	150	1200	308	157		800	243	130	1000	261	138	
	800	258	135	1000	276	145		600	209	110	800	230	125	
	625	226	114	800	243	130		560	202	104	600	198	106	
20				655	219	115					585	195	105	
	1340	349	168	1510	357	171		-30	1670	392	173	1840	397	175
	1200	324	161	1400	338	166			1600	380	170	1800	390	173
	1000	290	149	1200	305	156			1400	343	162	1600	354	165
	800	255	134	1000	273	144			1200	309	152	1400	321	157
615	222	113	800	241	129	1000			275	141	1200	289	147	
10				640	214	113		800	241	128	1000	258	137	
	1500	375	174	1680	385	177	600	207	109	800	228	124		
	1400	357	169	1600	370	173	550	198	103	600	196	106		
	1200	322	159	1400	335	164				570	191	102		
	1000	287	147	1200	302	154	-40	1670	388	171	1840	395	172	
800	252	133	1000	270	142	1600		376	168	1800	386	171		
600	217	110	800	238	128	1400		340	160	1600	350	163		
			625	209	110	1200		306	150	1400	317	155		
						1000		272	140	1200	286	146		
0	1640	398	178	1840	411	181	800	239	127	1000	255	135		
	1600	390	177	1800	404	179	600	204	109	800	225	123		
	1400	353	168	1600	366	171	525	191	100	600	193	106		
	1200	319	158	1400	331	162				555	186	101		
	1000	284	146	1200	299	152	-50	1670	387	168	1840	393	170	
800	249	132	1000	267	141	1600		372	166	1800	382	169		
590	212	108	800	235	127	1400		337	157	1600	346	161		
			615	205	109	1200		306	148	1400	314	153		
						1000		270	138	1200	283	144		
-10	1670	400	177	1840	412	179	800	236	126	1000	252	134		
	1600	386	175	1800	399	177	600	201	108	800	222	121		
	1400	350	166	1600	362	169	515	187	98	600	191	105		
	1200	316	156	1400	328	161				540	181	98		
	1000	281	144	1200	295	151								
	800	247	131	1000	264	140								
	600	212	110	800	233	126								
	575	207	106	600	200	107								

5-31 CRUISE PERFORMANCE (PRESSURE ALTITUDE 6000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
38	980	284	153	1090	285	155	-25	1670	395	178	1840	406	180	
	800	252	138	1000	271	149		1600	376	176	1800	397	178	
	660	227	120	800	238	133		1400	339	167	1600	352	170	
25				690	220	120		1200	304	157	1400	316	162	
	1180	320	164	1310	319	166		1000	270	145	1200	285	152	
	1200	316	165	1200	300	160		800	236	131	1000	253	140	
	1000	283	153	1000	267	147		600	202	110	800	222	127	
	800	249	137	800	235	132		580	198	107	605	191	108	
	645	221	118	670	214	117		-35	1670	394	176	1840	399	178
15	1310	336	170	1470	343	172			1600	374	173	1800	394	176
	1200	316	164	1400	331	169			1400	336	165	1600	347	168
	1000	281	151	1200	297	158			1200	301	155	1400	313	160
	800	246	136	1000	264	146			1000	267	144	1200	281	150
	630	216	115	800	233	131			800	234	130	1000	250	139
				655	209	115		600	199	110	800	220	125	
5	1460	360	176	1640	372	178	570	194	106	600	188	107		
	1400	349	173	1600	364	176				585	186	105		
	1200	313	162	1400	327	167	-45	1670	390	174	1840	392	175	
	1000	278	150	1200	294	157		1600	373	171	1800	388	174	
	800	244	135	1000	261	145		1400	333	162	1600	344	166	
	620	212	114	800	230	130		1200	298	153	1400	309	158	
			645	205	114	1000		265	142	1200	278	148		
						800		231	129	1000	247	137		
-5	1600	384	180	1790	398	182	600	197	109	800	217	124		
	1400	345	171	1600	359	174	555	194	103	600	186	106		
	1200	310	160	1400	324	165				570	181	103		
	1000	275	148	1200	291	155	-54	1670	384	172	1840	385	173	
	800	241	134	1000	258	143		1600	373	169	1800	382	172	
	605	207	112	800	228	129		1400	330	160	1600	340	164	
			630	200	111	1200		296	151	1400	306	156		
						1000		263	140	1200	275	146		
						800		229	127	1000	245	136		
-15	1670	396	181	1840	411	182	600	195	109	800	215	123		
	1600	380	178	1800	398	181	545	185	101	600	184	106		
	1400	342	169	1600	355	172				560	177	102		
	1200	307	159	1400	320	163								
	1000	273	147	1200	288	153								
	800	239	132	1000	256	142								
	600	204	111	800	225	128								
	590	202	110	620	196	110								

