

*The 1964 ICAO Standard Atmosphere*  
(*Z = altitude above mean sea level in meters*)

Z	gpm	Temperature, K	Pressure, kPa	Density, kg/m <sup>3</sup>
0	0	288.150	101.325	1.2250
200	200	286.850	98.945	1.2017
400	400	285.550	96.611	1.1786
600	600	284.250	94.322	1.1560
800	800	282.951	92.077	1.1337
1000	1000	281.651	89.876	1.1117
1200	1200	280.351	87.718	1.0900
1400	1400	279.052	85.602	1.0687
1600	1600	277.753	83.528	1.0476
1800	1799	276.453	81.494	1.0269
2000	1999	275.154	79.501	1.0066
2500	2499	271.906	74.692	0.9570
3000	2999	268.659	70.121	0.9093
3500	3498	265.413	65.780	0.8634
4000	3997	262.166	61.660	0.8194
4500	4497	258.921	57.753	0.7770
5000	4996	255.676	54.048	0.7364
5500	5495	252.431	50.539	0.6975
6000	5994	249.187	47.218	0.6601
6500	6493	245.943	44.075	0.6243
7000	6992	242.700	41.105	0.5900
7500	7491	239.457	38.300	0.5572
8000	7990	236.215	35.652	0.5258
8500	8489	232.974	33.154	0.4958
9000	8987	229.733	30.801	0.4671
9500	9486	226.492	28.585	0.4397
10,000	9984	223.252	26.500	0.4135
10,500	10,483	220.013	24.540	0.3886
11,000	10,981	216.774	22.700	0.3648
11,500	11,479	216.650	20.985	0.3374
12,000	11,977	216.650	19.399	0.3119
12,500	12,475	216.650	17.934	0.2884
13,000	12,973	216.650	16.580	0.2666
13,500	13,471	216.650	15.328	0.2465
14,000	13,969	216.650	14.170	0.2279
14,500	14,467	216.650	13.101	0.2107
15,000	14,965	216.650	12.112	0.1948
15,500	15,462	216.650	11.198	0.1801
16,000	15,960	216.650	10.353	0.1665
16,500	16,457	216.650	9.572	0.1539
17,000	16,955	216.650	8.850	0.1423
17,500	17,452	216.650	8.182	0.1316
18,000	17,949	216.650	7.565	0.1217
18,500	18,446	216.650	6.995	0.1125
19,000	18,943	216.650	6.468	0.1040
19,500	19,440	216.650	5.980	0.0962
20,000	19,937	216.650	5.529	0.0889