

**VOLUME I  
PERFORMANCE FLIGHT TESTING**

**APPENDIX B  
U. S. STANDARD ATMOSPHERE  
ALTITUDE, TEMPERATURE,  
PRESSURE AND DENSITY**

19970116 076

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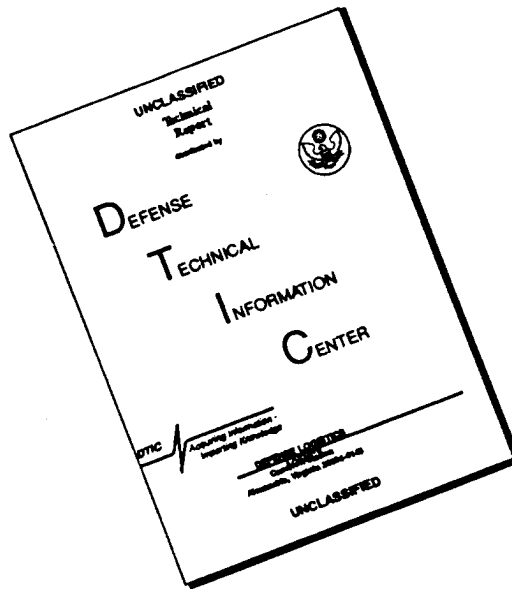
1962

**USAF TEST PILOT SCHOOL  
EDWARDS AFB, CA**

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APPENDIX B  
U.S. STANDARD ATMOSPHERE, 1962  
Altitude, Temperature, Pressure, and Density

ADOPTED PRIMARY CONSTANTS

Symbol	Units
$P_0$	2116.22 lbf ft <sup>-2</sup>
$\rho_0$	0.076474 lb ft <sup>-3</sup>
$T_0$	15_C; 59.0_F
$G_0$	32.1741 ft sec <sup>-2</sup>
$R^*$	1545.31 lbf_R <sup>-1</sup> lb-mol <sup>-1</sup>
Z	Tapeline Altitude ft
H	Geopotential Altitude ft

# GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
-1000	-1000	522.236	62.566	16.981	1.05041 + 3	3.10185 + 1	1.03987 + 0	7.8737 - 2	1.0296 + 0
-900	-900	521.880	62.210	16.783	1.04664	3.08073	1.03286	7.8508	1.0286
-800	-800	521.522	61.853	16.585	1.04289	3.07985	1.02925	7.8281	1.0276
-700	-700	521.165	61.497	16.387	1.03914	3.08889	1.02564	7.8053	1.0266
-600	-600	520.810	61.140	16.189	1.03539	3.05757	1.02187	7.7826	1.0177
-500	-500	520.453	60.783	15.991	1.03164	3.04629	1.01820	7.7598	1.0147
-400	-400	520.096	60.426	15.792	1.02789	3.03503	1.01454	7.7373	1.0118
-300	-300	519.740	60.070	15.594	1.02414	3.02377	1.01089	7.7148	1.0088
-200	-200	519.383	59.713	15.396	1.02039	3.01251	1.00725	7.6923	1.0059
-100	-100	519.027	59.357	15.198	1.01664	3.00125	1.00362	7.6698	1.0029
0	0	518.670	59.000	15.000	1.01289 + 3	2.99013 + 1	1.00000 + 0	7.6474 - 2	1.0000 + 0
100	100	518.313	58.643	14.802	1.00914	2.98133	0.996391 - 1	7.6251	9.9708 - 1
200	200	517.957	58.287	14.604	1.00539	2.97256	0.992793	7.6028	9.9416
300	300	517.600	57.930	14.406	1.00164	2.96383	0.989208	7.5805	9.9125
400	400	517.244	57.574	14.208	0.99789 + 2	2.94913	0.985629	7.5583	9.8835
500	500	516.887	57.217	14.010	0.99414	2.93946	0.982053	7.5362	9.8545
600	600	516.530	56.860	13.811	0.99039	2.92782	0.978507	7.5141	9.8256
700	700	516.174	56.504	13.613	0.98664	2.91721	0.974981	7.4920	9.7966
800	800	515.817	56.147	13.415	0.98289	2.90663	0.971426	7.4700	9.7680
900	900	515.460	55.790	13.217	0.97914	2.89608	0.967901	7.4480	9.7393
1000	1000	515.104	55.434	13.019	0.97539 + 2	2.88557 + 1	0.964387 - 1	7.4261 - 2	9.7108 - 1
1100	1100	514.747	55.077	12.821	0.97164	2.87505	0.960883	7.4043	9.6821
1200	1200	514.391	54.721	12.623	0.96789	2.86463	0.957380	7.3825	9.6535
1300	1300	514.034	54.364	12.424	0.96414	2.85421	0.953886	7.3607	9.6251
1400	1400	513.677	54.007	12.226	0.96039	2.84382	0.950403	7.3390	9.5967
1500	1500	513.321	53.651	12.028	0.95664	2.83345	0.946929	7.3174	9.5684
1600	1600	512.964	53.294	11.830	0.95289	2.82312	0.943455	7.2957	9.5401
1700	1700	512.608	52.938	11.632	0.94914	2.81282	0.940007	7.2742	9.5119
1800	1800	512.251	52.581	11.434	0.94539	2.80255	0.936583	7.2527	9.4838
1900	1900	511.894	52.224	11.236	0.94164	2.79231	0.933171	7.2312	9.4557
2000	2000	511.538	51.868	11.038	0.93789 + 2	2.78210 + 1	0.929679 - 1	7.2098 - 2	9.4277 - 1
2100	2100	511.181	51.511	10.839	0.93414	2.77193	0.926207	7.1884	9.3998
2200	2200	510.824	51.154	10.641	0.93039	2.76178	0.922755	7.1671	9.3719
2300	2300	510.468	50.798	10.443	0.92664	2.75166	0.919323	7.1458	9.3441
2400	2400	510.111	50.441	10.245	0.92289	2.74157	0.915912	7.1246	9.3164
2500	2500	509.755	50.085	10.047	0.91914	2.73151	0.912521	7.1034	9.2887
2600	2600	509.398	49.728	9.849	0.91539	2.72148	0.909150	7.0823	9.2610
2700	2700	509.041	49.371	9.651	0.91164	2.71148	0.905807	7.0612	9.2335
2800	2800	508.685	49.015	9.453	0.90789	2.70152	0.902483	7.0402	9.2060
2900	2900	508.328	48.658	9.256	0.90414	2.69158	0.900083	7.0192	9.1785
3000	3000	507.972	48.302	9.058	0.90039 + 2	2.68167 + 1	0.896711 - 1	6.9983 - 2	9.1512 - 1
3100	3100	507.615	47.945	8.860	0.89664	2.67179	0.893369	6.9774	9.1239
3200	3200	507.258	47.588	8.662	0.89289	2.66194	0.890047	6.9566	9.0966
3300	3301	506.902	47.232	8.464	0.88914	2.65211	0.886744	6.9358	9.0694
3400	3401	506.545	46.875	8.266	0.88539	2.64232	0.883461	6.9150	9.0423
3500	3501	506.188	46.518	8.068	0.88164	2.63256	0.880197	6.8943	9.0152
3600	3601	505.832	46.162	7.870	0.87789	2.62283	0.876952	6.8737	8.9882
3700	3701	505.475	45.805	7.672	0.87414	2.61312	0.873725	6.8531	8.9613
3800	3801	505.119	45.449	7.474	0.87039	2.60346	0.870516	6.8325	8.9344
3900	3901	504.762	45.092	7.276	0.86664	2.59380	0.867325	6.8120	8.9075
4000	4001	504.406	44.735	7.078	0.86289 + 2	2.58418 + 1	0.864151 - 1	6.7916 - 2	8.8809 - 1
4100	4101	504.049	44.379	6.879	0.85914	2.57460	0.860987	6.7712	8.8542
4200	4201	503.692	44.022	6.681	0.85539	2.56504	0.857842	6.7508	8.8275
4300	4301	503.335	43.666	6.483	0.85164	2.55551	0.854717	6.7305	8.8010
4400	4401	502.979	43.309	6.285	0.84789	2.54600	0.851612	6.7102	8.7745
4500	4501	502.622	42.952	6.087	0.84414	2.53653	0.848527	6.6900	8.7480
4600	4601	502.265	42.596	5.889	0.84039	2.52709	0.845462	6.6698	8.7216
4700	4701	501.908	42.239	5.691	0.83664	2.51767	0.842417	6.6497	8.6953
4800	4801	501.552	41.882	5.493	0.83289	2.50828	0.839392	6.6296	8.6690
4900	4901	501.195	41.526	5.295	0.82914	2.49892	0.836387	6.6096	8.6428
5000	5001	500.839	41.169	5.097	0.82539 + 2	2.48959 + 1	0.833391 - 1	6.5896 - 2	8.6167 - 1
5100	5101	500.482	40.813	4.899	0.82164	2.48029	0.830405	6.5696	8.5906
5200	5201	500.126	40.456	4.701	0.81789	2.47101	0.827429	6.5497	8.5646
5300	5301	499.769	40.099	4.503	0.81414	2.46177	0.824464	6.5298	8.5386
5400	5401	499.413	39.743	4.305	0.81039	2.45256	0.821509	6.5101	8.5127
5500	5501	499.056	39.386	4.107	0.80664	2.44338	0.818564	6.4903	8.4868
5600	5602	498.699	39.029	3.909	0.80289	2.43423	0.815629	6.4706	8.4611
5700	5702	498.343	38.673	3.711	0.79914	2.42509	0.812704	6.4509	8.4354
5800	5802	497.986	38.316	3.513	0.79539	2.41598	0.809789	6.4313	8.4097
5900	5902	497.630	37.959	3.315	0.79164	2.40687	0.806883	6.4117	8.3841
6000	6002	497.273	37.603	3.117	0.78789 + 2	2.39772 + 1	0.803987 - 1	6.3922 - 2	8.3586 - 1
6100	6102	496.916	37.246	2.919	0.78414	2.38859	0.801101	6.3727	8.3331
6200	6202	496.560	36.890	2.721	0.78039	2.37949	0.798225	6.3532	8.3077
6300	6302	496.203	36.533	2.523	0.77664	2.37043	0.795359	6.3338	8.2823
6400	6402	495.847	36.177	2.325	0.77289	2.36140	0.792504	6.3145	8.2570
6500	6502	495.490	35.820	2.127	0.76914	2.35240	0.789659	6.2952	8.2318
6600	6602	495.133	35.463	1.929	0.76539	2.34343	0.786824	6.2760	8.2066
6700	6702	494.777	35.107	1.731	0.76164	2.33449	0.783999	6.2569	8.1815
6800	6802	494.420	34.750	1.533	0.75789	2.32558	0.781184	6.2378	8.1564
6900	6902	494.063	34.393	1.335	0.75414	2.31669	0.778379	6.2188	8.1314

