

ENR 1.7 ALTIMETER SETTING PROCEDURES

1 INTRODUCTION

- 1.1 The Altimeter setting procedures in use generally conform to those contained in ICAO Doc 8168, Volume 1 Part 6 and are given in full below.
- 1.2 Transition altitudes are given on the instrument approach charts.
- 1.3 QNH reports and temperature information for use in determining adequate terrain clearance are provided in MET broadcasts, and are available on request from air traffic services units; QNH values are given in hectopascals(hpa).

2 BASIC ALTIMETER SETTING PROCEDURES

2.1 GENERAL

- 2.1.1 The Transition Altitude is fixed at 13 000 FT AMSL and the Transition Level is fixed at FL 150 within Doha FIR.
- 2.1.2 Vertical displacement of aircraft at or below the Transition Altitude is expressed in terms of altitude. Vertical displacement of aircraft at or above the Transition Level is expressed in terms of Flight Levels. While an aircraft is passing through the Transition Layer, vertical displacement is expressed as altitude when descending, and as Flight Levels when climbing.
- 2.1.3 Flight Level Zero is located at the atmospheric pressure level of 1013.2 hPa (29.92"). Consecutive Flight Levels are separated by a pressure interval corresponding to 500 FT in the Standard Atmosphere below FL 290, and by a pressure interval corresponding to 1 000 FT above FL 290.
- 2.1.4 Simultaneous flight at both the Transitional Altitude and the Transition Level is permissible as a minimum of 1 000 FT separation exists between the two layers; however, level flight within the Transition Layers is not permitted.

2.2 TAKE-OFF AND CLIMB

- 2.2.1 A QNH altimeter setting is made available to aircraft in the routine take-off and climb instructions.
- 2.2.2 Vertical displacement of aircraft during climb is controlled by reference to altitudes until reaching the Transition Altitude, above which vertical displacement is controlled by reference to Flight Levels.
- 2.2.3 In this context, the word “**controlled**” is used in composite sense in that a pilot will wish to fly his aircraft at predetermined Flight Levels or altitudes, and ATS will wish to advise the pilot of the availability of Flight Levels and altitudes. Both are concerned with the vertical position of aircraft.

2.3 VERTICAL SEPARATION - EN ROUTE

- 2.3.1 Aircraft shall be flown En-route at Flight Levels at all times when above 13 000 FT AMSL.
- 2.3.2 When complying with the semi-circular system of cruising levels of Annex 2, an aircraft shall be flown at Flight Levels or Flight Altitudes corresponding to the magnetic track as shown in the following table:

Magnetic Track	000° - 179°		180° - 359°	
	IFR	VFR	IFR	VFR
Flight Altitudes		1 500	2 000	2 500
	3 000	3 500	4 000	4 500
	5 000	5 500	6 000	6 500
	Up to 13 000	Up to 11 500	Up to 12 000	Up to 12 500
Flight Levels	150		160	
	170		180	
	190		200	
	Up to 290		Up to 280	
	310		300	
	330		320	
	350		340	
	370		360	
	390		380	
	etc		etc	

2.4 APPROACH AND LANDING

2.4.1 A QNH altimeter setting is made available in the routine approach and landing instructions.

2.4.2 Vertical displacement of aircraft during approach is controlled by reference to Flight Levels until reaching the Transition Level, below which vertical displacement is controlled by reference to altitudes.

Note: This does not preclude a pilot from using a QFE setting for terrain clearance purposes during the final approach to the runway.

2.5 MISSED APPROACH

The relevant portions of 2.1 and 2.2 shall be applied to the case of a missed approach.

3 ALTIMETER PRESSURE SETTING WITHIN QATAR AIRSPACE

3.1 All aircraft operating within DOHA FIR and below FL 150 are required to use **DOHA QNH** during climb and descend phase.

3.2 All VFR traffic operating outside controlled airspace within Qatar airspace, should use **DOHA QNH**.

4 PROCEDURES APPLICABLE TO OPERATORS (INCLUDING PILOTS)

4.1 FLIGHT PLANNING

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

- In terms of Flight Levels if the flight is to be conducted at or above the Transition Level, and
- 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: 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 three digit numbers preceded by letter “F” and not in terms of feet as is the case with altitude.

5 TABLES OF CRUISING LEVELS

The cruising levels to be observed when so required are as follows:

TRACK											
From 000° - 179°						From 180° - 359°					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
FL	Altitude		FL	Altitude		FL	Altitude		FL	Altitude	
	Metres	Feet		Metres	Feet		Metres	Feet		Metres	Feet
-	300	1 000	—	—	—	—	600	2 000	-	-	-
-	900	3 000	035	1 050	3 500	—	1 200	4 000	045	1 350	4 500
-	1 500	5 000	055	1 700	5 500	—	1 850	6 000	065	2 000	6 500
-	2 150	7 000	075	2 300	7 500	—	2 450	8 000	085	2 600	8 500
-	2 750	9 000	095	2 900	9 500	—	3 050	10 000	105	3 200	10 500
-	3 350	11 000	115	3 500	11 500	—	3 650	12 000	125	3 800	12 500
-	3 950	13 000	135	4 100	13 500	—	-	-	-	-	-
150			Doha FIR Class A airspace			160			Doha FIR Class A airspace		
170						180					
190						200					
210						220					
230						240					
250						260					
270						280					

TRACK											
From 000° - 179°						From 180° - 359°					
IFR Flights			VFR Flights			IFR Flights			VFR Flights		
FL	Altitude		FL	Altitude		FL	Altitude		FL	Altitude	
	Metres	Feet		Metres	Feet		Metres	Feet		Metres	Feet
290			Class A airspace RVSM applied see "ENR 1.10" item 1.9		300			Class A airspace RVSM applied See "ENR 1.10" item 1.9			
310											
330											
350											
370											
390											
410											
450			Doha FIR Class A airspace		430			Doha FIR Class A airspace			
490											
etc.											

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