

INTERNATIONAL STANDARD ATMOSPHERE (ISA)

ALTITUDE (Feet)	TEMP. (°C)	PRESSURE			PRESSURE RATIO $\delta =$ P / P ₀	DENSITY $\sigma = \rho / \rho_0$	SPEED of SOUND (a) kt	ALTITUDE (metres)
		hPa	P.S.I.	In Hg.				
41,000	-56.5	179	2.59	5.28	0.1764	0.2346	573	12.496
40,000	-56.5	188	2.72	5.54	0.1851	0.2462	573	12.192
39,000	-56.5	197	2.85	5.81	0.1942	0.2583	573	11.887
38,000	-56.5	206	2.99	6.10	0.2038	0.2710	573	11.582
37,000	-56.5	217	3.14	6.40	0.2138	0.2844	573	11.278
36,000	-56.3	227	3.30	6.71	0.2243	0.2891	573	10.973
35,000	-54.3	238	3.46	7.04	0.2353	0.3099	576	10.668
34,000	-52.4	250	3.63	7.38	0.2467	0.3220	579	10.363
33,000	-50.4	262	3.80	7.74	0.2586	0.3345	581	10.058
32,000	-48.4	274	3.98	8.11	0.2709	0.3473	584	9.754
31,000	-46.4	287	4.17	8.49	0.2837	0.3605	586	9.449
30,000	-44.4	301	4.36	8.89	0.2970	0.3741	589	9.144
29,000	-42.5	315	4.57	9.30	0.3107	0.3881	591	8.839
28,000	-40.5	329	4.78	9.73	0.3250	0.4025	594	8.534
27,000	-38.5	344	4.99	10.17	0.3398	0.4173	597	8.230
26,000	-36.5	360	5.22	10.63	0.3552	0.4325	599	7.925
25,000	-34.5	376	5.45	11.10	0.3711	0.4481	602	7.620
24,000	-32.5	393	5.70	11.60	0.3876	0.4642	604	7.315
23,000	-30.6	410	5.95	12.11	0.4046	0.4806	607	7.010
22,000	-28.6	428	6.21	12.64	0.4223	0.4976	609	6.706
21,000	-26.6	446	6.47	13.18	0.4406	0.5150	611	6.401
20,000	-24.6	466	6.75	13.75	0.4595	0.5328	614	6.096
19,000	-22.6	485	7.04	14.34	0.4791	0.5511	616	5.791
18,000	-20.7	506	7.34	14.94	0.4994	0.5699	619	5.406
17,000	-18.7	527	7.65	15.57	0.5203	0.5892	621	5.182
16,000	-16.7	549	7.97	16.22	0.5420	0.6090	624	4.877
15,000	-14.7	572	8.29	16.89	0.5643	0.6292	626	4.572
14,000	-12.7	595	8.63	17.58	0.5875	0.6500	628	4.267
13,000	-10.8	619	8.99	18.29	0.6113	0.6713	631	3.962
12,000	-8.8	644	9.35	19.03	0.6360	0.6932	633	3.658
11,000	-6.8	670	9.72	19.79	0.6614	0.7156	636	3.353
10,000	-4.8	697	10.10	20.58	0.6877	0.7385	638	3.048
9,000	-2.8	724	10.51	21.39	0.7148	0.7620	640	2.743
8,000	-0.8	753	10.92	22.22	0.7428	0.7860	643	2.438
7,000	+1.1	782	11.34	23.09	0.7716	0.8106	645	2.134
6,000	+3.1	812	11.78	23.98	0.8014	0.8359	647	1.829
5,000	+5.1	843	12.23	24.90	0.8320	0.8617	650	1.524
4,000	+7.1	875	12.69	25.84	0.8637	0.8881	652	1.219
3,000	+9.1	908	13.17	26.82	0.8962	0.9151	654	914
2,000	+11.0	942	13.67	27.82	0.9298	0.9428	656	610
1,000	+13.0	977	14.17	28.86	0.9644	0.9711	659	305
0	+15.0	1013	14.70	29.92	1.0000	1.0000	661	0
-1,000	+17.0	1050	15.23	31.02	1.0366	1.0295	664	-305