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
7000	7002	483.707	34.037	1.132	7.81853 + 2	2.30881 + 1	7.71629 - 1	6.1993 - 2	8.1064 - 1
7100	7102	483.350	33.680	0.923	7.78889	2.30006	7.68704	6.1803	8.0816
7200	7202	482.994	33.324	0.735	7.75935	2.29133	7.65788	6.1613	8.0567
7300	7303	482.637	32.967	0.537	7.72979	2.28256	7.62881	6.1424	8.0320
7400	7403	482.280	32.610	0.339	7.70023	2.27377	7.59973	6.1235	8.0073
7500	7503	481.924	32.254	0.141	7.67067	2.26497	7.57064	6.1046	7.9826
7600	7603	481.567	31.897	-0.057	7.64112	2.25617	7.54154	6.0858	7.9580
7700	7703	481.211	31.541	-0.258	7.61156	2.24737	7.51242	6.0670	7.9334
7800	7803	480.854	31.184	-0.458	7.58200	2.23856	7.48328	6.0483	7.9088
7900	7903	480.497	30.827	-0.651	7.55244	2.22976	7.45416	6.0296	7.8843
8000	8003	480.141	30.471	-0.840	7.52288 + 2	2.22095 + 1	7.42501 - 1	6.0110 - 2	7.8602 - 1
8100	8103	479.784	30.114	-1.048	7.49332	2.21214	7.39584	5.9924	7.8359
8200	8203	479.427	29.757	-1.246	7.46376	2.20333	7.37118	5.9739	7.8116
8300	8303	479.071	29.401	-1.444	7.43419	2.19452	7.34600	5.9554	7.7874
8400	8403	478.714	29.044	-1.642	7.40463	2.18571	7.31480	5.9369	7.7633
8500	8503	478.358	28.688	-1.840	7.37507	2.17690	7.28358	5.9185	7.7392
8600	8604	478.001	28.331	-2.038	7.34551	2.16809	7.25236	5.9001	7.7152
8700	8704	477.644	27.974	-2.236	7.31595	2.15928	7.22113	5.8818	7.6912
8800	8804	477.288	27.618	-2.435	7.28639	2.15047	7.18989	5.8635	7.6673
8900	8904	476.931	27.261	-2.633	7.25683	2.14166	7.15867	5.8453	7.6434
9000	9004	476.575	26.905	-2.831	7.22727 + 2	2.13285 + 1	7.12743 - 1	5.8271 - 2	7.6196 - 1
9100	9104	476.218	26.548	-3.029	7.19771	2.12404	7.12059	5.8089	7.5959
9200	9204	475.861	26.191	-3.227	7.16815	2.11523	7.08323	5.7908	7.5722
9300	9304	475.505	25.835	-3.425	7.13859	2.10642	7.04587	5.7727	7.5486
9400	9404	475.148	25.478	-3.623	7.10903	2.09761	7.00851	5.7547	7.5250
9500	9504	474.791	25.121	-3.821	7.07947	2.08880	6.97115	5.7367	7.5015
9600	9604	474.435	24.765	-4.020	7.04991	2.08000	6.93379	5.7188	7.4781
9700	9705	474.078	24.408	-4.218	7.02035	2.07119	6.89643	5.7009	7.4547
9800	9805	473.722	24.052	-4.416	6.99079	2.06238	6.85907	5.6830	7.4313
9900	9905	473.365	23.695	-4.614	6.96123	2.05357	6.82171	5.6652	7.4080
10000*	10005	473.008	23.338	-4.812	6.93167 + 2	2.04476 + 1	6.78435 - 1	5.6475 - 2	7.3848 - 1
10100	10105	472.652	22.982	-5.010	6.90211	2.03595	6.74699	5.6297	7.3616
10200	10205	472.295	22.625	-5.208	6.87255	2.02714	6.70963	5.6121	7.3385
10300	10305	471.939	22.269	-5.406	6.84299	2.01833	6.67227	5.5944	7.3154
10400	10405	471.582	21.912	-5.604	6.81343	2.00952	6.63491	5.5768	7.2924
10500	10505	471.225	21.556	-5.803	6.78387	2.00071	6.59755	5.5593	7.2695
10600	10605	470.869	21.200	-6.001	6.75431	1.99190	6.56019	5.5418	7.2466
10700	10705	470.512	20.844	-6.199	6.72475	1.98309	6.52283	5.5243	7.2237
10800	10805	470.155	20.488	-6.397	6.69519	1.97428	6.48547	5.5068	7.2009
10900	10905	470.799	20.132	-6.596	6.66563	1.96547	6.44811	5.4893	7.1782
11000	11005	470.442	19.776	-6.793	6.63607 + 2	1.95666 + 1	6.41075 - 1	5.4721 - 2	7.1556 - 1
11100	11105	470.086	19.419	-6.991	6.60651	1.94785	6.37339	5.4548	7.1329
11200	11205	470.729	19.063	-7.189	6.57695	1.93904	6.33603	5.4376	7.1103
11300	11305	470.372	18.707	-7.388	6.54739	1.93023	6.29867	5.4203	7.0878
11400	11405	470.016	18.350	-7.586	6.51783	1.92142	6.26131	5.4032	7.0653
11500	11505	470.659	17.994	-7.784	6.48827	1.91261	6.22395	5.3860	7.0429
11600	11605	470.303	17.638	-7.982	6.45871	1.90380	6.18659	5.3689	7.0206
11700	11705	470.946	17.282	-8.180	6.42915	1.89499	6.14923	5.3518	6.9983
11800	11807	470.589	16.926	-8.378	6.39959	1.88618	6.11187	5.3347	6.9761
11900	11907	470.233	16.569	-8.576	6.37003	1.87737	6.07451	5.3176	6.9539
12000	12007	470.876	16.213	-8.774	6.34047 + 2	1.86856 + 1	6.03715 - 1	5.3010 - 2	6.9317 - 1
12100	12107	470.519	15.857	-8.973	6.31091	1.85975	6.00000	5.2841	6.9097
12200	12207	470.163	15.500	-9.171	6.28135	1.85094	5.96284	5.2673	6.8878
12300	12307	470.806	15.144	-9.369	6.25179	1.84213	5.92568	5.2505	6.8657
12400	12407	470.450	14.788	-9.567	6.22223	1.83332	5.88852	5.2337	6.8437
12500	12507	470.093	14.432	-9.765	6.19267	1.82451	5.85136	5.2170	6.8219
12600	12607	470.736	14.076	-9.963	6.16311	1.81570	5.81420	5.2003	6.8001
12700	12708	470.380	13.719	-10.161	6.13355	1.80689	5.77704	5.1837	6.7785
12800	12808	470.023	13.363	-10.359	6.10400	1.79808	5.73988	5.1671	6.7566
12900	12908	470.667	12.997	-10.557	6.07444	1.78927	5.70272	5.1506	6.7349
13000	13008	470.310	12.640	-10.756	6.04488 + 2	1.78046 + 1	5.66556 - 1	5.1340 - 2	6.7133 - 1
13100	13108	470.953	12.284	-10.954	6.01532	1.77165	5.62840	5.1175	6.6918
13200	13208	470.597	11.927	-11.152	6.08576	1.76284	5.59124	5.1011	6.6703
13300	13308	470.240	11.571	-11.350	6.05620	1.75403	5.55408	5.0847	6.6489
13400	13408	470.883	11.214	-11.548	6.02664	1.74522	5.51692	5.0683	6.6275
13500	13508	470.527	10.858	-11.746	6.09708	1.73641	5.47976	5.0519	6.6061
13600	13608	470.170	10.501	-11.944	6.06752	1.72760	5.44260	5.0355	6.5849
13700	13708	469.814	10.145	-12.142	6.03796	1.71879	5.40544	5.0191	6.5638
13800	13808	469.457	9.788	-12.341	6.00840	1.71000	5.36828	5.0027	6.5424
13900	13908	469.100	9.432	-12.539	5.97884	1.70119	5.33112	4.9863	6.5213
14000	14008	468.744	9.074	-12.737	5.94928 + 2	1.69238 + 1	5.29396 - 1	4.9710 - 2	6.5003 - 1
14100	14110	468.387	8.717	-12.936	5.91972	1.68357	5.25680	4.9549	6.4792
14200	14210	468.031	8.361	-13.134	5.89016	1.67476	5.21964	4.9389	6.4583
14300	14310	467.674	8.004	-13.333	5.86060	1.66595	5.18248	4.9229	6.4373
14400	14410	467.317	7.648	-13.531	5.83104	1.65714	5.14532	4.9070	6.4165
14500	14510	466.961	7.291	-13.729	5.80148	1.64833	5.10816	4.8911	6.3957
14600	14610	466.604	6.935	-13.928	5.77192	1.63952	5.07100	4.8752	6.3749
14700	14710	466.247	6.578	-14.126	5.74236	1.63071	5.03384	4.8593	6.3542
14800	14811	465.891	6.221	-14.325	5.71280	1.62190	5.09668	4.8434	6.3335
14900	14911	465.534	5.864	-14.523	5.68324	1.61309	5.05952	4.8275	6.3129