5-32 CRUISE PERFORMANCE (PRESSURE ALTITUDE 8000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM						
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS				
34	950	270	153	1060	273	156	-25	1670	388	183	1840	399	184				
	800	244	140	1000	263	151		1600	381	180	1800	389	183				
	680	123	124	800	231	134		1400	333	171	1600	349	174				
				710	216	124		1200	298	160	1400	312	165				
25	1070	290	161	1200	294	163		1000	264	149	1200	278	155				
	1000	277	156	1000	260	150		800	230	134	1000	247	143				
	800	242	139	800	229	134		605	197	112	800	216	129				
	670	220	122	700	213	122		630	190	112	630	190	112				
15	1200	309	168	1350	317	170		-35	1670	384	181	1840	394	182			
	1000	274	155	1200	291	162			1600	374	178	1800	386	180			
	800	240	138	1000	258	149			1400	330	169	1600	347	172			
				800	226	133			1200	295	159	1400	308	163			
655	215	120	800	226	133	1000			261	147	1200	275	153				
5	1320	328	173	1480	337	175			800	227	132	1000	244	142			
	1200	306	166	1400	222	171			600	194	111	800	214	128			
	1000	272	153	1200	288	160			590	192	109	615	185	109			
	800	237	137	1000	255	148	-45		1670	380	178	1840	390	180			
645	211	118	800	224	132	1600			367	175	1800	381	178				
1470	354	178	1650	368	181	1400			327	166	1600	345	170				
			1400	356	179	1200			292	157	1400	305	161				
1400	340	175	1600	318	169	1000			258	145	1200	272	152				
1200	303	164	1400	318	169	800			225	131	1000	242	140				
1000	269	152	1200	284	159	600			191	110	800	211	127				
800	235	136	1000	252	146	580			188	107	600	180	107				
630	206	116	800	221	131	-54		1670	377	176	1840	386	177				
-5	1470	354	178	1650	368			181	1600	362	173	1800	378	176			
				1400	356			179	1400	324	164	1600	343	168			
				1200	318			169	1200	284	159	1200	290	155	1400	302	159
				1000	284			159	1000	252	146	1000	256	143	1200	270	150
800	235	136	1000	252	146			800	223	130	1000	239	139				
630	206	116	800	221	131			600	189	110	800	209	125				
-15	1590	381	182	1780	392			184	565	183	105	600	178	107			
				1400	352		177	600	189	110	580	175	104				
				1200	315		167	800	219	130							
				1000	281		157	800	219	130							
800	250	145	645	194	114												

5-30 CRUISE PERFORMANCE (PRESSURE ALTITUDE 10000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
30	920	258	153	1020	259	156	-30	1600	370	183	1810	393	187	
	800	237	141	1000	256	154		1400	330	174	1800	391	186	
	700	220	128	800	224	136		1200	291	163	1600	349	178	
20				730	212	128		1000	257	151	1400	307	168	
	1060	280	163	1160	280	164		800	223	136	1200	272	158	
	1000	270	159	1000	253	153		620	192	115	1000	240	146	
	800	234	141	800	221	135					800	209	131	
	690	215	126	720	209	126					650	186	115	
10	1180	299	170	1320	306	172		-40	1670	382	184	1840	397	185
	1000	267	157	1200	284	165			1600	366	181	1800	386	184
	800	232	140	1000	251	152			1400	329	172	1600	342	175
	675	211	123	800	219	135			1200	288	161	1400	303	166
				705	204	124			1000	254	149	1200	269	156
0	1300	318	175	1450	327	177			800	220	134	1000	237	144
	1200	299	169	1400	317	174			605	188	112	800	207	130
	1000	264	156	1200	281	163					635	182	112	
	800	230	139	1000	248	150	-50		1670	379	181	1840	392	183
	660	206	121	800	216	134			1600	363	178	1800	382	181
			690	199	121	1400			328	169	1600	337	173	
-10	1410	336	179	1590	359	181			1200	286	159	1400	299	164
	1400	334	178	1400	313	172			1000	252	148	1200	266	154
	1200	296	167	1200	278	161			800	218	133	1000	235	142
	1000	262	154	1000	246	149			600	185	111	800	204	128
	800	227	138	800	214	133		585	182	110	615	177	110	
650	202	119	680	195	119									
-20	1510	359	181	1710	374	185								
	1400	331	176	1600	355	180								
	1200	294	165	1400	310	170								
	1000	259	153	1200	275	160								
	800	225	137	1000	243	147								
635	197	117	800	211	132									
			665	191	117									

