# ENR 1.7 ALTIMETER SETTING PROCEDURES

## 1. INTRODUCTION

The altimeter setting procedures in use generally confirm to those contained in ICAO Doc 8168-OPS/611, Volume I, Part 6 and are given in full bellow. Differences are shown in quotation marks.

Transition altitudes of airports of Bosnia and Herzegovina are depicted on the Instrument Approach Charts.

QNH reports and temperature information for use in determining adequate terrain clearance are provided in MET broadcast and are available on request from the ATC Units.

QNH and QFE values are given in hectopascals (HPA).

## 2. BASIC ALTIMETER SETTING PROCEDURES

### 2.1 GENERAL

A transition altitude is specified as 10000 FT above MSL.

Vertical positioning of aircraft when at or below transition altitude is expressed in terms of altitude, whereas such positioning at or above the transition level is expressed in terms of flight levels. While passing trough the transition layer, vertical positioning is expressed in terms of altitude when descending and in terms of flight levels when ascending.

Flight level zero is located at the atmospheric pressure level of 1013.2 HPA (29.92 in). Consecutive flight levels are separated by pressure interval corresponding to 500 FT (152.4 M) in the standard atmosphere.

***Note:*** *Examples of relationship between flight levels and altimeter indications are given in the following table, the metric equivalents being approximate*:

| FL | Altimeter indication | |
|---|---|---|
| | FT | M |
| 10 | 1000 | 300 |
| 15 | 1500 | 450 |
| 20 | 2000 | 600 |
| 50 | 5000 | 1500 |
| 100 | 10000 | 3050 |
| 150 | 15000 | 4550 |
| 200 | 20000 | 6100 |

### 2.2 TAKE-OF AND CLIMB

A QNH altimeter setting is made available to aircraft as a part of departure information.

Vertical positioning of aircraft during climb is expressed in terms of altitude until reaching the transition altitude above which vertical positioning is expressed in terms of flight levels.

### 2.3 EN-ROUTE

**Vertical separation**

Vertical separation during en-route shall be expressed in terms of flight levels or altitudes when flying below transition altitude.

On VFR flights, at and below the transition altitude, the pilot shall set altimeter to QNH to the vale of controlled aerodrome nearest to the route of flight exceeds the vicinity of the departure aerodrome.

IFR flights, and VFR flights above 3 000 FT (900 M) operating in cruising flight in controlled airspace shall be flown at a cruising level, or, if authorized to employ cruise climb techniques, between two levels or above a level selected from the Table of cruising levels specified in Annex 2, Appendix 3, a).

Except that correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in air traffic control clearance or specified in the AIP.

As specified in the ICAO EUR Regional Supplementary Procedures (Doc 7030/4 – EUR), flights shall be conducted in accordance with Instrument Flight Rules when operated within or above the EUR RVSM airspace.

**Terrain clearance**

For the purpose of adequate terrain altitude clearance local QNH based upon aerodromes Banja Luka, Mostar, Sarajevo and Tuzla are to be used depending on the terminal control area in which the flight is conducted.

A QNH altimeter setting necessary for flight planning or terrain clearance shall be passed by approach control service, on request.

### 2.4 APPROACH AND LANDING

A QNH altimeter setting is made available by competent ATC Unit, not later than passing transition level or together with the clearance to enter controlled airspace.

A QFE altimeter setting are normally not available at controlled aerodromes, except for flights within a CTR, upon request and ATC approval.

Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitudes.

### 2.5 MISSED APPROACH

The relevant portions of 2.1, 2.2 and 2.4 shall be applied in the event of a missed approach.

## 3. DESCRIPTION OF ALTIMETER SETTING REGION

NIL

## 4. PROCEDURES APLICABLE TO OPERATORS (INCLUDING PILOTS)

### 4.1 FLIGHT PLANNING

The levels at which a flight is to be conducted shall be specified in a flight plan:

a. in terms of flight levels if the flight is to be conducted at or above the transition level, and

b. in terms of altitude if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.

***Note 1:*** *Short flights in the vicinity of an aerodrome may often be conducted only at altitudes below the transition altitude.*

***Note 2:*** *Flight levels are specified in a plan by number and not in the terms of feet or metres as is the case with altitudes.*

The flight levels or altitudes selected for flight should:

a. ensure adequate terrain clearance;

b. satisfy air traffic control requirements;

c. be compatible with the table of cruising levels.

## 5. TABLE OF CRUISING LEVELS

| TRACK ** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| From 000 degrees to 179 degrees*** | | | | | | From 180 degrees to 359 degrees*** | | | | | |
| IFR Flights | | | VFR Flights | | | IFR Flights | | | VFR Flights | | |
| Level | | | Level | | | Level | | | Level | | |
| FL | Feet | Metres | FL | Feet | Metres | FL | Feet | Metres | FL | Feet | Metres |
| 010 | 1000 | 300 | | | | 020 | 2000 | 600 | | | |
| 030 | 3000 | 900 | 035 | 3500 | 1050 | 040 | 4000 | 1200 | 045 | 4500 | 1350 |
| 050 | 5000 | 1500 | 055 | 5500 | 1700 | 060 | 6000 | 1850 | 065 | 6500 | 2000 |
| 070 | 7000 | 2150 | 075 | 7500 | 2300 | 080 | 8000 | 2450 | 085 | 8500 | 2600 |
| 090 | 9000 | 2750 | 095 | 9500 | 2900 | 100 | 10000 | 3050 | 105 | 10500 | 3200 |
| 110 | 11000 | 3350 | 115 | 11500 | 3500 | 120 | 12000 | 3650 | 125 | 12500 | 3800 |
| 130 | 13000 | 3950 | 135 | 13500 | 4100 | 140 | 14000 | 4250 | 145 | 14500 | 4400 |
| 150 | 15000 | 4550 | 155 | 15500 | 4700 | 160 | 16000 | 4900 | 165 | 16500 | 5050 |
| 170 | 17000 | 5200 | 175 | 17500 | 5350 | 180 | 18000 | 5500 | 185 | 18500 | 5650 |
| 190 | 19000 | 5800 | 195 | 19500 | 5950 | 200 | 20000 | 6100 | 205 | 20500 | 6250 |
| 210 | 21000 | 6400 | 215 | 21500 | 6550 | 220 | 22000 | 6700 | 225 | 22500 | 6850 |
| 230 | 23000 | 7000 | 235 | 23500 | 7150 | 240 | 24000 | 7300 | 245 | 24500 | 7450 |
| 250 | 25000 | 7600 | 255 | 25500 | 7750 | 260 | 26000 | 7900 | 265 | 26500 | 8100 |
| 270 | 27000 | 8250 | 275 | 27500 | 8400 | 280 | 28000 | 8550 | 285 | 28500 | 8700 |
| 290 | 29000 | 8850 | | | | 300 | 30000 | 9150 | | | |
| 310 | 31000 | 9450 | | | | 320 | 32000 | 9750 | | | |
| 330 | 33000 | 10050 | | | | 340 | 34000 | 10350 | | | |
| 350 | 35000 | 10650 | | | | 360 | 36000 | 10950 | | | |
| 370 | 37000 | 11300 | | | | 380 | 38000 | 11600 | | | |
| 390 | 39000 | 11900 | | | | 400 | 40000 | 12200 | | | |
| 410 | 41000 | 12500 | | | | 430 | 43000 | 13100 | | | |
| 450 | 45000 | 13700 | | | | 470 | 47000 | 14350 | | | |
| 490 | 49000 | 14950 | | | | 510 | 51000 | 15550 | | | |
| etc. | etc. | etc. | | | | etc. | etc. | etc. | | | |

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