

Altitude (metres)	Conversion factor							
	ISA-30	ISA-20	ISA-10	ISA	ISA+10	ISA+15	ISA+20	ISA+30
4 000.0	1.1507	1.1753	1.1993	1.2229	1.2460	1.2574	1.2687	1.2910
4 500.0	1.1807	1.2063	1.2313	1.2558	1.2798	1.2917	1.3034	1.3266
5 000.0	1.2119	1.2385	1.2645	1.2900	1.3150	1.3273	1.3395	1.3636
5 500.0	1.2443	1.2720	1.2991	1.3256	1.3516	1.3644	1.3771	1.4022
6 000.0	1.2779	1.3068	1.3350	1.3627	1.3897	1.4031	1.4163	1.4424
6 500.0	1.3130	1.3430	1.3725	1.4013	1.4295	1.4434	1.4572	1.4843
7 000.0	1.3494	1.3808	1.4115	1.4415	1.4709	1.4854	1.4998	1.5281
7 500.0	1.3873	1.4201	1.4521	1.4835	1.5141	1.5292	1.5442	1.5737

The following formula is used for values not listed in the table:

$$TAS = IAS \times 171233 [(288 \pm VAR) - 0.006496H]^{0.5} \div (288 - 0.006496H)^{2.628}$$

where: VAR = Temperature variation about ISA in °C, H = Altitude in metres.

Table I-2-1-App-2

Altitude (feet)	Conversion factor							
	ISA-30	ISA-20	ISA-10	ISA	ISA+10	ISA+15	ISA+20	ISA+30
0	0.9465	0.9647	0.9825	1.0000	1.0172	1.0257	1.0341	1.0508
1 000.0	0.9601	0.9787	0.9969	1.0148	1.0324	1.0411	1.0497	1.0667
2 000.0	0.9740	0.9930	1.0116	1.0299	1.0479	1.0567	1.0655	1.0829
3 000.0	0.9882	1.0076	1.0266	1.0453	1.0637	1.0728	1.0818	1.0995
4 000.0	1.0027	1.0225	1.0420	1.0611	1.0799	1.0892	1.0984	1.1165
5 000.0	1.0175	1.0378	1.0577	1.0773	1.0965	1.1059	1.1153	1.1339
6 000.0	1.0327	1.0534	1.0738	1.0938	1.1134	1.1231	1.1327	1.1517
7 000.0	1.0481	1.0694	1.0902	1.1107	1.1307	1.1406	1.1505	1.1699
8 000.0	1.0639	1.0857	1.1070	1.1279	1.1485	1.1586	1.1686	1.1885
9 000.0	1.0801	1.1024	1.1242	1.1456	1.1666	1.1770	1.1872	1.2075

Altitude (feet)	Conversion factor							
	ISA-30	ISA-20	ISA-10	ISA	ISA+10	ISA+15	ISA+20	ISA+30
10 000.0	1.0967	1.1194	1.1418	1.1637	1.1852	1.1958	1.2063	1.2270
11 000.0	1.1136	1.1369	1.1597	1.1822	1.2042	1.2150	1.2258	1.2470
12 000.0	1.1309	1.1547	1.1781	1.2011	1.2236	1.2347	1.2457	1.2674
13 000.0	1.1485	1.1730	1.1970	1.2205	1.2435	1.2549	1.2661	1.2884
14 000.0	1.1666	1.1917	1.2162	1.2403	1.2639	1.2755	1.2871	1.3098
15 000.0	1.1852	1.2108	1.2360	1.2606	1.2848	1.2967	1.3085	1.3318
16 000.0	1.2041	1.2304	1.2562	1.2814	1.3062	1.3184	1.3305	1.3544
17 000.0	1.2235	1.2505	1.2769	1.3028	1.3281	1.3406	1.3530	1.3775
18 000.0	1.2434	1.2710	1.2981	1.3246	1.3506	1.3634	1.3761	1.4011
19 000.0	1.2637	1.2921	1.3198	1.3470	1.3736	1.3868	1.3998	1.4254
20 000.0	1.2846	1.3136	1.3421	1.3700	1.3973	1.4107	1.4240	1.4503
21 000.0	1.3059	1.3357	1.3649	1.3935	1.4215	1.4353	1.4489	1.4759
22 000.0	1.3278	1.3584	1.3883	1.4176	1.4463	1.4605	1.4745	1.5021
23 000.0	1.3502	1.3816	1.4123	1.4424	1.4718	1.4863	1.5007	1.5290
24 000.0	1.3731	1.4054	1.4369	1.4677	1.4980	1.5128	1.5276	1.5566

The following formula is used for values not listed in the table:

$$\text{TAS} = \text{IAS} \times 171233 [(288 \pm \text{VAR}) - 0.00198\text{H}]^{0.5} \div (288 - 0.00198\text{H})^{2.628}$$

where: VAR = Temperature variation about ISA in °C, H = Altitude in feet.