ENR 1.7 高度表拨正程序

ENR 1.7 ALTIMETER SETTING PROCEDURES

1. 介绍

中国高度表拨正程序基本与国际民用航空组织 8168 文件第一卷第六部分相一致,详见以下规定。

仪表进近图、仪表进场图和仪表离场图 提供过渡高度或过渡高和过渡高度层。

用以确定足够地形超障高度的机场修正海平面气压(QNH)或机场场面气压(QFE)报告和温度通过气象广播提供,并可向空中交通服务单位申请得到。QNH或QFE值的单位为百帕。

2. 高度表拨正值的规定

2.1 航路飞行

航路飞行的高度表拨正值为 1013.2 百帕。

- 2.2 机场塔台管制区域飞行
- 2.2.1 在规定过渡高度和过渡高度层的机场:

在机场高度表拨正区域内规定的过渡高度及其以下飞行,高度表拨正值为机场修正海平面气压;在过渡高度层及其以上飞行,为1013.2 百帕。

2.2.2 在规定过渡高和过渡高度层的机场:

在机场高度表拨正区域内规定的过渡高及其以下飞行,高度表拨正值为机场场面气压;在过渡高度层及其以上飞行,为 1013.2 百帕。

2.2.3 在没有规定过渡高度或过渡高和过渡 高度层的机场

详见 ENR 1.7 第 3.1.3 款。

1. Briefing

China's altimeter setting procedures in use basically conform to those contained in ICAO Doc 8168, Vol. I, Part 6, with details as follows:

Transition altitudes or transition heights and transition levels are given on the instrument approach charts and STAR/SID charts. QNH or QFE reports and temperature information for use in determining adequate terrain clearance are provided in MET broadcasts and are available on request from the air traffic services. QNH or QFE values are given in hectopascals.

2. Altimeter settings to be used

2.1 En-route flight

The altimeter setting for en-route flight is 1013.2hPa.

- 2.2 Flights within aerodrome tower control areas
- 2.2.1 At aerodromes where transition altitudes and transition levels are established:

QNH shall be used for flights at or below the transition altitude specified in the aerodrome Altimeter Setting Regions; 1013.2hPa shall be used for flights at or above the transition level.

2.2.2 At aerodromes where transition heights and transition levels are established:

QFE shall be used for flights at or below the transition height specified in the Aerodrome Altimeter Setting Regions; 1013.2hPa shall be used for flights at or above the transition level.

2.2.3 At aerodromes where transition altitudes or transition heights and transition levels are not established

Ref. subsection ENR 1.7, item 3.1.3 for details.

2.2.4 高原机场

高原机场的飞行使用 1013.2 百帕。

3. 高度表拨正程序

航空器起飞或降落时, 高度表拨正程 3.1 序按照下列规定进行:

规定过渡高度和过渡高度层的机场

航空器起飞前,应当将机场修正海平面 气压的数值对正航空器上气压高度表的固定 指标; 航空器起飞后, 上升到过渡高度时, 应当将航空器上气压高度表的气压刻度 1013.2 百帕对正固定指标; 当航空器在下降 过程中穿越过渡高度层时, 应当将机场修正 海平面气压的数值对正航空器上气压高度表 的固定指标。

3.1.2 规定过渡高和过渡高度层的机场

航空器起飞前, 应当将机场场面气压的 数值对正航空器上气压高度表的固定指标; 航空器起飞后,上升到过渡高时,应当将航 空器上气压高度表的气压刻度 1013.2 百帕对 正固定指标。

当航空器在下降过程中穿越过渡高度层 时,应当将机场场面气压的数值对正航空器 上气压高度表的固定指标。

3.1.3 没有规定过渡高度或过渡高和过渡高 度层的机场

航空器起飞前,应当将机场场面气压的数 值对正航空器上气压高度表的固定指标; 航 空器起飞后,上升到 600 米高时,应当将航 空器上气压高度表的气压刻度 1013.2 百帕对 正固定指标。在机场塔台管制区域内的下降 过程中,航空器应根据空中交通管制员的指 令开始调表。

