



CIVL 2025 PLENARY – ANNEXE 39 C
PROPOSAL ITALY: CHANGE ALTITUDE VERIFICATION RULE



Aero Club d'Italia

Background

Altitude verification has always been challenging. Now we rely solely on GPS, but it is inaccurate and prone to significant errors. On the other hand, barometric verification presents problems in setting instruments to avoid Flight Levels and, at the same time, to navigate using standard pressure instead of QNH.

To avoid airspaces defined by FL, the MD can set the correct daily QNH altitude using a conversion chart during the task briefing.

Proposal : to change S7A 4.4.5 and S7F 4.3

Section 7A, chapter 4.4.5

Old version

Where infringement of airspace or briefed altitude limits are considered possible it is the responsibility of the pilot to produce tracklog evidence that this did not occur. Airspace violation checks rely on the GNSS altitude as recorded on the flight instrument.

Barometric altitude from tracklogs can be used as evidence in the case of disputes. The barometric altitudes of the track log must be compensated using a reference point method in such a way as to eliminate sensor drift errors.

Local regulations can override this default

New version

Where infringement of airspace or briefed altitude limits are considered possible it is the responsibility of the pilot to produce tracklog evidence that this did not occur. Airspace violation checks rely on the barometric altitude as recorded on the flight instrument, compensated using a reference point method in such a way as to eliminate sensor drift errors.

Section 7F, chapter 4.3

Old version

All altitude evaluation is primarily based on GNSS altitude, as recorded in the flight instrument tracklog. Recorded barometric altitude (the International Standard Atmosphere pressure altitude, QNE), from the primary tracklog or a backup log, and if necessary corrected by the scoring software for the pressure conditions of the task (QNH), may be taken into consideration only in case of problems with GNSS altitude logging.

Category 2 event organisers may choose to use barometric altitude instead of GNSS altitude.

New version

All altitude evaluation is based on QNH barometric altitude.

To avoid Flight Level infringements at the task briefing the MD will set the daily altitude limit using the convert chart here supplied as « Appendix A »

Fabio Loro

Appendix A template



Table de conversion des niveaux de vol (FL) en altitude AMSL en fonction du QNH

Fédération Française de la Vol à Voile
 Note Permanente 4.1.a - 19/01/2011
www.ffvv.org

Variation altitude 1 hPa : 28.00 m
 Conversion 1 pied : 0.3048 m
 Variation altitude 1 hPa : 8.5344 m
 Pression de référence : 1013.25 hPa