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
15000	15011	485.178	5.508	-14.718	5.71819 + 2	1.68868 + 1	5.64342 - 1	4.8120 - 2	6.2924 - 1
15100	15111	484.521	5.151	-14.916	5.69519	1.69179	5.62071	4.7954	6.2719
15200	15211	483.864	4.794	-15.114	5.67226	1.67502	5.59508	4.7807	6.2514
15300	15311	484.108	4.438	-15.312	5.64941	1.66827	5.57323	4.7651	6.2310
15400	15411	483.751	4.081	-15.510	5.62663	1.66154	5.55305	4.7498	6.2107
15500	15512	483.395	3.725	-15.708	5.60383	1.65484	5.53366	4.7340	6.1904
15600	15612	483.038	3.368	-15.907	5.58130	1.64816	5.51631	4.7186	6.1701
15700	15712	482.681	3.011	-16.105	5.55874	1.64150	5.49886	4.7031	6.1498
15800	15812	482.325	2.655	-16.303	5.53628	1.63486	5.48206	4.6877	6.1296
15900	15912	481.968	2.298	-16.501	5.51385	1.62824	5.46475	4.6723	6.1097
16000	16012	481.611	1.941	-16.699	5.49152 + 2	1.62164 + 1	5.44791 - 1	4.6570 - 2	6.0896 - 1
16100	16112	481.255	1.585	-16.897	5.46925	1.61507	5.43173	4.6417	6.0696
16200	16213	480.898	1.228	-17.095	5.44707	1.60852	5.41584	4.6264	6.0497
16300	16313	480.542	0.872	-17.294	5.42495	1.60199	5.39941	4.6112	6.0298
16400	16413	480.185	0.515	-17.492	5.40291	1.59548	5.38326	4.5961	6.0099
16500	16513	479.828	0.158	-17.690	5.38094	1.58899	5.36707	4.5809	5.9901
16600	16613	479.472	-0.198	-17.888	5.35904	1.58252	5.35086	4.5658	5.9704
16700	16713	479.115	-0.555	-18.086	5.33722	1.57608	5.33462	4.5508	5.9507
16800	16814	478.759	-0.911	-18.284	5.31546	1.56965	5.31836	4.5357	5.9311
16900	16914	478.402	-1.268	-18.482	5.29378	1.56325	5.29256	4.5207	5.9115
17000	17014	478.045	-1.625	-18.680	5.27217 + 2	1.55687 + 1	5.26723 - 1	4.5058 - 2	5.8919 - 1
17100	17114	477.689	-1.981	-18.879	5.25064	1.55051	5.24197	4.4909	5.8724
17200	17214	477.332	-2.338	-19.077	5.22917	1.54417	5.21679	4.4760	5.8530
17300	17314	476.975	-2.695	-19.275	5.20777	1.53785	5.19167	4.4612	5.8336
17400	17415	476.619	-3.051	-19.473	5.18645	1.53156	5.16663	4.4464	5.8142
17500	17515	476.262	-3.408	-19.671	5.16519	1.52528	5.14165	4.4316	5.7949
17600	17615	475.906	-3.764	-19.869	5.14401	1.51903	5.11674	4.4169	5.7757
17700	17715	475.549	-4.121	-20.067	5.12290	1.51279	5.09191	4.4022	5.7565
17800	17815	475.192	-4.478	-20.265	5.10185	1.50658	5.06714	4.3876	5.7373
17900	17915	474.836	-4.834	-20.463	5.08088	1.50038	5.04244	4.3729	5.7182
18000	18016	474.479	-5.191	-20.662	5.05998 + 2	1.49421 + 1	4.99381 - 1	4.3584 - 2	5.6991 - 1
18100	18116	474.122	-5.547	-20.860	5.03915	1.48806	4.97325	4.3438	5.6801
18200	18216	473.766	-5.904	-21.058	5.01838	1.48193	4.95276	4.3293	5.6612
18300	18316	473.409	-6.261	-21.256	4.99769	1.47582	4.93233	4.3148	5.6423
18400	18416	473.053	-6.617	-21.454	4.97706	1.46973	4.91198	4.3005	5.6234
18500	18516	472.696	-6.974	-21.652	4.95651	1.46366	4.89169	4.2861	5.6046
18600	18617	472.339	-7.331	-21.850	4.93602	1.45761	4.87147	4.2717	5.5858
18700	18717	471.983	-7.687	-22.048	4.91560	1.45158	4.85132	4.2574	5.5671
18800	18817	471.626	-8.044	-22.247	4.89525	1.44557	4.83124	4.2431	5.5484
18900	18917	471.270	-8.400	-22.445	4.87497	1.43958	4.81122	4.2289	5.5296
19000	19017	470.913	-8.757	-22.643	4.85475 + 2	1.43361 + 1	4.79127 - 1	4.2147 - 2	5.5112 - 1
19100	19118	470.556	-9.114	-22.841	4.83461	1.42766	4.77139	4.2005	5.4927
19200	19218	470.200	-9.470	-23.039	4.81453	1.42173	4.75157	4.1864	5.4742
19300	19318	469.843	-9.827	-23.237	4.79452	1.41582	4.73182	4.1723	5.4558
19400	19418	469.486	-10.184	-23.435	4.77458	1.40993	4.71214	4.1582	5.4374
19500	19518	469.130	-10.540	-23.633	4.75470	1.40406	4.69252	4.1442	5.4191
19600	19618	468.773	-10.897	-23.832	4.73489	1.39821	4.67297	4.1302	5.4008
19700	19719	468.417	-11.253	-24.030	4.71515	1.39238	4.65349	4.1163	5.3826
19800	19819	468.060	-11.610	-24.228	4.69547	1.38657	4.63407	4.1024	5.3644
19900	19919	467.703	-11.967	-24.426	4.67586	1.38076	4.61472	4.0885	5.3462
20000	20019	467.347	-12.323	-24.624	4.65632 + 2	1.37501 + 1	4.59543 - 1	4.0746 - 2	5.3281 - 1
20100	20119	466.990	-12.680	-24.822	4.63685	1.36926	4.57621	4.0608	5.3101
20200	20220	466.634	-13.036	-25.020	4.61743	1.36353	4.55705	4.0471	5.2921
20300	20320	466.277	-13.393	-25.218	4.59809	1.35782	4.53796	4.0333	5.2741
20400	20420	465.920	-13.750	-25.416	4.57881	1.35212	4.51894	4.0196	5.2562
20500	20520	465.564	-14.106	-25.615	4.55960	1.34645	4.49997	4.0060	5.2383
20600	20620	465.207	-14.463	-25.813	4.54045	1.34079	4.48108	3.9923	5.2205
20700	20721	464.850	-14.820	-26.011	4.52137	1.33516	4.46224	3.9787	5.2027
20800	20821	464.494	-15.177	-26.209	4.50225	1.32954	4.44347	3.9652	5.1850
20900	20921	464.137	-15.533	-26.407	4.48310	1.32395	4.42477	3.9517	5.1673
21000	21021	463.781	-15.890	-26.605	4.46451 + 2	1.31837 + 1	4.40613 - 1	3.9382 - 2	5.1497 - 1
21100	21121	463.424	-16.246	-26.803	4.44588	1.31281	4.38758	3.9247	5.1321
21200	21222	463.067	-16.603	-27.001	4.42682	1.30727	4.36904	3.9113	5.1145
21300	21322	462.711	-16.959	-27.200	4.40823	1.30175	4.35058	3.8979	5.0970
21400	21422	462.354	-17.316	-27.398	4.38969	1.29625	4.33220	3.8846	5.0796
21500	21522	461.998	-17.672	-27.596	4.37103	1.29076	4.31387	3.8713	5.0622
21600	21622	461.641	-18.029	-27.794	4.35235	1.28528	4.29561	3.8580	5.0448
21700	21723	461.284	-18.386	-27.992	4.33369	1.27980	4.27741	3.8448	5.0275
21800	21823	460.928	-18.743	-28.190	4.31515	1.27443	4.25927	3.8316	5.0102
21900	21923	460.571	-19.099	-28.388	4.29673	1.26908	4.24120	3.8184	4.9930
22000	22023	460.214	-19.456	-28.586	4.27814 + 2	1.26383 + 1	4.22319 - 1	3.8052 - 2	4.9758 - 1
22100	22123	460.858	-19.812	-28.785	4.25986	1.25858	4.20524	3.7921	4.9587
22200	22224	460.501	-20.169	-28.983	4.24283	1.25331	4.18735	3.7791	4.9416
22300	22324	460.145	-20.525	-29.181	4.22617	1.24807	4.16952	3.7660	4.9246
22400	22424	460.788	-20.882	-29.379	4.20977	1.24286	4.15176	3.7530	4.9076
22500	22524	460.431	-21.239	-29.577	4.19363	1.23768	4.13405	3.7401	4.8906
22600	22625	460.075	-21.595	-29.775	4.17765	1.23251	4.11641	3.7271	4.8737
22700	22725	460.718	-21.952	-29.973	4.16181	1.22734	4.09883	3.7143	4.8568
22800	22825	460.362	-22.308	-30.171	4.14623	1.22218	4.08131	3.7014	4.8400
22900	22925	460.005	-22.665	-30.369	4.13089	1.21705	4.06384	3.6886	4.8233