5-33 CRUISE PERFORMANCE (PRESSURE ALTITUDE 12000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
26	890	246	153	980	246	155	-35	1540	355	184	1720	374	186	
	800	230	143	800	217	138		1400	324	177	1600	344	181	
	725	217	132	755	210	132		1200	285	166	1400	307	171	
15	1050	272	165	1150	273	166		1000	250	154	1200	266	161	
	1000	262	161	1000	247	155		800	217	137	1000	233	148	
	800	227	142	800	214	137		640	190	118	800	202	132	
5	710	212	130	740	205	130		-45	1630	374	186	1820	394	188
	1170	291	172	1300	297	174			1600	367	184	1800	389	187
	1000	259	160	1200	278	168			1400	320	175	1600	340	179
-5	800	225	142	1000	244	154			1200	282	164	1400	306	169
	695	207	127	800	212	136			1000	248	152	1200	263	159
				730	201	128			800	214	136	1000	231	146
-15				730	201	128			625	185	116	800	200	131
	1280	309	177	1420	319	178						650	178	115
	1200	293	172	1400	313	177			-54	1670	379	185	1840	395
	1000	257	159	1200	275	166	1600	363		182	1800	384	185	
	800	223	141	1000	241	153	1400	318		173	1600	337	176	
685	204	126	800	209	135	1200	280	162		1400	202	167		
			715	197	126	1000	245	150		1200	261	157		
-25				715	197	126	800	212	135	1000	229	145		
	1360	327	179	1520	336	181	610	181	113	800	198	130		
	1200	290	170	1400	311	175				635	174	113		
	1000	255	157	1200	272	164								
	800	221	140	1000	239	151								
-25	670	199	123	800	207	135								
				700	192	123								
	1460	340	183	1630	356	184								
	1400	330	179	1600	349	183								
	1200	287	168	1400	309	173								
-25	1000	253	155	1200	269	162								
	800	219	139	1000	236	150								
	655	194	121	800	205	134								
			685	187	121									

5-34 CRUISE PERFORMANCE (PRESSURE ALTITUDE 14000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
22	860	234	152	940	220	154	-20	1290	308	179	1440	316	181
	740	213	135	780	207	137		690	196	127	720	187	127
10	990	254	163	1090	257	165	-30	1380	320	182	1560	341	185
	730	209	134	765	202	134		670	191	123	705	184	124
0	1100	272	170	1230	280	173	-40	1450	333	183	1640	356	186
	720	205	132	750	198	132		660	187	122	690	180	122
-10	1200	288	175	1340	304	177	-50	1530	350	185	1740	377	188
	705	201	129	735	193	129		650	183	120	675	176	119

5-35 CRUISE PERFORMANCE (PRESSURE ALTITUDE 16000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
18	820	221	149	910	224	154	-20	1190	285	177	1340	296	180
	770	213	141	805	206	141		715	196	132	750	189	132
10	910	235	159	1000	237	161	-30	1280	298	181	1430	313	183
	760	209	140	795	203	140		700	191	129	735	184	130
0	1010	251	167	1110	255	168	-40	1340	309	182	1510	329	184
	745	205	137	780	198	137		690	188	127	715	179	126
-10	1100	266	173	1220	277	174	-50	1420	325	184	1600	347	186
	730	200	134	765	194	135		670	182	124	700	175	124

5-36 CRUISE PERFORMANCE (PRESSURE ALTITUDE 18000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL



NOTE: Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
14	790 *	211 *	145 *	870 830	212 205	151 146	-25	1120 740	264 194	176 136	1250 775	276 188	177 136
5	860 780	221 207	156 144	960 820	226 201	160 144	-35	1200 720	279 189	179 133	1350 755	297 182	181 133
-5	960 765	237 202	165 141	1060 805	242 198	167 142	-45	1260 710	291 185	181 131	1420 740	309 178	183 131
-15	1040 750	253 198	171 138	1170 790	264 192	174 139	-54	1320 690	302 180	182 128	1460 725	315 174	183 128

5-37 CRUISE PERFORMANCE (PRESSURE ALTITUDE 20000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL



NOTE: Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
10	750 *	199 *	134 *	820 *	199 *	145 *	-30	1065 1000 800 760	251 238 199 193	175 169 147 141	1170 1000 800 795	258 225 187 186	175 162 141 140
0	830 800	211 205	153 148	920 845	215 201	158 149	-40	1130 1000 800 740	263 234 197 187	178 167 146 137	1250 1200 1000 800 775	274 262 224 185 181	179 175 160 140 137
-10	920 800 790	226 203 202	164 148 146	1010 1000 830	231 228 196	166 165 146	-50	1190 1000 800 725	274 232 196 183	180 166 145 134	1310 1200 1000 800 760	285 259 222 182 176	180 173 159 140 134
-20	1000 800 770	242 201 196	171 147 143	1100 1000 815	245 227 192	172 163 144							

5-38 CRUISE PERFORMANCE (PRESSURE ALTITUDE 22000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
6	710	187	---	780 *	189 *	137 *	-35	1040 780	245 192	176 145	1150 820	256 187	177 145
-5	810 *	204 *	150 *	900 870	208 203	157 153	-45	1100 765	257 187	179 142	1220 800	269 181	180 142
-15	890 810	221 201	163 150	990 855	225 197	166 151	-54	1140 750	263 183	180 139	1270 785	278 177	181 139
-25	960 795	229 196	169 148	1070 840	239 192	172 148							

5-39 CRUISE PERFORMANCE (PRESSURE ALTITUDE 24000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
2	670	176	---	730	176	---	-40	960 805	227 195	171 150	1060 845	235 192	173 150
-10	770 *	194 *	134 *	840 *	204 *	150 *	-50	1020 785	238 190	175 146	1120 825	246 187	176 146
-20	840 835	206 205	157 156	920 880	216 215	161 156							
-30	890 820	213 200	164 153	990 865	223 210	168 153							

5-40 CRUISE PERFORMANCE (PRESSURE ALTITUDE 25000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
0	650	171	---	720	174	---	-30	850 835	204 201	159 156	940 880	211 198	164 156
-10	720	182	---	790 *	187 *	136 *	-40	910 820	216 196	167 153	1000 865	223 192	169 153
-20	790 *	196 *	144 *	870 *	198 *	155 *	-50	960 800	225 190	171 150	1060 1000 845	234 220 186	173 167 150

5-41 RANGE / ENDURANCE PROFILE

Conditions:

- Weight..... 6750 LB
- Propeller 2000 RPM
- Temperature..... ISA
- Winds..... Zero
- Total Fuel 320 GAL

Example:

- Power..... Maximum Cruise
- Takeoff Press Alt 2000 FT
- Cruise Press Alt 10000 FT

Fuel to Climb: 42.4 LB
Cruise Fuel Flow: 343 LB/HR
Endurance: 5.6 HR
Range: 987 NM
True Airspeed: 179 KIAS

NOTES:

- *Fuel Remaining For Cruise is equal to 2110 pounds usable, less fuel required for climb from sea level at maximum climb power, less 153 pounds for 45 minutes IFR reserve fuel at Maximum Range Power (ISA @10,000 ft PA), less fuel for descent to sea level, less 50 pounds for fuel used prior to takeoff.*
- *Range and endurance values include descent to final destination at approximately 140 KIAS above 16,000 feet and 160 KIAS below 16,000 feet.*



Maximum Cruise Power							
Press Alt (FT)	Climb Fuel (LB)	Fuel Remaining For Cruise (LB)	Airspeed (KTAS)	Fuel Flow (PPH)	Endurance (Hours)	Total Range (NM)	Total Specific Range (NM/LB)
SL	0	1907	174	419	4.6	792	.42
2000	9.8	1886	176	409	4.7	821	.43
4000	19.4	1864	178	390	4.9	869	.46
6000	30.5	1843	178	375	5.1	903	.47
8000	42.4	1820	178	353	5.4	956	.50
10000	54.1	1798	179	343	5.6	987	.52
12000	66.4	1776	179	327	5.9	1032	.54
14000	80.1	1751	179	308	6.2	1089	.57
16000	95.9	1725	179	293	6.5	1139	.60
18000	113.8	1699	177	271	7.0	1208	.63
20000	136.8	1668	176	252	7.4	1281	.67
22000	171.2	1626	175	247	7.6	1394	.68
24000	267.5	1521	171	225	8.2	1357	.71
25000	344.6	1440	169	219	8.4	1363	.71

Figure 5-22 – Maximum Cruise Profile

Maximum Range Power							
Press Alt (FT)	Climb Fuel (LB)	Fuel Remaining For Cruise (LB)	Airspeed (KTAS)	Fuel Flow (PPH)	Endurance (Hours)	Total Range (NM)	Total Specific Range (NM/LB)
SL	0	1907	104	219	8.7	906	.47
2000	9.8	1886	107	212	9.0	961	.50
4000	19.4	1864	110	207	9.1	1009	.53
6000	30.5	1843	114	204	9.2	1058	.55
8000	42.4	1820	117	201	9.3	1097	.58
10000	54.1	1798	120	197	9.5	1144	.60
12000	66.4	1776	124	194	9.6	1195	.63
14000	80.1	1751	128	191	9.7	1245	.65
16000	95.9	1725	133	190	9.7	1292	.68
18000	113.8	1699	138	190	9.6	1333	.70
20000	136.8	1668	142	189	9.7	1370	.72
22000	171.2	1626	147	189	9.6	1363	.71
24000	267.5	1521	152	193	9.4	1399	.73
25000	344.6	1440	154	194	9.2	1395	.73

Figure 5-23 – Maximum Range Profile

5-42 TIME, FUEL AND DISTANCE TO DESCEND

Conditions:

- Weight.....6750 LB
- Flaps.....0°
- Airspeed..... 140 KIAS Above 16,000 Feet
 160 KIAS Below 16,000 Feet
- Power.....Set for 800 FPM Descent
- Propeller2200 RPM



NOTE: Distances provided are based on a zero wind condition.

Press Alt (FT)	DESCENT TO SEA LEVEL		
	Time (MIN)	Fuel (LB)	Distance (NM)
24000	30.0	118	76.6
22000	27.5	110	70.8
20000	25.0	102	65.0
18000	22.5	94	59.1
16000	20.0	86	53.3
14000	17.5	76	46.7
12000	15.0	65	40.0
10000	12.5	55	33.3
8000	10.0	45	26.7
6000	7.5	34	20
4000	5.0	23	13.3
2000	2.5	11	6.6
SL	0	0	0

Figure 5-24 – Time, Fuel, and Distance to Descend

5-43 BALKED LANDING CLIMB GRADIENT

(Refer to the Table on the following page)

Conditions:

- Power.....Max Takeoff
- Flaps.....35° (Down)
- Climb Airspeed.....V_{REF}
- Winds.....Zero

Example:

- Outside Air Temp.....20°C
- Weight.....6690 LB
- Pressure Altitude.....6000 FT
Climb Airspeed: 76 KIAS
Climb Gradient: 489 FT/NM

NOTES:

- *Balked Landing Climb Gradients shown represent the gain in altitude for the horizontal distance traveled and is expressed as Feet per Nautical Mile.*
- *For operation in air colder than provided in this table, use the coldest charted data.*
- *For operation in air warmer than provided in this table, use extreme caution.*
- *This chart is required data for aircraft certification. However, significantly better performance may be achieved by climbing at the Best Rate of Climb speeds with the flaps positioned at 20° or following the Go-Around / Balked Landing procedure outlined in **Section 4**.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*



Weight (LB)	Press Alt (FT)	Climb Speed (KIAS)	CLIMB GRADIENT – Feet Per Nautical Mile				
			-20 °C	0 °C	20 °C	40 °C	50 °C
6690	SL	76	1074	1005	944	617	437
	2000	76	1006	943	789	470	303
	4000	76	943	879	632	338	---
	6000	76	881	727	489	207	---
	8000	76	761	572	346	---	---
	10000	76	605	417	215	---	---
6000	SL	76	1329	1250	1180	806	602
	2000	76	1251	1178	1002	640	451
	4000	76	1178	1105	823	490	---
	6000	76	1107	931	660	342	---
	8000	76	970	755	499	---	---
	10000	76	792	579	351	---	---
5000	SL	76	1780	1680	1592	1128	878
	2000	76	1681	1590	1370	924	694
	4000	76	1590	1498	1149	741	---
	6000	76	1500	1282	949	562	---
	8000	76	1330	1065	752	---	---
	10000	76	1111	849	572	---	---

Figure 5-25 – Balked Landing Climb Gradient

5-44 BALKED LANDING RATE OF CLIMB

(Refer to the Table on the following page)

Conditions:

- Power.....Max Takeoff
- Flaps.....35° (Down)
- Climb Airspeed.....76 KIAS

Example:

- Outside Air Temp.....20°C
 - Weight.....6690 LB
 - Pressure Altitude.....6000 FT
- Climb Airspeed: 76 KIAS
Climb Gradient: 712 FT/MIN

NOTES:

- *Balked Landing Rates of Climb shown represent the gain in altitude for the horizontal distance traveled and is expressed as feet per minute.*
- *For operation in air colder than provided in this table, use the coldest charted data.*
- *For operation in air warmer than provided in this table, use extreme caution.*
- *This chart is required data for aircraft certification. However, significantly better performance may be achieved by climbing at the Best Rate of Climb speeds with the flaps positioned at 20° or following the Go-Around / Balked Landing procedure outlined in **Section 4**.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*



Weight (LB)	Press Alt (FT)	Climb Speed (KIAS)	RATE OF CLIMB – Feet Per Minute				
			-20 °C	0 °C	20 °C	40 °C	50 °C
6690	SL	76	1287	1254	1222	830	599
	2000	76	1253	1221	1062	658	432
	4000	76	1220	1183	886	491	---
	6000	76	1185	1019	712	314	---
	8000	76	1066	835	525	---	---
	10000	76	884	634	339	---	---
6000	SL	76	1580	1548	1517	1081	823
	2000	76	1546	1517	1343	893	641
	4000	76	1515	1479	1149	711	---
	6000	76	1480	1300	960	517	---
	8000	76	1352	1099	755	---	---
	10000	76	1153	878	553	---	---
5000	SL	76	2079	2047	2017	1501	1194
	2000	76	2045	2017	1815	1282	983
	4000	76	2014	1979	1591	1071	---
	6000	76	1980	1771	1372	847	---
	8000	76	1834	1538	1134	---	---
	10000	76	1603	1282	899	---	---

Figure 5-26 – Balked Landing Rate of Climb

5-45 LANDING DISTANCE (MAXIMUM WEIGHT 6690 LB SHORT FIELD)

(Refer to the Table on the following page)

Conditions:

- Winds.....ZERO
- Runway.....Dry, Level, Paved
- Flaps.....35° (FULL)
- Powered 3° Powered Approach to 50 FT obstacle, then a smooth reduction to IDLE at touchdown. BETA range (Lever against spring) after touchdown.

Example:

- Outside Air Temp.....20°C
 - Weight.....6690 LB
 - Pressure Altitude.....2000 FT
 - Headwind.....ZERO
- Obstacle Speed(VREF): 76 KIAS
Landing Ground Roll: 986 FT
Total Dist. Over 50' Obs.: 1807

NOTES:

- *Short field technique utilized as outlined in Section 4.*
- *Decrease distances 10% for each 13 knots headwind.*
- *Increase distances 10% for each 2 knots tailwind up to 10 knots.*
- *For operation on a dry, grass runway, increase distances by 40% of the ground roll calculation.*
- *Use of maximum reverse thrust after touchdown reduces ground roll by approximately 15%.*
- *For sloped runways (up to 3% slope), increase the distances by 27% of the ground roll distance for each 1% of downslope. Decrease distances by 9% of the ground roll distance for each 1% of upslope.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*



WT (LB)	50' Speed (KIAS)	Press Alt (FT)	0°C		20°C		40°C	
			GRD ROLL (FT)	Total Feet to Clear 50' OBS	GRD ROLL (FT)	Total Feet to Clear 50' OBS	GRD ROLL (FT)	Total Feet to Clear 50' OBS
6690	76	SL	867	1603	931	1681	994	1760
		2000	918	1719	986	1807	1053	1896
		4000	973	1849	1045	1947	1116	2047
		6000	1033	1994	1109	2104	---	---
		8000	1097	2156	1177	2279	---	---
		10000	1165	2336	1251	2475	---	---
6000	72	SL	737	1355	791	1419	845	1484
		2000	781	1452	838	1524	895	1597
		4000	827	1560	888	1640	949	1722
		6000	878	1679	943	1769	---	---
		8000	932	1813	1001	1914	---	---
		10000	991	1962	1063	2075	---	---
5000	65	SL	574	1038	616	1086	658	1134
		2000	608	1111	653	1164	697	1218
		4000	645	1191	692	1251	739	1312
		6000	684	1281	734	1348	---	---
		8000	727	1381	780	1455	---	---
		10000	772	1492	828	1576	---	---

Figure 5-27 – Landing Distance