| AMSL(m) | FL | | | | | | | | | | | | | | | | | | | | | | | | | | | | AMSL(m) | | | | | | | | |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|------|------|------|------|------|-----------|------|------|
| QNH (hPa) | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 165 | 175 | 190 | 195 | 220 | 230 | 240 | 245 | 280 | QNH (hPa) | | |
| 990 | 668 | 1021 | 1173 | 1326 | 1478 | 1630 | 1783 | 1935 | 2088 | 2240 | 2392 | 2545 | 2697 | 2850 | 3002 | 3154 | 3307 | 3459 | 3612 | 3764 | 3916 | 4069 | 4221 | 4374 | 4526 | 4678 | 4831 | 5136 | 5593 | 5745 | 6507 | 6812 | 6964 | 7117 | 7269 | 8336 | 990 |
| 991 | 877 | 1029 | 1182 | 1334 | 1487 | 1639 | 1791 | 1944 | 2096 | 2249 | 2401 | 2554 | 2706 | 2858 | 3011 | 3163 | 3315 | 3468 | 3620 | 3773 | 3925 | 4077 | 4230 | 4382 | 4535 | 4688 | 4841 | 5146 | 5603 | 5755 | 6517 | 6822 | 6974 | 7127 | 7279 | 8346 | 991 |
| 992 | 885 | 1038 | 1190 | 1343 | 1495 | 1647 | 1800 | 1952 | 2105 | 2257 | 2409 | 2562 | 2714 | 2867 | 3019 | 3171 | 3324 | 3476 | 3629 | 3781 | 3933 | 4086 | 4238 | 4391 | 4543 | 4696 | 4849 | 5154 | 5611 | 5763 | 6525 | 6830 | 6982 | 7135 | 7287 | 8354 | 992 |
| 993 | 894 | 1046 | 1199 | 1351 | 1504 | 1656 | 1808 | 1961 | 2113 | 2266 | 2418 | 2571 | 2723 | 2875 | 3028 | 3180 | 3332 | 3485 | 3637 | 3790 | 3942 | 4094 | 4247 | 4399 | 4552 | 4704 | 4857 | 5162 | 5619 | 5771 | 6533 | 6838 | 6990 | 7142 | 7295 | 8362 | 993 |
| 994 | 903 | 1055 | 1207 | 1360 | 1512 | 1665 | 1817 | 1969 | 2122 | 2274 | 2427 | 2579 | 2731 | 2884 | 3036 | 3189 | 3341 | 3493 | 3646 | 3798 | 3951 | 4103 | 4255 | 4408 | 4560 | 4713 | 4865 | 5170 | 5627 | 5779 | 6541 | 6846 | 6999 | 7151 | 7303 | 8370 | 994 |
| 995 | 911 | 1063 | 1216 | 1368 | 1521 | 1673 | 1825 | 1978 | 2130 | 2283 | 2435 | 2587 | 2740 | 2892 | 3045 | 3197 | 3350 | 3502 | 3654 | 3807 | 3959 | 4111 | 4264 | 4416 | 4569 | 4721 | 4874 | 5179 | 5636 | 5788 | 6550 | 6855 | 7007 | 7159 | 7312 | 8379 | 995 |
| 996 | 920 | 1072 | 1224 | 1377 | 1529 | 1682 | 1834 | 1987 | 2139 | 2291 | 2444 | 2596 | 2749 | 2901 | 3054 | 3206 | 3358 | 3510 | 3663 | 3815 | 3967 | 4120 | 4272 | 4425 | 4577 | 4730 | 4882 | 5187 | 5644 | 5796 | 6558 | 6863 | 7015 | 7168 | 7320 | 8387 | 996 |
| 997 | 928 | 1081 | 1233 | 1385 | 1538 | 1690 | 1843 | 1995 | 2147 | 2300 | 2452 | 2605 | 2757 | 2909 | 3062 | 3214 | 3367 | 3519 | 3671 | 3824 | 3976 | 4129 | 4281 | 4434 | 4586 | 4739 | 4891 | 5196 | 5653 | 5805 | 6567 | 6872 | 7024 | 7177 | 7329 | 8396 | 997 |
| 998 | 937 | 1089 | 1241 | 1394 | 1546 | 1699 | 1851 | 2003 | 2156 | 2308 | 2461 | 2613 | 2766 | 2918 | 3071 | 3223 | 3375 | 3528 | 3680 | 3832 | 3985 | 4137 | 4289 | 4442 | 4594 | 4747 | 4900 | 5205 | 5662 | 5814 | 6574 | 6879 | 7031 | 7184 | 7337 | 8404 | 998 |
| 999 | 945 | 1098 | 1250 | 1402 | 1555 | 1707 | 1860 | 2012 | 2164 | 2317 | 2469 | 2622 | 2774 | 2927 | 3079 | 3231 | 3384 | 3536 | 3688 | 3841 | 3993 | 4146 | 4298 | 4451 | 4603 | 4756 | 4909 | 5214 | 5671 | 5823 | 6583 | 6888 | 7040 | 7193 | 7346 | 8413 | 999 |
| 1000 | 954 | 1106 | 1259 | 1411 | 1563 | 1716 | 1868 | 2021 | 2173 | 2325 | 2478 | 2630 | 2783 | 2935 | 3088 | 3240 | 3392 | 3545 | 3697 | 3850 | 4002 | 4154 | 4307 | 4459 | 4611 | 4764 | 4917 | 5222 | 5679 | 5831 | 6591 | 6896 | 7048 | 7201 | 7354 | 8421 | 1000 |