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
23000	23025	436.448	-23.022	-30.568	4.10008 + 2	1.21075 + 1	4.04445 - 1	1.6758 - 2	4.8065 - 1
23100	23125	436.522	-23.078	-30.706	4.08249	1.20556	4.02911	1.6830	4.7999
23200	23225	436.595	-23.134	-30.844	4.06490	1.20039	4.01123	1.6903	4.7722
23300	23325	436.668	-23.190	-30.982	4.04731	1.19524	3.99451	1.6976	4.7555
23400	23425	436.742	-23.246	-31.120	4.03015	1.19010	3.97745	1.7049	4.7401
23500	23527	436.815	-23.302	-31.258	4.01282	1.18499	3.96035	1.7123	4.7236
23600	23627	436.888	-23.358	-31.396	3.99556	1.17989	3.94331	1.7197	4.7071
23700	23727	436.961	-23.414	-31.534	3.97835	1.17481	3.92633	1.7272	4.6907
23800	23727	437.034	-23.470	-31.672	3.96121	1.16974	3.90941	1.7346	4.6743
23900	23727	437.107	-23.526	-31.810	3.94412	1.16470	3.89255	1.7422	4.6580
24000	24028	437.180	-23.582	-31.948	3.92710 + 2	1.15967 + 1	3.87574 - 1	1.7497 - 2	4.6417 - 1
24100	24128	437.253	-23.638	-32.086	3.91013	1.15466	3.85900	1.7573	4.6254
24200	24228	437.326	-23.694	-32.224	3.89322	1.14967	3.84231	1.7649	4.6092
24300	24328	437.399	-23.750	-32.362	3.87637	1.14469	3.82568	1.7725	4.5931
24400	24429	437.472	-23.806	-32.500	3.85956	1.13974	3.80912	1.7802	4.5770
24500	24529	437.545	-23.862	-32.638	3.84286	1.13480	3.79260	1.7878	4.5609
24600	24629	437.618	-23.918	-32.776	3.82619	1.12987	3.77615	1.7955	4.5449
24700	24729	437.691	-23.974	-32.914	3.80957	1.12497	3.75976	1.8032	4.5289
24800	24830	437.764	-24.030	-33.052	3.79302	1.12008	3.74342	1.8109	4.5129
24900	24830	437.837	-24.086	-33.190	3.77652	1.11521	3.72714	1.8186	4.4970
25000	25030	437.910	-24.142	-33.328	3.76009 + 2	1.11035 + 1	3.71092 - 1	1.8262 - 2	4.4812 - 1
25100	25130	437.983	-24.198	-33.466	3.74371	1.10552	3.69475	1.8339	4.4654
25200	25230	438.056	-24.254	-33.604	3.72739	1.10070	3.67864	1.8416	4.4496
25300	25331	438.129	-24.310	-33.742	3.71112	1.09589	3.66259	1.8493	4.4339
25400	25431	438.202	-24.366	-33.880	3.69482	1.09111	3.64660	1.8570	4.4182
25500	25531	438.275	-24.422	-34.018	3.67877	1.08634	3.63066	1.8647	4.4025
25600	25631	438.348	-24.478	-34.156	3.66287	1.08159	3.61478	1.8724	4.3869
25700	25732	438.421	-24.534	-34.294	3.64684	1.07685	3.59895	1.8801	4.3714
25800	25832	438.494	-24.590	-34.432	3.63086	1.07213	3.58319	1.8878	4.3559
25900	25832	438.567	-24.646	-34.570	3.61474	1.06743	3.56747	1.8955	4.3404
26000	26032	438.640	-24.702	-34.708	3.59888 + 2	1.06275 + 1	3.55181 - 1	1.9032 - 2	4.3250 - 1
26100	26133	438.713	-24.758	-34.846	3.58307	1.05808	3.53621	1.9109	4.3096
26200	26233	438.786	-24.814	-34.984	3.56732	1.05343	3.52067	1.9186	4.2942
26300	26333	438.859	-24.870	-35.122	3.55162	1.04879	3.50518	1.9263	4.2789
26400	26433	438.932	-24.926	-35.260	3.53598	1.04417	3.48974	1.9340	4.2635
26500	26534	439.005	-24.982	-35.398	3.52040	1.03957	3.47436	1.9417	4.2481
26600	26634	439.078	-25.038	-35.536	3.50487	1.03499	3.45904	1.9494	4.2327
26700	26734	439.151	-25.094	-35.674	3.48940	1.03042	3.44377	1.9571	4.2174
26800	26834	439.224	-25.150	-35.812	3.47398	1.02587	3.42855	1.9648	4.2020
26900	26835	439.297	-25.206	-35.950	3.45862	1.02133	3.41339	1.9725	4.1866
27000	27035	439.370	-25.262	-36.088	3.44331 + 2	1.01681 + 1	3.39828 - 1	1.9802 - 2	4.1713 - 1
27100	27135	439.443	-25.318	-36.226	3.42806	1.01230	3.38323	1.9879	4.1560
27200	27236	439.516	-25.374	-36.364	3.41286	1.00782	3.36823	1.9956	4.1407
27300	27336	439.589	-25.430	-36.502	3.39772	1.00335	3.35329	1.0033	4.1254
27400	27436	439.662	-25.486	-36.640	3.38263	9.99889 + 0	3.33839	1.0110	4.1101
27500	27536	439.735	-25.542	-36.778	3.36759	9.99450	3.32356	1.0187	4.0948
27600	27637	439.808	-25.598	-36.916	3.35261	9.99026	3.30877	1.0264	4.0795
27700	27737	439.881	-25.654	-37.054	3.33769	9.98619	3.29404	1.0341	4.0642
27800	27837	439.954	-25.710	-37.192	3.32281	9.98227	3.27937	1.0418	4.0489
27900	27937	440.027	-25.766	-37.330	3.30800	9.97844	3.26474	1.0495	4.0336
28000	28038	440.100	-25.822	-37.468	3.29323 + 2	9.97469 + 0	3.25017 - 1	1.0572 - 2	4.0251 - 1
28100	28138	440.173	-25.878	-37.606	3.27852	9.97101	3.23566	1.0649	4.0166
28200	28238	440.246	-25.934	-37.744	3.26386	9.96738	3.22118	1.0726	4.0081
28300	28338	440.319	-25.990	-37.882	3.24926	9.96380	3.20677	1.0803	4.0000
28400	28439	440.392	-26.046	-38.020	3.23470	9.96026	3.19241	1.0880	3.9919
28500	28539	440.465	-26.102	-38.158	3.22021	9.95676	3.17810	1.0957	3.9838
28600	28639	440.538	-26.158	-38.296	3.20576	9.95330	3.16384	1.1034	3.9757
28700	28740	440.611	-26.214	-38.434	3.19136	9.94988	3.14963	1.1111	3.9676
28800	28840	440.684	-26.270	-38.572	3.17702	9.94650	3.13548	1.1188	3.9595
28900	28840	440.757	-26.326	-38.710	3.16273	9.94316	3.12138	1.1265	3.9514
29000	29040	440.830	-26.382	-38.848	3.14850 + 2	9.93986 + 0	3.10732 - 1	1.1342 - 2	3.9433 - 1
29100	29141	440.903	-26.438	-38.986	3.13431	9.93659	3.09332	1.1419	3.9352
29200	29241	440.976	-26.494	-39.124	3.12018	9.93336	3.07937	1.1496	3.9271
29300	29341	441.049	-26.550	-39.262	3.10609	9.93017	3.06548	1.1573	3.9190
29400	29442	441.122	-26.606	-39.400	3.09206	9.92701	3.05163	1.1650	3.9109
29500	29542	441.195	-26.662	-39.538	3.07808	9.92388	3.03783	1.1727	3.9028
29600	29642	441.268	-26.718	-39.676	3.06416	9.92078	3.02408	1.1804	3.8947
29700	29742	441.341	-26.774	-39.814	3.05029	9.91771	3.01039	1.1881	3.8866
29800	29843	441.414	-26.830	-39.952	3.03645	9.91466	2.99675	1.1958	3.8785
29900	29843	441.487	-26.886	-40.090	3.02268	9.91164	2.98315	1.2035	3.8704
30000	30043	441.560	-26.942	-40.228	3.00895 + 2	9.90864 + 0	2.96961 - 1	1.2112 - 2	3.8623 - 1
30100	30144	441.633	-26.998	-40.366	2.99528	9.90566	2.95611	1.2189	3.8542
30200	30244	441.706	-27.054	-40.504	2.98166	9.90271	2.94267	1.2266	3.8461
30300	30344	441.779	-27.110	-40.642	2.96808	9.90000	2.92927	1.2343	3.8380
30400	30444	441.852	-27.166	-40.780	2.95456	9.89732	2.91592	1.2420	3.8299
30500	30545	441.925	-27.222	-40.918	2.94109	9.89466	2.90263	1.2497	3.8218
30600	30645	441.998	-27.278	-41.056	2.92768	9.89202	2.88939	1.2574	3.8137
30700	30745	442.071	-27.334	-41.194	2.91429	9.88940	2.87618	1.2651	3.8056
30800	30846	442.144	-27.390	-41.332	2.90096	9.88680	2.86303	1.2728	3.7975
30900	30846	442.217	-27.446	-41.470	2.88769	9.88422	2.84993	1.2805	3.7894

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
31000	31044	408.119	-51.551	-46.417	2.87446 + 2	8.48229 + 0	2.83587 - 1	2.7571 - 2	3.6053 - 1
31100	31146	407.762	-51.908	-46.615	2.86125	8.44729	2.82387	2.7469	3.5919
31200	31247	407.405	-52.264	-46.813	2.84816	8.41191	2.81161	2.7367	3.5785
31300	31347	407.048	-52.621	-47.012	2.83504	8.37719	2.79951	2.7265	3.5653
31400	31447	406.693	-52.977	-47.210	2.82200	8.34251	2.78745	2.7164	3.5520
31500	31548	406.338	-53.334	-47.408	2.80907	8.30787	2.77533	2.7062	3.5388
31600	31648	405.979	-53.691	-47.606	2.79613	8.27328	2.76325	2.6961	3.5256
31700	31748	405.623	-54.047	-47.804	2.78325	8.23873	2.75120	2.6861	3.5124
31800	31849	405.268	-54.404	-48.002	2.77041	8.20422	2.73918	2.6760	3.4993
31900	31949	404.909	-54.761	-48.200	2.75762	8.16976	2.72716	2.6660	3.4862
32000	32049	404.553	-55.117	-48.398	2.74488 + 2	8.10563 + 0	2.70899 - 1	2.6561 - 2	3.4731 - 1
32100	32149	404.196	-55.474	-48.597	2.73219	8.06815	2.69646	2.6461	3.4601
32200	32250	403.840	-55.830	-48.795	2.71954	8.03081	2.68398	2.6362	3.4472
32300	32350	403.483	-56.187	-48.993	2.70694	7.99360	2.67155	2.6263	3.4342
32400	32450	403.126	-56.544	-49.191	2.69439	7.95654	2.65916	2.6164	3.4213
32500	32551	402.770	-56.900	-49.389	2.68189	7.91961	2.64682	2.6065	3.4085
32600	32651	402.413	-57.257	-49.587	2.66943	7.88283	2.63452	2.5966	3.3956
32700	32751	402.057	-57.613	-49.785	2.65702	7.84618	2.62228	2.5867	3.3828
32800	32852	401.700	-57.979	-49.983	2.64466	7.80967	2.61008	2.5773	3.3701
32900	32952	401.343	-58.327	-50.181	2.63234	7.77330	2.59792	2.5675	3.3574
33000	33052	400.987	-58.683	-50.380	2.62007 + 2	7.73707 + 0	2.58581 - 1	2.5578 - 2	3.3447 - 1
33100	33153	400.630	-59.040	-50.578	2.60785	7.70097	2.57375	2.5482	3.3321
33200	33253	400.273	-59.397	-50.776	2.59567	7.66501	2.56173	2.5385	3.3195
33300	33353	399.917	-59.753	-50.974	2.58354	7.62919	2.54975	2.5289	3.3069
33400	33454	399.560	-60.110	-51.172	2.57145	7.59350	2.53783	2.5193	3.2944
33500	33554	399.204	-60.466	-51.370	2.55941	7.55794	2.52594	2.5098	3.2819
33600	33654	398.847	-60.823	-51.568	2.54742	7.52253	2.51411	2.5003	3.2694
33700	33755	398.490	-61.180	-51.766	2.53547	7.48724	2.50232	2.4908	3.2570
33800	33855	398.134	-61.536	-51.965	2.52357	7.45209	2.49057	2.4813	3.2446
33900	33956	397.777	-61.893	-52.163	2.51171	7.41708	2.47887	2.4718	3.2322
34000	34056	397.421	-62.249	-52.361	2.49980 + 2	7.38219 + 0	2.46721 - 1	2.4624 - 2	3.2199 - 1
34100	34156	397.064	-62.606	-52.559	2.48813	7.34744	2.45559	2.4530	3.2077
34200	34256	396.707	-62.963	-52.757	2.47641	7.31283	2.44402	2.4437	3.1954
34300	34357	396.351	-63.319	-52.955	2.46473	7.27834	2.43250	2.4343	3.1832
34400	34457	395.994	-63.676	-53.153	2.45310	7.24399	2.42102	2.4250	3.1710
34500	34557	395.637	-64.033	-53.351	2.44151	7.20977	2.40958	2.4157	3.1589
34600	34658	395.281	-64.389	-53.550	2.42996	7.17568	2.39819	2.4065	3.1468
34700	34758	394.924	-64.746	-53.748	2.41846	7.14172	2.38684	2.3973	3.1347
34800	34858	394.568	-65.102	-53.946	2.40701	7.10789	2.37553	2.3881	3.1227
34900	34959	394.211	-65.459	-54.144	2.39559	7.07419	2.36427	2.3789	3.1107
35000	35059	393.854	-65.816	-54.342	2.38423 + 2	7.04082 + 0	2.35305 - 1	2.3687 - 2	3.0987 - 1
35100	35160	393.497	-66.173	-54.540	2.37292	6.99786	2.34174	2.3595	3.0799
35200	35260	393.140	-66.530	-54.738	2.36162	6.95502	2.33044	2.3503	3.0613
35300	35361	392.783	-66.887	-54.936	2.35031	6.91229	2.31915	2.3411	3.0427
35400	35461	392.426	-67.244	-55.134	2.33901	6.86967	2.30787	2.3319	3.0241
35500	35561	392.069	-67.601	-55.332	2.32771	6.82716	2.29660	2.3227	3.0055
35600	35662	391.712	-67.958	-55.530	2.31641	6.78476	2.28534	2.3135	2.9870
35700	35762	391.355	-68.315	-55.728	2.30511	6.74236	2.27409	2.3043	2.9684
35800	35863	390.998	-68.672	-55.926	2.29381	6.69996	2.26284	2.2951	2.9500
35900	35963	390.641	-69.029	-56.124	2.28251	6.65756	2.25159	2.2859	2.9315
36000	36064	390.284	-69.386	-56.322	2.27121	6.61516	2.24034	2.2767	2.9131
36100	36164	389.927	-69.743	-56.520	2.25991	6.57276	2.22909	2.2675	2.8946
36200	36264	389.570	-70.100	-56.718	2.24861	6.53036	2.21784	2.2583	2.8762
36300	36365	389.213	-70.457	-56.916	2.23731	6.48796	2.20659	2.2491	2.8577
36400	36465	388.856	-70.814	-57.114	2.22601	6.44556	2.19534	2.2400	2.8393
36500	36566	388.499	-71.171	-57.312	2.21471	6.40316	2.18409	2.2308	2.8208
36600	36666	388.142	-71.528	-57.510	2.20341	6.36076	2.17284	2.2216	2.8024
36700	36767	387.785	-71.885	-57.708	2.19211	6.31836	2.16159	2.2124	2.7839
36800	36867	387.428	-72.242	-57.906	2.18081	6.27596	2.15034	2.2032	2.7655
36900	36968	387.071	-72.599	-58.104	2.16951	6.23356	2.13909	2.1940	2.7470
37000	37068	386.714	-72.956	-58.302	2.15821	6.19116	2.12784	2.1848	2.7286
37100	37169	386.357	-73.313	-58.500	2.14691	6.14876	2.11659	2.1756	2.7101
37200	37269	386.000	-73.670	-58.698	2.13561	6.10636	2.10534	2.1664	2.6917
37300	37370	385.643	-74.027	-58.896	2.12431	6.06396	2.09409	2.1572	2.6732
37400	37470	385.286	-74.384	-59.094	2.11301	6.02156	2.08284	2.1480	2.6548
37500	37571	384.929	-74.741	-59.292	2.10171	5.97916	2.07159	2.1388	2.6363
37600	37671	384.572	-75.098	-59.490	2.09041	5.93676	2.06034	2.1296	2.6179
37700	37772	384.215	-75.455	-59.688	2.07911	5.89436	2.04909	2.1204	2.5994
37800	37872	383.858	-75.812	-59.886	2.06781	5.85196	2.03784	2.1112	2.5810
37900	37973	383.501	-76.169	-60.084	2.05651	5.80956	2.02659	2.1020	2.5625
38000	38073	383.144	-76.526	-60.282	2.04521	5.76716	2.01534	2.0928	2.5441
38100	38174	382.787	-76.883	-60.480	2.03391	5.72476	2.00409	2.0836	2.5256
38200	38274	382.430	-77.240	-60.678	2.02261	5.68236	1.99284	2.0744	2.5072
38300	38375	382.073	-77.597	-60.876	2.01131	5.63996	1.98159	2.0652	2.4887
38400	38475	381.716	-77.954	-61.074	2.00001	5.59756	1.97034	2.0560	2.4703
38500	38576	381.359	-78.311	-61.272	1.98871	5.55516	1.95909	2.0468	2.4518
38600	38676	381.002	-78.668	-61.470	1.97741	5.51276	1.94784	2.0376	2.4334
38700	38777	380.645	-79.025	-61.668	1.96611	5.47036	1.93659	2.0284	2.4149
38800	38877	380.288	-79.382	-61.866	1.95481	5.42796	1.92534	2.0192	2.3965
38900	38978	379.931	-79.739	-62.064	1.94351	5.38556	1.91409	2.0100	2.3780
39000	39078	379.574	-80.096	-62.262	1.93221	5.34316	1.90284	2.0008	2.3596
39100	39179	379.217	-80.453	-62.460	1.92091	5.30076	1.89159	1.9916	2.3411
39200	39279	378.860	-80.810	-62.658	1.90961	5.25836	1.88034	1.9824	2.3227
39300	39380	378.503	-81.167	-62.856	1.89831	5.21596	1.86909	1.9732	2.3042
39400	39480	378.146	-81.524	-63.054	1.88701	5.17356	1.85784	1.9640	2.2858
39500	39581	377.789	-81.881	-63.252	1.87571	5.13116	1.84659	1.9548	2.2673
39600	39681	377.432	-82.238	-63.450	1.86441	5.08876	1.83534	1.9456	2.2489
39700	39782	377.075	-82.595	-63.648	1.85311	5.04636	1.82409	1.9364	2.2304
39800	39882	376.718	-82.952	-63.846	1.84181	5.00396	1.81284	1.9272	2.2120
39900	39983	376.361	-83.309	-64.044	1.83051	4.96156	1.80159	1.9180	2.1935
40000	40083	376.004	-83.666	-64.242	1.81921	4.91916	1.79034	1.9088	2.1751
40100	40184	375.647	-84.023	-64.440	1.80791	4.87676	1.77909	1.8996	2.1566
40200	40284	375.290	-84.380	-64.638	1.79661	4.83436	1.76784	1.8904	2.1382
40300	40385	374.933	-84.737	-64.836	1.78531	4.79196	1.75659	1.8812	2.1197
40400	40485	374.576	-85.094	-65.034	1.77401	4.74956	1.74534	1.8720	2.1013
40500	40586	374.219	-85.451	-65.232	1.76271	4.70716	1.73409	1.8628	2.0828
40600	40686	373.862	-85.808	-65.430	1.75141	4.66476	1.72284	1.8536	2.0644
40700	40787	373.505	-86.165	-65.628	1.74011	4.62236	1.71159	1.8444	2.0459
40800	40887	373.148	-86.522	-65.826	1.72881	4.57996	1.70034	1.8352	2.0275
40900	40988	372.791	-86.879	-66.024	1.71751	4.53756	1.68909	1.8260	2.0090
41000	41088	372.434	-87.236	-66.222	1.70621	4.49516	1.67784	1.8168	1.9906
41100	41189	372.077	-87.593	-66.420	1.69491	4.45276	1.66659	1.8076	1.9721
41200	41289	371.720	-87.950	-66.618	1.68361	4.4103			

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
43000	43069	389.970	-69.700	-54.500	1.62357 + 2	4.79439 + 0	1.60234 - 1	1.6208 - 2	2.1311 - 1
43200	43290	389.970	-69.700	-54.500	1.60803	4.74882	1.58701	1.6142	2.1108
43400	43491	389.970	-69.700	-54.500	1.58255	4.70310	1.57182	1.5987	2.0906
43600	43711	389.970	-69.700	-54.500	1.55741	4.65810	1.55679	1.5836	2.0706
43800	43932	389.970	-69.700	-54.500	1.53222	4.61354	1.54189	1.5683	2.0508
44000	44153	389.970	-69.700	-54.500	1.50728	4.56941	1.52714	1.5533	2.0311
44200	44374	389.970	-69.700	-54.500	1.48257	4.52569	1.51253	1.5384	2.0117
44400	44595	389.970	-69.700	-54.500	1.45791	4.48249	1.49808	1.5237	1.9925
44600	44816	389.970	-69.700	-54.500	1.43339	4.43951	1.48373	1.5091	1.9734
44800	45036	389.970	-69.700	-54.500	1.40891	4.39704	1.46954	1.4947	1.9545
45000	45257	389.970	-69.700	-54.500	1.38447 + 2	4.35498 + 0	1.45548 - 1	1.4804 - 2	1.9358 - 1
45200	45478	389.970	-69.700	-54.500	1.46886	4.31332	1.44156	1.4662	1.9173
45400	45699	389.970	-69.700	-54.500	1.44488	4.27205	1.42776	1.4522	1.8990
45600	45920	389.970	-69.700	-54.500	1.42094	4.23118	1.41411	1.4383	1.8808
45800	46141	389.970	-69.700	-54.500	1.39714	4.19070	1.40058	1.4246	1.8628
46000	46362	389.970	-69.700	-54.500	1.40558	4.15061	1.38718	1.4109	1.8450
46200	46583	389.970	-69.700	-54.500	1.38211	4.11091	1.37391	1.3974	1.8273
46400	46804	389.970	-69.700	-54.500	1.35879	4.07158	1.36076	1.3841	1.8099
46600	47024	389.970	-69.700	-54.500	1.33560	4.03263	1.34775	1.3708	1.7925
46800	47245	389.970	-69.700	-54.500	1.31254	3.99405	1.33485	1.3577	1.7754
47000	47466	389.970	-69.700	-54.500	1.28960 + 2	3.95584 + 0	1.32208 - 1	1.3447 - 2	1.7584 - 1
47200	47687	389.970	-69.700	-54.500	1.26679	3.91800	1.30944	1.3319	1.7416
47400	47908	389.970	-69.700	-54.500	1.24409	3.88051	1.29691	1.3191	1.7249
47600	48129	389.970	-69.700	-54.500	1.22152	3.84339	1.28450	1.3065	1.7084
47800	48350	389.970	-69.700	-54.500	1.20007	3.80662	1.27221	1.2940	1.6921
48000	48571	389.970	-69.700	-54.500	1.17874	3.77020	1.26004	1.2816	1.6759
48200	48792	389.970	-69.700	-54.500	1.15752	3.73414	1.24799	1.2694	1.6599
48400	49013	389.970	-69.700	-54.500	1.13643	3.69841	1.23605	1.2572	1.6440
48600	49234	389.970	-69.700	-54.500	1.11544	3.66303	1.22422	1.2452	1.6282
48800	49455	389.970	-69.700	-54.500	1.09456	3.62799	1.21251	1.2333	1.6127
49000	49676	389.970	-69.700	-54.500	1.07379 + 2	3.59328 + 0	1.20091 - 1	1.2215 - 2	1.5972 - 1
49200	49897	389.970	-69.700	-54.500	1.05312	3.55891	1.18942	1.2098	1.5820
49400	50118	389.970	-69.700	-54.500	1.03255	3.52486	1.17805	1.1982	1.5668
49600	50339	389.970	-69.700	-54.500	1.01208	3.49114	1.16678	1.1868	1.5518
49800	50560	389.970	-69.700	-54.500	0.99171	3.45774	1.15561	1.1754	1.5370
50000	50781	389.970	-69.700	-54.500	0.97144	3.42466	1.14456	1.1642	1.5223
50200	51002	389.970	-69.700	-54.500	0.95127	3.39190	1.13361	1.1530	1.5077
50400	51223	389.970	-69.700	-54.500	0.93119	3.35945	1.12278	1.1420	1.4933
50600	51444	389.970	-69.700	-54.500	0.91121	3.32731	1.11202	1.1311	1.4790
50800	51665	389.970	-69.700	-54.500	0.89132	3.29548	1.10138	1.1202	1.4649
51000	51886	389.970	-69.700	-54.500	1.08530 + 2	3.26386 + 0	1.09085 - 1	1.1086 - 2	1.4509 - 1
51200	52107	389.970	-69.700	-54.500	1.06473	3.23257	1.08041	1.0989	1.4370
51400	52328	389.970	-69.700	-54.500	1.04425	3.20160	1.07008	1.0884	1.4232
51600	52549	389.970	-69.700	-54.500	1.02388	3.17117	1.05984	1.0780	1.4096
51800	52770	389.970	-69.700	-54.500	1.00361	3.14103	1.04970	1.0677	1.3961
52000	52991	389.970	-69.700	-54.500	0.98343	3.11079	1.03964	1.0575	1.3828
52200	53212	389.970	-69.700	-54.500	0.96336	3.08093	1.02971	1.0473	1.3696
52400	53433	389.970	-69.700	-54.500	0.94337	3.05158	1.01986	1.0373	1.3564
52600	53654	389.970	-69.700	-54.500	0.92348	3.02238	1.01010	1.0274	1.3433
52800	53875	389.970	-69.700	-54.500	0.90369	2.99341	1.00044	1.0176	1.3306
53000	54096	389.970	-69.700	-54.500	1.00400 + 2	2.96484 + 0	0.99078 - 2	1.0078 - 2	1.3179 - 1
53200	54317	389.970	-69.700	-54.500	0.98434 + 1	2.93644	0.98130	0.99820 - 3	1.3053
53400	54538	389.970	-69.700	-54.500	0.96481	2.90823	0.97202	0.98865	1.2928
53600	54759	389.970	-69.700	-54.500	0.94539	2.88023	0.962703	0.97919	1.2804
53800	54980	389.970	-69.700	-54.500	0.92607	2.85237	0.953483	0.96982	1.2682
54000	55201	389.970	-69.700	-54.500	0.90684	2.82468	0.944371	0.96055	1.2560
54200	55422	389.970	-69.700	-54.500	0.88770	2.79715	0.935337	0.95136	1.2440
54400	55643	389.970	-69.700	-54.500	0.86864	2.77017	0.926389	0.94228	1.2321
54600	55864	389.970	-69.700	-54.500	0.84964	2.74335	0.917526	0.93324	1.2203
54800	56085	389.970	-69.700	-54.500	0.83070	2.71709	0.908749	0.92431	1.2087
55000	56306	389.970	-69.700	-54.500	0.81181 + 1	2.69138 + 0	0.90005 - 2	0.91547 - 3	1.1971 - 1
55200	56527	389.970	-69.700	-54.500	0.79306	2.66581	0.891445	0.90671	1.1856
55400	56748	389.970	-69.700	-54.500	0.77445	2.64038	0.882917	0.90004	1.1743
55600	56969	389.970	-69.700	-54.500	0.75588	2.61502	0.874470	0.89454	1.1631
55800	57190	389.970	-69.700	-54.500	0.73734	2.58974	0.866104	0.88904	1.1519
56000	57411	389.970	-69.700	-54.500	0.71883	2.56452	0.857819	0.88351	1.1408
56200	57632	389.970	-69.700	-54.500	0.70034	2.53935	0.849612	0.87816	1.1300
56400	57853	389.970	-69.700	-54.500	0.68187	2.51423	0.841484	0.87290	1.1192
56600	58074	389.970	-69.700	-54.500	0.66342	2.48917	0.833434	0.86771	1.1085
56800	58295	389.970	-69.700	-54.500	0.64498	2.46418	0.825461	0.86258	1.0979
57000	58516	389.970	-69.700	-54.500	0.62657 + 1	2.44025 + 0	0.817564 - 2	0.85757 - 3	1.0874 - 1
57200	58737	389.970	-69.700	-54.500	0.60817	2.41637	0.809743	0.85261	1.0770
57400	58958	389.970	-69.700	-54.500	0.58979	2.39254	0.801996	0.84773	1.0667
57600	59179	389.970	-69.700	-54.500	0.57143	2.36877	0.794324	0.84287	1.0565
57800	59400	389.970	-69.700	-54.500	0.55309	2.34506	0.786725	0.83802	1.0464
58000	59621	389.970	-69.700	-54.500	0.53476	2.32141	0.779198	0.83318	1.0364
58200	59842	389.970	-69.700	-54.500	0.51644	2.29781	0.771744	0.82836	1.0264
58400	60063	389.970	-69.700	-54.500	0.49812	2.27426	0.764361	0.82356	1.0166
58600	60284	389.970	-69.700	-54.500	0.47981	2.25076	0.757049	0.81877	1.0069
58800	60505	389.970	-69.700	-54.500	0.46151	2.22731	0.749806	0.81398	9.9726 - 2

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
59000	59167	389.970	-69.700	-54.900	7.52473 + 1	2.22206 + 0	7.42633 - 2	7.5636 - 3	9.8772 - 2
59200	59334	389.970	-69.700	-54.900	7.46274	2.20079	7.35529	7.4613	9.7327
59400	59700	389.970	-69.700	-54.900	7.28145	2.17774	7.25462	7.4057	9.6701
59600	59771	389.970	-69.700	-54.900	7.31053	2.15512	7.21532	7.2315	9.5154
59800	59672	389.970	-69.700	-54.900	7.24069	2.13253	7.16640	7.2585	9.5046
60000	60173	389.970	-69.700	-54.900	7.17162	2.11000	7.07784	7.1991	9.4137
60200	60374	389.970	-69.700	-54.900	7.10301	2.08752	7.01013	7.1302	9.3237
60400	60575	389.970	-69.700	-54.900	7.03506	2.06746	6.94308	7.0620	9.2345
60600	60777	389.970	-69.700	-54.900	6.96776	2.04758	6.87684	6.9944	9.1461
60800	60978	389.970	-69.700	-54.900	6.90110	2.02789	6.81086	6.9275	9.0586
61000	61179	389.970	-69.700	-54.900	6.83508 + 1	2.01840 + 0	6.74570 - 2	6.8612 - 3	8.9720 - 2
61200	61380	389.970	-69.700	-54.900	6.76969	1.99909	6.68116	6.7966	8.8861
61400	61581	389.970	-69.700	-54.900	6.70493	1.97988	6.61725	6.7306	8.8011
61600	61783	389.970	-69.700	-54.900	6.64078	1.96072	6.55394	6.6642	8.7169
61800	61984	389.970	-69.700	-54.900	6.57725	1.94226	6.49124	6.6024	8.6335
62000	62185	389.970	-69.700	-54.900	6.51433	1.92388	6.42914	6.5393	8.5509
62200	62386	389.970	-69.700	-54.900	6.45201	1.90528	6.36764	6.4767	8.4691
62400	62587	389.970	-69.700	-54.900	6.39029	1.88705	6.30672	6.4147	8.3881
62600	62788	389.970	-69.700	-54.900	6.32915	1.86900	6.24639	6.3534	8.3079
62800	62990	389.970	-69.700	-54.900	6.26860	1.85112	6.18663	6.2926	8.2284
63000	63191	389.970	-69.700	-54.900	6.20864 + 1	1.83341 + 0	6.12745 - 2	6.2324 - 3	8.1497 - 2
63200	63392	389.970	-69.700	-54.900	6.14924	1.81587	6.06883	6.1728	8.0717
63400	63593	389.970	-69.700	-54.900	6.09041	1.79840	6.01077	6.1137	7.9945
63600	63795	389.970	-69.700	-54.900	6.03215	1.78129	5.95327	6.0552	7.9180
63800	63996	389.970	-69.700	-54.900	5.97444	1.76425	5.89731	5.9973	7.8422
64000	64197	389.970	-69.700	-54.900	5.91728	1.74737	5.84291	5.9399	7.7672
64200	64398	389.970	-69.700	-54.900	5.86068	1.73066	5.78904	5.8831	7.6929
64400	64599	389.970	-69.700	-54.900	5.80461	1.71410	5.73570	5.8268	7.6193
64600	64801	389.970	-69.700	-54.900	5.74908	1.69770	5.68290	5.7711	7.5464
64800	65002	389.970	-69.700	-54.900	5.69408	1.68146	5.63062	5.7159	7.4742
65000	65203	389.970	-69.700	-54.900	5.63961 + 1	1.66537 + 0	5.57886 - 2	5.6612 - 3	7.4027 - 2
65200	65404	389.970	-69.700	-54.900	5.58565	1.64944	5.52761	5.6070	7.3319
65400	65605	389.970	-69.700	-54.900	5.53222	1.63366	5.47687	5.5534	7.2618
65600	65807	389.970	-69.700	-54.900	5.47939	1.61803	5.42674	5.5003	7.1923
65800	66008	389.970	-69.700	-54.900	5.42708	1.60254	5.37671	5.4482	7.1237
66000	66210	389.970	-69.700	-54.900	5.37529	1.58720	5.32677	5.3962	7.0551
66200	66411	389.970	-69.700	-54.900	5.32392	1.57200	5.27692	5.3442	6.9862
66400	66612	389.970	-69.700	-54.900	5.27297	1.55700	5.22717	5.2921	6.9173
66600	66813	389.970	-69.700	-54.900	5.22234	1.54216	5.17750	5.2391	6.8485
66800	67015	389.970	-69.700	-54.900	5.17204	1.52742	5.12792	5.1856	6.7793
67000	67216	389.970	-69.700	-54.900	5.12206 + 1	1.51284 + 0	5.07842 - 2	5.1327 - 3	6.7116 - 2
67200	67417	389.970	-69.700	-54.900	5.07231	1.49840	5.02899	5.0793	6.6447
67400	67619	389.970	-69.700	-54.900	5.02277	1.48410	4.97962	5.0232	6.5784
67600	67820	389.970	-69.700	-54.900	4.97344	1.46994	4.92931	4.9670	6.5126
67800	68021	389.970	-69.700	-54.900	4.92431	1.45591	4.87904	4.9148	6.4473
68000	68222	389.970	-69.700	-54.900	4.87538	1.44200	4.82881	4.8626	6.3825
68200	68423	389.970	-69.700	-54.900	4.82664	1.42820	4.77861	4.8104	6.3182
68400	68624	389.970	-69.700	-54.900	4.77809	1.41450	4.72844	4.7582	6.2544
68600	68825	389.970	-69.700	-54.900	4.72972	1.40100	4.67830	4.7061	6.1911
68800	69026	389.970	-69.700	-54.900	4.68153	1.38760	4.62820	4.6540	6.1283
69000	69227	389.970	-69.700	-54.900	4.63352 + 1	1.37430 + 0	4.57815 - 2	4.6039 - 3	6.0660 - 2
69200	69428	389.970	-69.700	-54.900	4.58568	1.36110	4.52814	4.5538	6.0042
69400	69629	389.970	-69.700	-54.900	4.53799	1.34800	4.47816	4.5037	5.9429
69600	69830	389.970	-69.700	-54.900	4.49044	1.33500	4.42820	4.4537	5.8820
69800	70031	389.970	-69.700	-54.900	4.44303	1.32210	4.37826	4.4037	5.8215
70000	70232	389.970	-69.700	-54.900	4.39574	1.30930	4.32834	4.3537	5.7614
70200	70433	389.970	-69.700	-54.900	4.34857	1.29660	4.27844	4.3037	5.7017
70400	70634	389.970	-69.700	-54.900	4.30152	1.28400	4.22856	4.2537	5.6424
70600	70835	389.970	-69.700	-54.900	4.25458	1.27150	4.17870	4.2037	5.5835
70800	71036	389.970	-69.700	-54.900	4.20774	1.25910	4.12886	4.1537	5.5250
71000	71237	389.970	-69.700	-54.900	4.16099	1.24680	4.07904	4.1037	5.4669
71200	71438	389.970	-69.700	-54.900	4.11434	1.23460	4.02924	4.0537	5.4092
71400	71639	389.970	-69.700	-54.900	4.06778	1.22250	3.97946	4.0037	5.3519
71600	71840	389.970	-69.700	-54.900	4.02131	1.21050	3.92970	3.9537	5.2950
71800	72041	389.970	-69.700	-54.900	3.97492	1.19860	3.88000	3.9037	5.2385
72000	72242	389.970	-69.700	-54.900	3.92861	1.18680	3.83036	3.8537	5.1824
72200	72443	389.970	-69.700	-54.900	3.88238	1.17510	3.78078	3.8037	5.1267
72400	72644	389.970	-69.700	-54.900	3.83623	1.16350	3.73126	3.7537	5.0714
72600	72845	389.970	-69.700	-54.900	3.79015	1.15200	3.68180	3.7037	5.0165
72800	73046	389.970	-69.700	-54.900	3.74414	1.14060	3.63240	3.6537	4.9620
73000	73247	389.970	-69.700	-54.900	3.69819	1.12930	3.58306	3.6037	4.9079
73200	73448	389.970	-69.700	-54.900	3.65230	1.11810	3.53378	3.5537	4.8542
73400	73649	389.970	-69.700	-54.900	3.60646	1.10700	3.48456	3.5037	4.8009
73600	73850	389.970	-69.700	-54.900	3.56067	1.09600	3.43540	3.4537	4.7480
73800	74051	389.970	-69.700	-54.900	3.51492	1.08510	3.38628	3.4037	4.6955
74000	74252	389.970	-69.700	-54.900	3.46921	1.07430	3.33720	3.3537	4.6434
74200	74453	389.970	-69.700	-54.900	3.42354	1.06360	3.28816	3.3037	4.5917
74400	74654	389.970	-69.700	-54.900	3.37791	1.05300	3.23916	3.2537	4.5404
74600	74855	389.970	-69.700	-54.900	3.33232	1.04250	3.19020	3.2037	4.4895
74800	75056	389.970	-69.700	-54.900	3.28677	1.03210	3.14128	3.1537	4.4390
75000	75257	389.970	-69.700	-54.900	3.24125	1.02180	3.09240	3.1037	4.3889

# GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
73000	73271	395.118	-64.552	-51.640	1.89779 + 1	1.03280 + 0	3.45205 - 2	3.4684 - 3	4.5315 - 2
73200	73472	395.228	-64.442	-51.579	1.86478	1.02214	3.41945	3.4318	4.4875
73400	73674	395.337	-64.333	-51.518	1.83206	1.01249	3.38715	3.3994	4.4439
73600	73877	395.447	-64.223	-51.457	1.80057	1.00383	3.35511	3.3574	4.4007
73800	74077	395.557	-64.113	-51.396	1.77033	9.99617 - 1	3.32331	3.3257	4.3582
74000	74278	395.667	-64.003	-51.335	1.74134	9.98974	3.29184	3.3004	4.3157
74200	74479	395.778	-63.894	-51.274	1.71360	9.98457	3.26070	3.2844	4.2738
74400	74681	395.888	-63.784	-51.213	1.68712	9.98068	3.23044	3.2687	4.2324
74600	74882	395.998	-63.674	-51.152	1.66189	9.97801	3.20000	3.2533	4.1913
74800	75084	396.108	-63.564	-51.091	1.63791	9.98461	3.18088	3.1743	4.1507
77000	77285	398.215	-63.455	-51.030	1.61511 + 1	9.98929 - 1	3.14001 - 2	3.1434 - 3	4.1105 - 2
77200	77487	398.325	-63.346	-50.969	1.51518	9.99082	3.11044	3.1104	4.0708
77400	77688	398.435	-63.235	-50.908	1.51259	9.21822	3.08116	3.0829	4.0312
77600	77890	398.544	-63.126	-50.848	1.50981	9.13248	3.05217	3.0530	3.9922
77800	78091	398.654	-63.016	-50.787	1.50683	9.04856	3.02345	3.0234	3.9535
78000	78293	398.764	-62.906	-50.726	1.50371	8.96648	2.99502	2.9942	3.9152
78200	78494	398.874	-62.796	-50.665	1.50047	8.88622	2.96686	2.9652	3.8774
78400	78696	398.983	-62.687	-50.604	1.49719	8.80777	2.93897	2.9365	3.8399
78600	78897	399.093	-62.577	-50.543	1.49385	8.73107	2.91136	2.9081	3.8027
78800	79099	399.203	-62.467	-50.482	1.49045	8.65701	2.88400	2.8800	3.7660
79000	79300	399.313	-62.357	-50.421	1.48700 + 1	8.58468 - 1	2.85692 - 2	2.8521 - 3	3.7296 - 2
79200	79502	399.422	-62.248	-50.360	1.48350	8.46479	2.83008	2.8246	3.6935
79400	79703	399.532	-62.138	-50.299	1.48007	8.38851	2.80353	2.7973	3.6578
79600	79905	399.642	-62.028	-50.238	1.47660	8.30979	2.77722	2.7703	3.6225
79800	80107	399.751	-61.919	-50.177	1.47317	8.22853	2.75116	2.7435	3.5875
80000	80308	399.861	-61.809	-50.116	1.46977	8.14462	2.72536	2.7171	3.5529
80200	80510	399.971	-61.699	-50.055	1.46639	8.07816	2.69980	2.6908	3.5188
80400	80711	399.081	-61.589	-50.004	1.46302	8.00243	2.67450	2.6649	3.4847
80600	80913	399.190	-61.480	-49.953	1.45961	7.92744	2.64943	2.6392	3.4511
80800	81114	399.300	-61.370	-49.902	1.45618	7.85317	2.62461	2.6137	3.4178
81000	81316	399.410	-61.260	-49.851	1.45274 + 1	7.77962 - 1	2.60003 - 2	2.5895 - 3	3.3849 - 2
81200	81517	399.520	-61.150	-49.790	1.44931	7.70677	2.57568	2.5636	3.3522
81400	81719	399.629	-61.041	-49.729	1.44588	7.63463	2.55157	2.5389	3.3199
81600	81921	399.739	-60.931	-49.668	1.44245	7.56317	2.52769	2.5144	3.2880
81800	82122	399.849	-60.821	-49.607	1.43902	7.49240	2.50404	2.4902	3.2563
82000	82324	399.958	-60.712	-49.546	1.43559	7.42233	2.48062	2.4663	3.2250
82200	82525	399.068	-60.602	-49.485	1.43216	7.35293	2.45743	2.4425	3.1939
82400	82727	399.178	-60.492	-49.424	1.42873	7.28419	2.43445	2.4190	3.1632
82600	82928	399.288	-60.382	-49.363	1.42530	7.21612	2.41170	2.3958	3.1328
82800	83130	399.397	-60.273	-49.302	1.42187	7.14870	2.38917	2.3727	3.1027
83000	83332	399.507	-60.163	-49.241	1.41844 + 1	7.08192 - 1	2.36685 - 2	2.3499 - 3	3.0728 - 2
83200	83533	399.617	-60.053	-49.180	1.41501	7.01577	2.34475	2.3273	3.0433
83400	83735	399.727	-59.943	-49.119	1.41158	6.95029	2.32286	2.3050	3.0141
83600	83937	399.836	-59.834	-49.058	1.40815	6.88543	2.30118	2.2828	2.9851
83800	84138	399.946	-59.724	-49.007	1.40472	6.82119	2.27971	2.2609	2.9564
84000	84340	400.056	-59.614	-48.946	1.40129	6.75756	2.25845	2.2392	2.9281
84200	84541	400.165	-59.505	-48.885	1.39786	6.69454	2.23739	2.2177	2.9000
84400	84743	400.275	-59.395	-48.824	1.39443	6.63213	2.21653	2.1964	2.8721
84600	84945	400.385	-59.285	-48.763	1.39100	6.57031	2.19587	2.1754	2.8446
84800	85146	400.495	-59.175	-48.702	1.38757	6.50910	2.17541	2.1545	2.8173
85000	85348	400.604	-59.066	-48.641	1.38414 + 1	6.44846 - 1	2.15514 - 2	2.1339 - 3	2.7903 - 2
85200	85550	400.714	-58.956	-48.580	1.38071	6.38841	2.13507	2.1134	2.7636
85400	85751	400.824	-58.846	-48.519	1.37728	6.32893	2.11520	2.0932	2.7371
85600	85953	400.934	-58.736	-48.458	1.37385	6.27003	2.09551	2.0731	2.7109
85800	86154	401.043	-58.627	-48.397	1.37042	6.21169	2.07801	2.0533	2.6849
86000	86356	401.153	-58.517	-48.336	1.36699	6.15380	2.06070	2.0336	2.6592
86200	86558	401.263	-58.407	-48.275	1.36356	6.09647	2.04357	2.0141	2.6338
86400	86759	401.372	-58.298	-48.214	1.36013	6.03969	2.02663	1.9949	2.6086
86600	86961	401.482	-58.188	-48.153	1.35670	5.98346	2.00987	1.9758	2.5836
86800	87163	401.592	-58.078	-48.092	1.35327	5.92778	1.99329	1.9569	2.5589
87000	87364	401.702	-57.968	-48.031	1.34984 + 1	5.87261 - 1	1.97689 - 2	1.9382 - 3	2.5344 - 2
87200	87566	401.811	-57.858	-47.970	1.34641	5.81802	1.96060	1.9197	2.5102
87400	87768	401.921	-57.748	-47.909	1.34298	5.76400	1.94448	1.9013	2.4862
87600	87970	402.031	-57.638	-47.848	1.33955	5.71056	1.92847	1.8832	2.4625
87800	88171	402.141	-57.528	-47.787	1.33612	5.65769	1.91257	1.8652	2.4390
88000	88373	402.250	-57.418	-47.726	1.33269	5.60539	1.89676	1.8474	2.4157
88200	88575	402.360	-57.308	-47.665	1.32926	5.55366	1.88096	1.8297	2.3926
88400	88776	402.470	-57.198	-47.604	1.32583	5.50249	1.86516	1.8123	2.3698
88600	88978	402.579	-57.088	-47.543	1.32240	5.45188	1.84936	1.7950	2.3472
88800	89180	402.689	-56.978	-47.482	1.31897	5.40182	1.83356	1.7779	2.3248
89000	89381	402.799	-56.867	-47.421	1.31554 + 1	5.35231 - 1	1.78822 - 2	1.7809 - 3	2.3026 - 2
89200	89583	402.909	-56.757	-47.360	1.31211	5.30334	1.77242	1.7641	2.2807
89400	89785	403.018	-56.647	-47.299	1.30868	5.25491	1.75662	1.7458	2.2589
89600	89987	403.128	-56.537	-47.238	1.30525	5.20702	1.74082	1.7310	2.2374
89800	90189	403.238	-56.427	-47.177	1.30182	5.15967	1.72502	1.7162	2.2161
90000	90390	403.348	-56.317	-47.116	1.29839	5.11286	1.70922	1.7014	2.1950
90200	90592	403.457	-56.207	-47.055	1.29496	5.06659	1.69342	1.6866	2.1741
90400	90794	403.567	-56.097	-46.994	1.29153	5.02086	1.67762	1.6718	2.1534
90600	90996	403.677	-55.987	-46.933	1.28810	4.97567	1.66182	1.6560	2.1329
90800	91197	403.787	-55.877	-46.872	1.28467	4.93092	1.64602	1.6402	2.1127

## GEOPOTENTIAL ALTITUDE, ENGLISH UNITS

ALTITUDE		TEMPERATURE			PRESSURE			DENSITY	
H, FT	Z, FT	T, °R	t, °F	t, °C	P, mB	P, IN. HG	$\frac{P}{P_0}$	$\rho, \text{LB FT}^{-3}$	$\frac{\rho}{\rho_0}$
91000	91299	403.253	-55.774	-48.753	1.65110 + 1	4.87570 - 1	1.62951 - 2	1.6003 - 3	2.0926 - 2
91200	91500	403.253	-55.774	-48.753	1.63575	4.83799	1.61446	1.5851	2.0777
91400	91700	403.253	-55.774	-48.753	1.62074	4.79925	1.59955	1.5700	2.0630
91600	91900	403.253	-55.774	-48.753	1.60574	4.76051	1.58478	1.5551	2.0483
91800	92100	404.235	-54.225	-48.519	1.59076	4.72177	1.57015	1.5403	2.0342
92000	92300	404.445	-53.225	-48.458	1.57628	4.68303	1.55567	1.5257	1.9960
92200	92500	404.555	-52.225	-48.397	1.56174	4.64429	1.54132	1.5112	1.9761
92400	92700	404.664	-51.225	-48.336	1.54734	4.60555	1.52702	1.4969	1.9573
92600	92900	404.774	-50.225	-48.275	1.53307	4.56681	1.51302	1.4827	1.9388
92800	93100	404.884	-49.225	-48.215	1.51884	4.52807	1.49908	1.4686	1.9204
93000	93417	404.994	-48.276	-48.154	1.50464 + 1	4.44410 - 1	1.48528 - 2	1.4547 - 3	1.9022 - 2
93200	93618	405.103	-47.276	-48.093	1.49108	4.40516	1.47158	1.4409	1.8841
93400	93820	405.213	-46.276	-48.032	1.47735	4.36621	1.45803	1.4272	1.8663
93600	94022	405.323	-45.276	-47.971	1.46377	4.32724	1.44448	1.4137	1.8486
93800	94224	405.432	-44.276	-47.910	1.45027	4.28826	1.43131	1.4003	1.8311
94000	94426	405.542	-43.276	-47.849	1.43683	4.24921	1.41814	1.3870	1.8137
94200	94627	405.652	-42.276	-47.788	1.42341	4.21012	1.40509	1.3739	1.7966
94400	94829	405.762	-41.276	-47.727	1.41001	4.17102	1.39217	1.3609	1.7796
94600	95031	405.871	-40.276	-47.666	1.39764	4.13194	1.37937	1.3480	1.7627
94800	95233	405.981	-39.276	-47.605	1.38547	4.09283	1.36669	1.3353	1.7460
95000	95435	406.091	-38.279	-47.544	1.37307 + 1	4.05372 - 1	1.35413 - 2	1.3226 - 3	1.7295 - 2
95200	95637	406.201	-37.279	-47.483	1.35946	4.01464	1.34169	1.3101	1.7132
95400	95838	406.310	-36.279	-47.422	1.34688	3.97552	1.32936	1.2978	1.6970
95600	96040	406.420	-35.279	-47.361	1.33461	3.93641	1.31716	1.2855	1.6809
95800	96242	406.530	-34.279	-47.300	1.32226	3.89729	1.30506	1.2733	1.6651
96000	96444	406.639	-33.279	-47.239	1.31022	3.85818	1.29309	1.2613	1.6493
96200	96646	406.749	-32.279	-47.178	1.29820	3.81906	1.28122	1.2494	1.6338
96400	96848	406.859	-31.279	-47.117	1.28629	3.78002	1.26947	1.2376	1.6183
96600	97050	406.969	-30.279	-47.056	1.27450	3.74098	1.25783	1.2259	1.6031
96800	97251	407.078	-29.279	-46.995	1.26281	3.70194	1.24630	1.2144	1.5879
97000	97453	407.188	-28.282	-46.934	1.25124 + 1	3.66280 - 1	1.23488 - 2	1.2029 - 3	1.5730 - 2
97200	97655	407.298	-27.282	-46.873	1.23977	3.62374	1.22356	1.1916	1.5581
97400	97857	407.408	-26.282	-46.812	1.22842	3.58462	1.21235	1.1803	1.5434
97600	98059	407.517	-25.282	-46.752	1.21717	3.54552	1.20125	1.1692	1.5289
97800	98261	407.627	-24.282	-46.691	1.20602	3.50641	1.19025	1.1582	1.5145
98000	98463	407.737	-23.282	-46.630	1.19498	3.46729	1.17936	1.1473	1.5002
98200	98665	407.846	-22.282	-46.569	1.18405	3.42818	1.16857	1.1365	1.4861
98400	98867	407.956	-21.282	-46.508	1.17322	3.38906	1.15788	1.1258	1.4721
98600	99069	408.066	-20.282	-46.447	1.16249	3.35002	1.14729	1.1152	1.4583
98800	99270	408.176	-19.282	-46.386	1.15186	3.31098	1.13680	1.1047	1.4445
99000	99472	408.285	-18.285	-46.325	1.14133 + 1	3.27195 - 1	1.12641 - 2	1.0943 - 3	1.4309 - 2
99200	99674	408.395	-17.285	-46.264	1.13080	3.23283	1.11611	1.0840	1.4175
99400	99876	408.505	-16.285	-46.203	1.12037	3.19372	1.10582	1.0738	1.4042
99600	100078	408.615	-15.285	-46.142	1.11004	3.15461	1.09562	1.0637	1.3910
99800	100280	408.724	-14.285	-46.081	1.10020	3.11550	1.08542	1.0537	1.3779
100000	100482	408.834	-13.285	-46.020	1.09035	3.07640	1.07520	1.0438	1.3649
100200	100684	408.944	-12.285	-45.959	1.08050	3.03729	1.06500	1.0340	1.3521
100400	100886	409.053	-11.285	-45.898	1.07065	3.00000	1.05480	1.0243	1.3394
100600	101088	409.163	-10.285	-45.837	1.06080	2.96271	1.04460	1.0147	1.3269
100800	101290	409.273	-9.287	-45.776	1.05095	2.92542	1.03440	1.0052	1.3144
101000	101492	409.383	-8.287	-45.715	1.04133 + 1	2.88808 - 1	1.02772 - 2	9.9575 - 4	1.3021 - 2
101200	101694	409.492	-7.287	-45.654	1.03184	2.85073	1.01835	9.8641	1.2899
101400	101896	409.602	-6.287	-45.593	1.02244	2.81338	1.00907	9.7716	1.2778
101600	102097	409.712	-5.287	-45.532	1.01313	2.77603	1.00000	9.6800	1.2658
101800	102299	409.822	-4.287	-45.471	1.00380	2.73868	0.99100	9.5885	1.2539
102000	102501	409.931	-3.287	-45.410	0.99447	2.70133	0.98200	9.4970	1.2422
102200	102703	410.041	-2.287	-45.349	0.98514	2.66398	0.97300	9.4105	1.2306
102400	102905	410.151	-1.287	-45.288	0.97581	2.62663	0.96400	9.3224	1.2190
102600	103107	410.260	-0.287	-45.227	0.96648	2.58928	0.95500	9.2351	1.2075
102800	103309	410.370	-0.300	-45.167	0.95715	2.55193	0.94611	9.1486	1.1963
103000	103511	410.480	-0.190	-45.106	0.94782 + 0	2.51458 - 1	0.93706 - 3	9.0630 - 4	1.1851 - 2
103200	103713	410.590	-0.080	-45.045	0.93849	2.47723	0.92800	8.9783	1.1740
103400	103915	410.700	0.030	-44.984	0.92916	2.43988	0.91900	8.8943	1.1630
103600	104117	410.810	0.140	-44.923	0.91983	2.40253	0.91000	8.8111	1.1522
103800	104319	410.920	0.250	-44.862	0.91050	2.36518	0.90100	8.7286	1.1414
104000	104521	411.029	0.360	-44.801	0.90117	2.32783	0.89200	8.6472	1.1307
104200	104723	411.139	0.470	-44.740	0.89184	2.29048	0.88300	8.5664	1.1202
104400	104925	411.248	0.580	-44.679	0.88251	2.25313	0.87400	8.4864	1.1097
104600	105127	411.358	0.690	-44.618	0.87318	2.21578	0.86500	8.4072	1.0993
104800	105329	411.467	0.800	-44.557	0.86385	2.17843	0.85600	8.3287	1.0891
105000	105531	411.576	0.910	-44.496	0.85452 + 0	2.14108 - 1	0.84715 - 3	8.2507 - 4	1.0789 - 2
105200	105733	411.686	1.020	-44.435	0.84519	2.10373	0.83800	8.1651	1.0687
105400	105935	411.795	1.130	-44.374	0.83586	2.06638	0.82900	8.0801	1.0587
105600	106137	411.905	1.240	-44.313	0.82653	2.02903	0.82000	7.9951	1.0487
105800	106339	412.014	1.350	-44.252	0.81720	1.99168	0.81100	7.9101	1.0387
106000	106541	412.124	1.460	-44.191	0.80787	1.95433	0.80200	7.8251	1.0287
106200	106743	412.233	1.570	-44.130	0.79854	1.91698	0.79300	7.7401	1.0187
106400	106945	412.343	1.680	-44.069	0.78921	1.87963	0.78400	7.6551	1.0087
106600	107147	412.452	1.790	-44.008	0.77988	1.84228	0.77500	7.5701	0.9987
106800	107349	412.562	1.900	-43.947	0.77055	1.80493	0.76600	7.4851	0.9887
107000	107551	412.671	2.010	-43.886	0.76122	1.76758	0.75700	7.4001	0.9787
107200	107753	412.781	2.120	-43.825	0.75189	1.73023	0.74800	7.3151	0.9687
107400	107955	412.890	2.230	-43.764	0.74256	1.69288	0.73900	7.2301	0.9587
107600	108157	413.000	2.340	-43.703	0.73323	1.65553	0.73000	7.1451	0.9487
107800	108359	413.109	2.450	-43.642	0.72390	1.61818	0.72100	7.0601	0.9387
108000	108561	413.219	2.560	-43.581	0.71457	1.58083	0.71200	6.9751	0.9287
108200	108763	413.328	2.670	-43.520	0.70524	1.54348	0.70300	6.8901	0.9187
108400	108965	413.438	2.780	-43.459	0.69591	1.50613	0.69400	6.8051	0.9087
108600	109167	413.547	2.890	-43.398	0.68658	1.46878	0.68500	6.7201	0.8987
108800	109369	413.657	3.000	-43.337	0.67725	1.43143	0.67600	6.6351	0.8887
109000	109571	413.766	3.110	-43.276	0.66792	1.39408	0.66700	6.5501	0.8787
109200	109773	413.876	3.220	-43.215	0.65859	1.35673	0.65800	6.4651	0.8687
109400	109975	413.985	3.330	-43.154	0.64926	1.31938	0.64900	6.3801	0.8587
109600	110177	414.095	3.440	-43.093	0.63993	1.28203	0.64000	6.2951	0.8487
109800	110379	414.204	3.550	-43.032	0.63060	1.24468	0.63100	6.2101	0.8387
110000	110581	414.314	3.660	-42.971	0.62127	1.20733	0.62200	6.1251	0.8287