3 1 4 高原机场

2.2.4 At aerodromes of high elevation 1013.2hPa shall be used for flight operations.

3. Altimeter setting procedures

3.1 When an aircraft is taking off from or landing at an aerodrome, the following altimeter setting procedures are to be observed:

3.1.1 At aerodromes where transition altitudes and transition levels are established

Before take-off, the aircraft altimeter subscale shall be set to QNH of the aerodrome; after take-off, upon reaching the transition altitude the altimeter subscale shall be set to 1013.2hPa; when an aircraft is passing through a transition level during descent, the altimeter subscale shall be set to QNH of the aerodrome.

At aerodromes where transition heights and transition 3.1.2 levels are established

Before take-off, the aircraft altimeter subscale shall be set to the atmospheric pressure at the aerodrome elevation; after take-off, upon reaching the transition height the altimeter subscale shall be set to 1013.2hPa; when an aircraft is passing through a transition level during descent, the altimeter subscale shall be set to the atmospheric pressure at the aerodrome elevation.

3.1.3 At aerodromes where transition altitudes or transition heights and transition levels are not established

Before take-off, the aircraft altimeter subscale shall be set to the atmospheric pressure at the aerodrome elevation; after take-off when the aircraft has reached a height of 600m, the altimeter subscale shall be set to 1013.2hPa. During the process of descending in the aerodrome tower control area, the aircraft shall start altimeter setting by the instruction of air traffic controller.

At aerodromes of high elevation 3.1.4

航空器起飞前,当航空器上气压高度表 When the aircraft altimeter subscale cannot be set to the

的气压刻度不能调整到机场场面气压的数值 时,应当将气压高度表的气压刻度 1013.2 百 帕对正固定指标(此时所指示的高度为零点 高度)。

航空器降落前,如果航空器上气压高度 表的气压刻度不能调整到机场场面气压的数 值时,应当按照降落机场空中交通管制员通 知的假定零点高度(航空器着陆时所指示的 高度)进行着陆。

3.1.5 为了安全实施高度表拨正,在机场地区划设了高度表拨正区域。要求低于过渡高度飞行的航空器,在进出高度表拨正区域的水平边界时或根据空中交通管制员的指示开始调整高度表,该水平边界详见ENR 1.7第4款。

- - a. 真航线角在 0 度至 179 度范围内,高度由 900 米至 8 100 米以及 8 900 米至 12 500 米,每隔 600 米为一个高度层;高度在 12 500 米(不含)以上,每隔 1 200 米为一个高度层。
 - b. 真航线角在 180 度至 359 度范围内,高度由 600 米至 8 400 米以及 9 200 米至 12 200 米,每隔 600 米为一个高度层;高度在 13 100 米以上,每隔 1 200 米为一个高度层。
 - c. 飞行高度层根据标准大气压条件下假定 海平面计算, 真航线角从航线起点和转 弯点量取。

飞行高度层的具体配备标准见飞行高度 层配备示意图(ENR 1.7-5页)。 atmospheric pressure at the aerodrome elevation, it will then be set to 1013.2hPa before take-off, with the indicated altitude interpreted as zero altitude

When the aircraft altimeter subscale cannot be set to the atmospheric pressure at the aerodrome elevation, landing is to be made with the assumed zero altitude notified by the air traffic controller before landing.

- 3.1.5 For the safe execution of altimeter setting, Aerodrome Altimeter Setting Regions are defined. An aircraft below the transition altitude is required to start its altimeter setting when entering or leaving the lateral boundary of Altimeter Setting Region or by following the instruction of the air traffic controller. For details of lateral boundaries, please refer to subsection ENR 1.7, item 4.
- 3.2 En-route vertical separations are based on flight level allocation. Flight levels are determined by the following criteria:
 - a. For a true track between $0^{\circ} 179^{\circ}$, a flight level at every 600m from 900m up to 8 100m and 8 900m up to 12 500m; a flight level at every 1 200m above 12 500m.
 - b. For a true track between $180^{\circ} 359^{\circ}$, a flight level at every 600m from 600m up to 8 400m and 9 200m up to 12 200m; a flight level at every 1 200m above 13 100m.
 - c. The flight level shall be calculated on the basis of presumed sea level under standard atmospheric pressure conditions. True track shall be measured from the starting or turning point of the air route.

For specific flight level allocation criteria, see diagram of flight levels allocation (page ENR1.7-5).

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4. 高度表拨正区域 Description of altimeter setting regions

详见第三部分一机场 (AD)。

Ref. Part III—aerodrome (AD) for details.

5. 适用于经营人的程序

飞行中将要使用的高度层必须在飞行计 划中说明:

- a. 如果在过渡高度层或者其上飞行,使用 飞行高度层.
- b. 如果在机场附近或在过渡高度之下飞 行,使用高度。

注: 有些机场使用高而不使用高度。

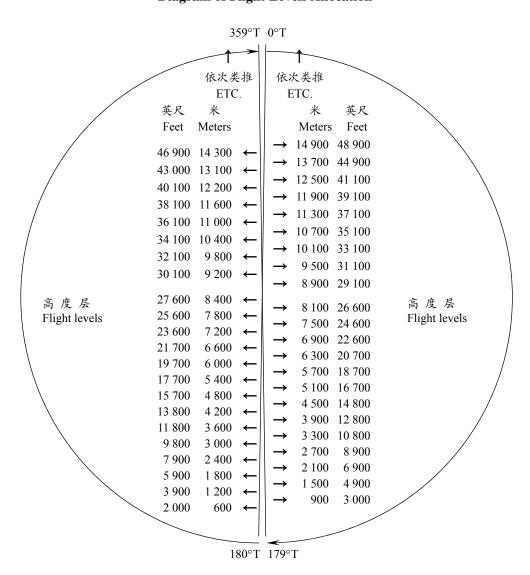
5. Procedures applicable to operators (including pilots)

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

- a. In term of flight levels, if the flight is to be conducted at or above the transition level, and
- b. In terms of altitudes, if the flight is to be conducted in the vicinity of an aerodrome and at or below the transition altitude.

Note: Height is used instead of altitude at some aerodromes.

飞行高度层配备示意图 Diagram of Flight Levels Allocation



注:管制员将发布米制飞行高度层指令。航空器驾驶员应当根据中国民航飞行高度层配备标准示意图(表)来确定对应的英制飞行高度层。航空器应当飞对应的英制飞行高度层。航空器驾驶员应当知晓公英制转换带来的差异,驾驶舱仪表显示的米制高度与管制指令的米制高度不一定完全一致,但存在的差异不会超过30米。

Note: ATC will issue the Flight Level clearance in meters. Pilots shall use the China FLAS Diagram to determine the corresponding flight level in feet. The aircraft shall be flown using the flight level in FEET.

Pilots should be aware that due to the rounding differences, the metric readout of the onboard avionics will not necessarily correspond to the cleared Flight Level in meters however the difference will never be more than 30 meters.

飞行高度层配备标准表 Table of Flight Levels Allocation

180°- 359°T		000°- 179°T	
Flight Levels		Flight Levels	
m	ft	m	ft
ETC.	ETC.	ETC.	ETC.
↑	↑	↑	↑
15500	50900	14900	48900
14300	46900	13700	44900
13100	43000		
		12500	41100
12200	40100	11900	39100
11600	38100	11300	37100
11000	36100	10700	35100
10400	34100	10100	33100
9800	32100	9500	31100
9200	30100	8900	29100
8400	27600	8100	26600
7800	25600	7500	24600
7200	23600	6900	22600
6600	21700	6300	20700
6000	19700	5700	18700
5400	17700	5100	16700
4800	15700	4500	14800
4200	13800	3900	12800
3600	11800	3300	10800
3000	9800	2700	8900
2400	7900	2100	6900
1800	5900	1500	4900
1200	3900	900	3000
600	2000	_	_
m	ft	m	ft