| 1001 | 962 | 1115 | 1267 | 1419 | 1572 | 1724 | 1877 | 2029 | 2181 | 2334 | 2486 | 2639 | 2791 | 2943 | 3096 | 3248 | 3401 | 3553 | 3705 | 3858 | 4010 | 4163 | 4315 | 4467 | 4620 | 4772 | 4925 | 5230 | 5687 | 5839 | 6600 | 6905 | 7057 | 7210 | 7363 | 8430 | 1001 |
| 1002 | 971 | 1123 | 1276 | 1428 | 1580 | 1733 | 1885 | 2038 | 2190 | 2342 | 2495 | 2647 | 2800 | 2952 | 3104 | 3257 | 3409 | 3562 | 3714 | 3866 | 4019 | 4171 | 4324 | 4476 | 4628 | 4781 | 4933 | 5238 | 5695 | 5847 | 6608 | 6913 | 7065 | 7218 | 7371 | 8438 | 1002 |
| 1003 | 979 | 1132 | 1284 | 1437 | 1589 | 1741 | 1894 | 2046 | 2199 | 2351 | 2503 | 2656 | 2808 | 2961 | 3113 | 3265 | 3418 | 3570 | 3723 | 3875 | 4027 | 4180 | 4332 | 4485 | 4637 | 4790 | 4942 | 5247 | 5704 | 5856 | 6617 | 6922 | 7074 | 7227 | 7380 | 8447 | 1003 |
| 1004 | 988 | 1140 | 1293 | 1445 | 1597 | 1750 | 1902 | 2055 | 2207 | 2359 | 2512 | 2664 | 2817 | 2970 | 3122 | 3274 | 3427 | 3579 | 3732 | 3884 | 4036 | 4188 | 4341 | 4493 | 4646 | 4798 | 4951 | 5256 | 5713 | 5865 | 6626 | 6931 | 7083 | 7236 | 7389 | 8455 | 1004 |
| 1005 | 996 | 1149 | 1301 | 1454 | 1606 | 1758 | 1911 | 2063 | 2216 | 2368 | 2520 | 2673 | 2825 | 2978 | 3130 | 3282 | 3435 | 3587 | 3740 | 3892 | 4044 | 4197 | 4349 | 4502 | 4654 | 4807 | 4959 | 5264 | 5721 | 5873 | 6634 | 6939 | 7091 | 7244 | 7397 | 8464 | 1005 |
| 1006 | 1005 | 1157 | 1310 | 1462 | 1615 | 1767 | 1919 | 2072 | 2224 | 2377 | 2529 | 2681 | 2834 | 2986 | 3139 | 3291 | 3443 | 3596 | 3748 | 3901 | 4053 | 4205 | 4358 | 4510 | 4663 | 4815 | 4968 | 5273 | 5730 | 5882 | 6643 | 6948 | 7100 | 7253 | 7406 | 8473 | 1006 |
| 1007 | 1013 | 1166 | 1318 | 1471 | 1623 | 1775 | 1928 | 2080 | 2233 | 2385 | 2537 | 2689 | 2842 | 2994 | 3147 | 3299 | 3452 | 3604 | 3757 | 3909 | 4061 | 4214 | 4366 | 4519 | 4671 | 4824 | 4976 | 5281 | 5738 | 5890 | 6651 | 6956 | 7108 | 7261 | 7414 | 8481 | 1007 |
| 1008 | 1022 | 1174 | 1327 | 1479 | 1632 | 1784 | 1936 | 2089 | 2241 | 2394 | 2546 | 2698 | 2851 | 3003 | 3156 | 3308 | 3461 | 3613 | 3765 | 3918 | 4070 | 4222 | 4375 | 4527 | 4680 | 4832 | 4985 | 5290 | 5747 | 5899 | 6660 | 6965 | 7117 | 7270 | 7423 | 8490 | 1008 |
| 1009 | 1031 | 1183 | 1335 | 1488 | 1640 | 1793 | 1945 | 2097 | 2250 | 2402 | 2555 | 2707 | 2859 | 3012 | 3164 | 3317 | 3469 | 3621 | 3774 | 3926 | 4079 | 4231 | 4383 | 4536 | 4688 | 4841 | 4993 | 5298 | 5755 | 5907 | 6668 | 6973 | 7125 | 7278 | 7431 | 8498 | 1009 |
| 1010 | 1039 | 1191 | 1344 | 1496 | 1649 | 1801 | 1954 | 2106 | 2258 | 2411 | 2563 | 2715 | 2868 | 3020 | 3173 | 3325 | 3477 | 3630 | 3782 | 3935 | 4087 | 4239 | 4392 | 4544 | 4697 | 4850 | 5002 | 5307 | 5764 | 5916 | 6677 | 6982 | 7134 | 7287 | 7440 | 8507 | 1010 |
| 1011 | 1048 | 1200 | 1352 | 1505 | 1657 | 1810 | 1962 | 2114 | 2267 | 2419 | 2572 | 2724 | 2877 | 3029 | 3181 | 3334 | 3486 | 3638 | 3791 | 3943 | 4096 | 4248 | 4400 | 4553 | 4705 | 5010 | 5467 | 5924 | 6076 | 6837 | 6990 | 7142 | 7295 | 7448 | 8515 | 1011 | |
| 1012 | 1056 | 1209 | 1361 | 1513 | 1666 | 1818 | 1971 | 2123 | 2275 | 2428 | 2580 | 2732 | 2885 | 3037 | 3190 | 3342 | 3495 | 3647 | 3799 | 3952 | 4104 | 4257 | 4409 | 4561 | 4714 | 5019 | 5476 | 5933 | 6085 | 6846 | 6999 | 7151 | 7304 | 7457 | 8524 | 1012 | |
| 1013 | 1065 | 1217 | 1369 | 1522 | 1674 | 1827 | 1979 | 2131 | 2284 | 2436 | 2589 | 2741 | 2894 | 3046 | 3199 | 3351 | 3503 | 3655 | 3808 | 3960 | 4113 | 4265 | 4417 | 4570 | 4722 | 5027 | 5484 | 5941 | 6093 | 6854 | 6999 | 7151 | 7304 | 7457 | 8532 | 1013 | |
| 1014 | 1073 | 1226 | 1378 | 1530 | 1683 | 1835 | 1988 | 2140 | 2293 | 2445 | 2597 | 2750 | 2902 | 3054 | 3207 | 3359 | 3512 | 3664 | 3816 | 3969 | 4121 | 4274 | 4426 | 4578 | 4731 | 5036 | 5493 | 5950 | 6102 | 6863 | 6999 | 7151 | 7304 | 7457 | 8540 | 1014 | |
| 1015 | 1082 | 1234 | 1387 | 1539 | 1691 | 1844 | 1996 | 2149 | 2301 | 2454 | 2606 | 2759 | 2911 | 3063 | 3215 | 3368 | 3520 | 3673 | 3825 | 3977 | 4130 | 4282 | 4435 | 4587 | 4740 | 5045 | 5502 | 5959 | 6111 | 6872 | 6999 | 7151 | 7304 | 7457 | 8547 | 1015 | |
| 1016 | 1090 | 1243 | 1395 | 1547 | 1700 | 1852 | 2005 | 2157 | 2309 | 2462 | 2614 | 2767 | 2919 | 3071 | 3224 | 3376 | 3529 | 3681 | 3833 | 3986 | 4138 | 4291 | 4443 | 4595 | 4748 | 5053 | 5510 | 5967 | 6119 | 6880 | 6999 | 7151 | 7304 | 7457 | 8554 | 1016 | |
| 1017 | 1099 | 1251 | 1404 | 1556 | 1708 | 1861 | 2013 | 2166 | 2318 | 2470 | 2623 | 2775 | 2928 | 3080 | 3232 | 3385 | 3537 | 3690 | 3842 | 3994 | 4147 | 4299 | 4452 | 4604 | 4757 | 5062 | 5519 | 5976 | 6128 | 6889 | 6999 | 7151 | 7304 | 7457 | 8561 | 1017 | |
| 1018 | 1107 | 1260 | 1412 | 1565 | 1717 | 1869 | 2022 | 2174 | 2327 | 2479 | 2631 | 2784 | 2936 | 3089 | 3241 | 3394 | 3546 | 3698 | 3851 | 4003 | 4155 | 4308 | 4460 | 4613 | 4765 | 5070 | 5527 | 5984 | 6136 | 6897 | 6999 | 7151 | 7304 | 7457 | 8568 | 1018 | |
| 1019 | 1116 | 1268 | 1421 | 1573 | 1725 | 1878 | 2030 | 2183 | 2335 | 2487 | 2640 | 2792 | 2945 | 3097 | 3249 | 3402 | 3554 | 3707 | 3859 | 4011 | 4164 | 4316 | 4468 | 4621 | 4773 | 5078 | 5535 | 5992 | 6144 | 6905 | 6999 | 7151 | 7304 | 7457 | 8575 | 1019 | |
| 1020 | 1124 | 1277 | 1429 | 1582 | 1734 | 1886 | 2039 | 2191 | 2344 | 2496 | 2648 | 2801 | 2953 | 3106 | 3258 | 3410 | 3562 | 3715 | 3868 | 4020 | 4172 | 4325 | 4477 | 4630 | 4782 | 5087 | 5544 | 6001 | 6153 | 6914 | 6999 | 7151 | 7304 | 7457 | 8582 | 1020 | |
| 1021 | 1133 | 1285 | 1438 | 1590 | 1743 | 1895 | 2047 | 2200 | 2352 | 2505 | 2657 | 2810 | 2962 | 3114 | 3267 | 3419 | 3571 | 3724 | 3876 | 4029 | 4181 | 4333 | 4486 | 4638 | 4791 | 5096 | 5553 | 6010 | 6162 | 6923 | 6999 | 7151 | 7304 | 7457 | 8589 | 1021 | |
| 1022 | 1141 | 1294 | 1446 | 1599 | 1751 | 1903 | 2056 | 2208 | 2361 | 2513 | 2665 | 2818 | 2970 | 3123 | 3275 | 3427 | 3580 | 3732 | 3885 | 4037 | 4189 | 4342 | 4494 | 4647 | 4800 | 5105 | 5562 | 6019 | 6171 | 6932 | 6999 | 7151 | 7304 | 7457 | 8596 | 1022 | |
| 1023 | 1150 | 1302 | 1455 | 1607 | 1760 | 1912 | 2064 | 2217 | 2369 | 2522 | 2674 | 2827 | 2979 | 3132 | 3284 | 3437 | 3589 | 3741 | 3894 | 4046 | 4198 | 4351 | 4503 | 4656 | 4808 | 5113 | 5570 | 6027 | 6179 | 6940 | 6999 | 7151 | 7304 | 7457 | 8603 | 1023 | |
| 1024 | 1159 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |