ENR.1 GENERAL RULES AND PROCEDURES
ENR 1.1 GENERAL RULES

1 General

1.1 The Air Traffic Rules and Procedures applicable to Air Traffic in Bangladesh Territory conform with Annexes 2 and 11 to the Convention on International Civil Aviation and with the portions applicable to aircraft, of the Procedures for Air Navigation Services, Rules of the Air and Air Traffic Services, and the Regional Supplementary procedures applicable to the MID/ASIA Region, except in the cases indicated below. All differences have been registered with the International Civil Aviation Organization (ICAO).

Note:- Special flight operations which cannot be conducted in accordance with the provisions of Annex 2 and 11 to the Convention on International Civil Aviation or the Regional Supplementary Procedures MID/ASIA Region, such as air races, air displays, aerobatic flights, or certain aerial work operations require, prior to the commencement of the operation, a certificate of waiver which may be obtained from the Chairman, Civil Aviation Authority.

2 Radio Communication Failure Procedure

2.1 The procedures to be followed by aircraft required to maintain two-way radio communications experiencing radio equipment failure conform to those specified in ICAO Annex-2 Rules of the Air.

2.2 The Procedures to be followed by aircraft experiencing radio communication equipment failure whilst under radar control are specified in ENR 1.6-4

3 Air Traffic Advisory Service (ATAS).

3.1 Introduction

3.1.1 Provision of service.

3.1.2 Air Traffic Advisory Service is provided to aircraft conducting IFR flights within the advisory areas or advisory routes outside controlled airspace.

3.1.3 Advisory service and advisory routes are specified in ENR 3. Along the routes Air Traffic Advisory Service is provided above level 150. Aircraft operating below this level on such routes to be provided flight information services only.

3.2 Procedure Applicable to Aircraft using the ATAS.

3.2.1 IFR flights when operating along advisory routes, are expected to comply with the same procedures as those which apply to controlled flights except that :

(a) the flight plan and changes thereto are not subjected to a clearance since the ATS furnishing Air Traffic Advisory Service, will only provide ADVICE on the presence of essential traffic or SUGGESTIONS as to a possible course of action.

(b) it is the responsibilities of Pilot-in-Command of the aircraft to decide whether he will comply with the advice or suggestion received and to inform the ATS unit providing Air Traffic Advisory Services without delay of his decision.

(c) Air-ground communication shall be made with the Air Traffic Services Unit designated to provide Air Traffic Advisory Service within the advisory airspace or portion thereof.

3.3 PROCEDURE APPLICABLE TO AIRCRAFT CROSSING ADR'S

3.1.1 Aircraft are expected to comply with the following procedures.-

(a) Cross an advisory route as nearly as possible at an angle of 90 degrees to the direction of the route and at a level appropriate to its track, selected from the table of cruising levels (semi-circular system) for IFR flights.

(b) Appropriate ATS Unit shall be informed before and after crossing in ADR.

4. Flight Information Service

Flight Information Service is provided by the Dhaka "Area Control Centre" within Dhaka FIR excluding the portion of the route L507 between AVPOP and ESDOT where the provision of Air Traffic Services from FL280 to FL460 is delegated to Kolkata ACC/FIC.

5 Special Air Traffic Services Procedures for VVIP Flight (AIR TRAFFIC RESTRICTIONS)

5.1 The following procedure shall be enforced at all airports in Bangladesh when VVIP Flights are notified.

5.1.1 AERODROME CONTROL

No aircraft shall be allowed to land or depart from the aerodrome or operate in the circuit for the period:

(a) 5 minutes before ETA of VVIP Flight till `Door Open Time'.

(b) 'Door Close Time' till 5 minutes after take-off.

Note-The Airport authorities may adjust the above timings to ensure that there is no disturbance during the period of ceremonies at the Airport and if required they may close the airfield to other operations.

5.1.2 CONTROLLED AIRSPACE

Standard separation shall be provided in Controlled Airspace. When vertical separation is applied, the vertical separation minimum shall be 2000 feet up to FL280 and FL290 to FL410 for RVSM equipped ACFT and 4000 feet between FL290 and FL410 for non RVSM equipped ACFT and FL410 to UNL for all ACFT.

No VFR operations shall be allowed during the period of VVIP Flight is expected to operate in Controlled Airspace.

5.1.3 OUTSIDE CONTROLLED AIRSPACE (EN-ROUTE)

When the VVIP flight is flying in Bangladesh, no other aircraft shall be cleared to operate in the block of uncontrolled airspace defined below:-

"2000 feet below and above cruising level and 25 nautical miles either side of the intended route of the VVIP flight in uncontrolled airspace".

This restriction will not be applicable when it is known that horizontal separation based on current flight plans will exist between the VVIP flight and other aircraft.

5.1.4 RADAR SEPARATION

Minimum 10NM within coverage of Radar.

6 Reporting the Location of Birds in the Vicinity of Airports

6.1 INTRODUCTION

In order to enable the Pilot to locate the position of birds with reference to the airport, 'Bird Reporting' by aerodrome control tower at civil aerodrome will be done as given in the following paragraph.

6.2 QUADRANTAL REPORTING PROCEDURES

For the purpose of giving report of location of birds observed in the vicinity of aerodromes, the airspace within the aerodrome traffic zone will be divided into 4 sectors (Quadrants):-

Sector	(Quadrant)	Bearing from Control Tower		
NE	(First)	000 deg	to	089 deg.
SE	(Second)	090 deg	to	179 deg.
SW	(Third)	180 deg	to	269 deg.
NW	(Fourth)	270 deg	to	359 deg.

6.3 Report: Caution Birds in South East Sector between 1500 feet and 2000 feet.

7.1 Special Procedure for Dhaka FIR.

ENTRY IN DHAKA FIR.

7.1.1 The following co-ordination procedure shall apply for flights entering and/ or transition Dhaka FIR.

(i) AFPL/ DEP message shall be addressed to Dhaka ACC/FIC.

(ii) Aircraft shall establish radio contact with Dhaka ACC/FIC (with position report and estimates) 10 minutes before entering Dhaka FIR boundary except those flights departing from Indian aerodromes located close to the FIR boundary which shall contact Dhaka ACC/FIC as early as possible but not later than crossing the FIR boundary.

7.2 FLIGHTS THROUGH AIRSPACE DELEGATED TO KOLKATA ACC.

7.2.1 Within the airspace on the route L507 between AVPOP and ESDOT the provision of Air Traffic Services from FL280 to FL460 is delegated to Kolkata ACC/FIC.

7.2.2 (i) No aircraft shall operate through that part of Dhaka FIR which has been delegated to Kolkata ACC/FIC without prior approval from Chairman, Civil Aviation Authority of Bangladesh.

(ii) Flight plans, departure and delay messages pertaining to flights through this airspace shall be addressed to Dhaka ACC/ FIC.

(iii) Prior to entering the aforementioned airspace Aircraft shall contact Dhaka Radio on 3491/6556/10066 KHz (MWARA) and 2947KHz (RDARA) or Dhaka ACC on VHF 125.7 MHz Kolkata and pass the following information:

(a) Aircraft call sign.
(b) Place/ Time of Departure
(c) Destination/ETA
(d) Estimated time over reporting points AVPOP and ESDOT.

Subsequent reports will only be necessary if the estimates differ by 5 minutes or more.

<u>DESCENT OF AIRCRAFT BOUND FOR KOLKATA</u>

7.2.2.1 The following procedure shall apply for flights operating through Dhaka FIR intends to start descent before FIR boundary:
The aircraft shall request Dhaka ACC/FIC for descent. Dhaka ACC/FIC shall provide the aircraft with available traffic information and advise the aircraft to co-ordinate with Kolkata directly for descent.

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1. **General**

The Holding, Approach and Departure procedures in use are based on those contained in the latest edition of ICAO Doc 8168-OPS/611 (PANS-OPS).

2. **Landing Flights (Arriving Flights)**

2.1 IFR Flight entering and landing within a Terminal control Area/Control zone will be cleared to a specified holding point and instructed to contact Tower at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from Tower. If the clearance limit is reached before further instructions have been received, holding procedure shall be carried out at the level last authorized.

2.2 Due to the limited airspace available, it is of importance that the approaches to the pattern and the holding procedures are carried out as exactly a possible. Pilots are strongly requested to inform ATC if for any reason the approach and / or holding cannot be performed as required.

3. **Departing Flights**

3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance through Aerodrome control Tower. The clearance will normally be limited to the controlled airspace.

3.2 Detailed instructions will be issued with regard to routes and turns etc., before take-off.

3.3 IFR flights departing from outside controlled airspace shall file flight plan with the ATC Unit unless filed earlier and shall follow ATC instructions.

4 Air Traffic Services Procedures

4.1 GENERAL

4.1.1 ICAO Standards and Recommended practices contained in ANO (Rules of the Air) A.1; ANO (ATS) A.1 and Rules of the Air and Air Traffic Services Procedures contained in Doc 4444(PANS -ATM) and Regional Supplementary Procedures contained in Doc 7030 for MID Asia Region are applicable. Differences are enumerated in GEN 1.7

4.1.2 The Semi Circular system of Cruising levels is followed in Bangladesh (ENR 1.7-4 and 1.7-5).

4.1.3 Aircraft shall operate along the ATS routes as applicable in accordance with ENR-3 if not otherwise cleared.

4.1.4 The data shown in ENR 1.5 and GEN 3.2.3 charts conform to the following:

a) Bearings - degrees magnetic
b) Distance (longitudinal) - Nautical miles
c) Distance (vertical) - feet related to MSL
d) Rate of turn - Degrees per second
Turns will be made at rate 1(3 degrees per second) unless otherwise specified.

e) Rate of descent - feet per minute
500 FPM (Plus or minus 100 FPM) for standard instrument approach procedures.

4.1.5 Plan & procedure diagrams for holding and approach charts are designed on the basis of the following values.

(a) Tangible values (holding arc)

(1) Maximum TAS of 240 KTS
(2) Minimum TAS of 90 KTS
(3) Still air condition.
(4) Tolerance for ground and airborne equipment as prescribed in Annex 10.

(b) Intangible values.

(1) Pilot proficiency.
(2) Width of ambiguity at heights above beacons.
(3) Effects of Turbulence.
(4) Corrections by pilot for wind effect.

Note: Pilots are expected to know the current holding, approach & departure procedures (although ATC will provide this information on request).

4.2 Holding Procedures

4.2.1 Initial approach tracks and holding patterns associated with Hazrat Shahjalal International Airport, Dhaka; Shah Amanat International Airport, Chittagong Osmani International Airport, Sylhet and other domestic aerodromes are detailed in AD-2 on specific charts prepared for the purpose along with approach procedures.

4.2.2 Holding patterns are race track and the following procedures apply :-

(a) Follow the prescribed track inbound to the holding point.
(b) Execute a 180 deg. turn in the direction specified so as to fly outbound on a track parallel to the inbound track.
(c) Continue outbound for the time specified, and
(d) Execute a 180 deg. turn so as to realign on to the inbound track.

4.2.3 Commencement of timing**.** Outbound timing should start from abeam the fix or on attaining the outbound heading, whichever comes later.

4.2.4 Outbound timing**.** The outbound timing should be one minute up to and including 4250 m(14000 ft) and one and half minutes above 4250m(14000 ft). However, it may be increased provided the protected airspace is adjusted in accordance with the principles contained herein. With DME available the outbound timing may be expressed in terms of distance. Where this is done care should be taken to ensure that at least thirty seconds should be available on the inbound track after completion of the turn to inbound and that slant range is taken into account.

ENR 1.6 RADAR SERVICES AND PROCEDURES

1. General

1.1 Radar Air Traffic Control Service will be provided in accordance with ICAO Doc 4444/PANS--ATM/(Rules of the Air and Air Traffic Service) to determine the position of aircraft with the main purpose of expediting the flow of Air Traffic as well as providing a smoother flight profile to aircraft by employing reduced horizontal separation standards.

2. Principles of Operations

2.1 The radar unit will operate during the notified hours of operation as an integral part of the parent ATS units and will provide radar control service to aircraft subject to volume of traffic, limitations of radar controllers workload, equipment capabilities, communication difficulties, radar coverage and at the discretion of ATC. The radar controller has complete discretion in determining the extent of services to be provided.

2.2 The identification of each aircraft shall be established and maintained wherever radar separation is applied between two or more aircraft.

2.3 When exercising radar control, the radar controller has complete freedom to instruct an aircraft to turn in any direction as dictated by circumstances. A pilot will know when radar services are being provided because the radar controller will use the following call sign(s): -

a) Aircraft within the area of Dhaka ACA – Dhaka Approach
b) Aircraft under Dhaka control – Dhaka Radar (on request)

Radar Range – Primary 80 NM, Secondary – 200 NM.

2.4 A pilot will be advised when radar service is discontinued or whenever radar identification is lost.

2.5 Radar control will be exercised outside controlled airspace only in respect of aircraft which are intending to enter or cross controlled airspace.

2.6 Radar assistance will be provided to aircraft flying outside controlled airspace at the request of the pilot. The extent to which this assistance can be provided will be determined by the radar controller and it should be borne in mind that the sudden appearance of unknown aircraft on the radar display; the inability of the radar controller to predict changes of flight paths of these aircraft may prevent or neutralize avoiding action. This assistance therefore, cannot always guarantee to provide positive separation from unknown aircraft.

2.7 Controlled aircraft should not be vectored into uncontrolled airspace except in case of emergency or in order to circumnavigate severe weather (in which cases the pilot should be so informed) or at the specific request of the pilot.

3. Minimum Radar Separation

3.1 Within the coverage area of primary radar, separation is 5 (five) nautical miles.

3.2 Outside the coverage area of primary radar but within the coverage of SSR, inside Dhaka FIR the separation is 10 (ten) nautical miles.

3.3 Radar separation will not be applied between aircraft holding over the same navigational aid.

4. Transfer of Control Procedures

4.1 Inbound aircraft shall contact Dhaka control on 125.7 MHz/126.7 MHz. When radar services is provided, the aircraft will be asked to change to Dhaka Approach on 121.3 MHz.

4.2 When within the area of Dhaka ACA, inbound aircraft will be hand over to Dhaka Approach on 121.3 MHz.

a) Dhaka Approach will hand over inbound aircraft to Dhaka tower on 118.3 MHz when on final approach or when field-in-sight for visual approach.

b) Departing aircraft will receive aerodrome information, taxi instruction from Dhaka Ground on 121.8MHz, ATC clearance and departure clearance will receive from Dhaka Tower on 118.3 MHz.

c) Dhaka Tower will advise departing aircraft to contact Dhaka Approach on 121.3 MHz immediately after departure. Dhaka Approach will hand over departing aircraft to Dhaka Control on 125.7 MHz/126.7 MHz as appropriate when the aircraft is leaving the TMA.

d) Dhaka Tower will issue departure clearance after coordination with Dhaka Approach.

5. Surveillance Radar Approach

5.1 When considered practicable and operationally necessary surveillance radar approach will be provided and will be terminated at 2 nautical miles from touch down.

ENR 1.7 ALTIMETER SETTING PROCEDURES

1 Introduction

The following procedures for the Altimeter Setting are in force in Bangladesh:

1.1 Transition altitudes and transition level for all aerodromes are given on page Para 2.1.1

1.2 QNH reports and temperature information for use in determining adequate terrain clearance is available on request from air traffic services unit. QNH values are given in hectopascal rounded down to the whole hectopascal.

1.3. QNH value in inches up to second place of decimal may be made available on request.

1.4 QFE value shall be available on request in tenths of hectopascal and hundredth's of inches.

2. Basic procedure

2.1 General

2.1.1 Transition altitude and transition level in all aerodromes in Bangladesh are 4,000 ft (1312.3 meters) and Flight level 60 respectively. No transition Altitude is less than 3,000 ft (900 meters) above an aerodrome.

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

2.1.3 Flight level zero is located at the atmospheric pressure level 1013.2 hPa (29.92 inch) consecutive flight levels are separated by a pressure interval corresponding to 500 feet (152.4 meters) in the Standard Atmosphere.

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

Flight Level	**Altimeter Indication**	
Number	Feet	Meters
5	500	150
10	1000	300
15	1500	450
20	2000	600
25	2500	750
30	3000	900
35	3500	1050
40	4000	1200
45	4500	1350
50	5000	1500
100	10000	3050
150	15000	4550
200	20000	6100
500	50000	15250

2.2 Take – off and climb

2.2.1 A QNH altimeter setting is made available to aircraft in taxi-clearance prior to take off.

2.2.2 Vertical displacement of aircraft during climb is expressed in terms of altitudes until reaching the transition altitude above which vertical displacement is expressed in terms of flight level.

2.3 Vertical Separation-En-route

2.3.1 Aircraft shall be flown En-route at flight levels at all times.

2.3.2 It is the Pilot’s responsibility to select a flight level which will give adequate terrain clearance using forecast pressure information.

2.3.3 Aircraft approaching an airfield below the notified transition level shall set the airfield’s QNH value.

2.3.4 Cruising levels shall be flown at flight levels corresponding to the magnetic tracks shown in the table of paragraph 4 of page ENR 1.7-4 and 1.7-5.

2.4 Approach and Landing

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

2.4.2 A QFE altimeter setting shall be made available on request. ←

2.4.3 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 altitude.

2.5 Missed Approach

The relevant portions of 2.2 & 2.4 shall be applied to the case of a missed approach.

3. Procedures Applicable to Operators Including Pilots.

3.1 Flight Planning.

3.1.1 The level(s) at which a flight is to be conducted shall be specified in flight plan ;

a) In terms of flight level(s) (due consideration may be given to minimum safe altitude for the route sector) 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: Flight levels are not specified in terms of feet or meters as is the case with altitudes, but only specified by number.

4. TABLE OF CRUISING LEVELS

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

a) in areas where, on the basis of regional air navigation agreements and in accordance with conditions specified therein, a vertical separation minimum (VSM) of 300 m (1 000 ft) is applied between FL 290 and FL 410 inclusive:*

TABLE OF SEMI-CIRCULAR CRUISING LEVEL SYSTEM

MAGNETIC TRACK											
From 000° to 179°						From 180° to 359°					
IFR FLIGHT			VFR FLIGHT			IFR FLIGHT			VFR FLIGHT		
FL	ALTITUDE		FL	ALTITUDE		FL	ALTITUDE		FL	ALTITUDE	
	M	FT		M	FT		M	FT		M	FT
10	300	1000	....	.....	.....	20	600	2000	.....	.....	.....
30	900	3000	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60	1850	6000	65	2000	6500
70	2150	7000	75	2300	7500	80	2450	8000	85	2600	8500
90	2750	9000	95	2900	9500	100	3050	10000	105	3200	10500
110	3350	11000	115	3500	11500	120	3650	12000	125	3800	12500
130	3950	13000	135	4100	13500	140	4250	14000	145	4400	14500
150	4550	15000	etc	etc	etc	160	4900	16000	etc	etc	etc
170	5200	17000				180	5500	18000			
190	5800	19000				200	6100	20000			
210	6400	21000				220	6700	22000			
230	7000	23000				240	7300	24000			
250	7600	25000				260	7900	26000			
270	8250	27000				280	8500	28000			
290	8850	29000				300	9150	30000			
310	9450	31000				320	9750	32000			
330	10050	33000				340	10350	34000			
350	10650	35000				360	10950	36000			
370	11300	37000				380	11600	38000			
390	11900	39000				400	12200	40000			
410	12500	41000				430	13100	43000			
450	13700	45000				470	14350	47000			
490	14950	49000				510	15550	51000			
etc	etc	etc				etc	etc	etc			

5.0 **Weather Deviation Procedures in the Dhaka FIR.**

General procedures

7.1 The following procedures are intended to provide guidance. All possible circumstances cannot be covered. The pilot's judgment shall ultimately determine the sequence of actions taken and ATC shall render all possible assistance.

7.2 If the aircraft is required to deviate from track to avoid weather and prior clearance cannot be obtained, an air traffic control clearance shall be obtained at the earliest possible time. In the meantime, the aircraft shall follow the procedures derailed in paragraph 7.9 below.

7.3 The pilot shall advise ATC when weather deviation is no longer required, or when a weather deviation has been completed and the aircraft has returned to the centerline of its cleared route.

7.4 When the pilot initiates communications with ATC, rapid response may be obtained by stating "WEATHER DEVIATION REQUIRED" to indicate that priority is desired on the frequency and for ATC response.

7.5 The pilot still retains the option of initiating the communications using the urgency call "PAN PAN" to alert all listening parties to a special handling condition, which may receive ATC priority for issuance of clearance or assistance.

7.6 When controller-pilot communications are established, the pilot shall notify ATC and request clearance to deviate from track, advising, when possible, the extent of the deviation expected. ATC will take one of the following actions:

(a) if there is no conflicting traffic in the horizontal dimension, ATC will issue clearance to deviate from track; or

(b) if there is conflicting traffic in the horizontal dimension, ATC will separate aircraft by establishing vertical separation or, if unable to establish vertical separation, ATC shall;

i) advise the pilot of inability to issue clearance for requested deviation,

ii) advise pilot of conflicting traffic,

iii) request pilot's intentions.

SAMPLE PHRASEOLOGY:

"Unable (requested deviation), traffic is (call-sign, position, altitude, direction), advise intention."

7.7 The pilot will take the following actions:

(a) Advise ATC of intentions by the most expeditious means available.

(b) Comply with air traffic control clearance issued or....

(c) Execute the procedures detailed in 7.9 below. (ATC will issue essential traffic information to all affected aircraft).

(d) If necessary, establish voice communications with ATC to expedite dialogue on the situation.

Actions to be taken if a revised air traffic control clearance cannot be obtained

7.8 The pilot shall take the actions listed below under the provision that the pilot may deviate from rules of the air (e.g. the requirement to operate on route or track center line unless otherwise directed by ATC), when it is absolutely necessary in the interests of safety to do so.

7.9 If a revised air traffic control clearance cannot be obtained and deviation from track is required to avoid weather, the pilot shall take the following actions:

(a) if possible, deviate away from an organized track or route system;

(b) establish communication with and alert nearby aircraft by broadcasting, at suitable intervals: flight identification, flight level, aircraft position (including the ATS route designator or the track code) and intentions (including the magnitude of the deviation expected)on the frequency in use, as well as on frequency 121.5 MHz (or, as a back-up, the VHF inter-pilot air-to-air frequency 123.45 MHz);

(c) watch for conflicting traffic both visually and by reference to ACAS;

(d) turn on all aircraft exterior lights (commensurate with appropriate operating limitations);

(e) for deviation of up to 10 NM, aircraft should remain at the level assigned by ATC;

(f) for deviations of greater than 10 NM, when the aircraft is approximately 10 NM from track, initiate a level change based on the following criteria:

Route center line track	Deviations>10 NM	Level change
EAST 000-179° magnetic	LEFT	DESCEND 300 ft
	RIGHT	CLIMB 300 ft
WEST 180-359° magnetic	LEFT	CLIMB 300 ft
	RIGHT	DESCEND 300 ft

Note: 7.9 (b) and (c) above calls for the pilot to: broadcast aircraft position and pilot's intentions, identify conflicting traffic and communicate air-to-air with nearby aircraft. If the pilot determines that there is another aircraft at or near the same FL with which his aircraft might conflict, then the pilot is expected to adjust the path of the aircraft, as necessary, to avoid conflict.

(g) if contact was not established prior to deviating, continue to attempt to contact ATC to obtain a clearance. If contact was established, continue to keep ATC advised of intentions and obtain essential traffic information.

(h) when returning to track, be at its assigned flight level, when the aircraft is within approximately 10 NM of center line.

6.0 **Special Procedures to Mitigate Wake Turbulence Encounters and Distracting Aircraft System Alerts in the Oceanic Airspace of the Dhaka FIR.**

8.1 The following special procedures are applicable to mitigate wake turbulence or distracting aircraft system alert (e.g. ACAS, Ground Proximity Warning System (WGPS) in airspace where RVSM is applied:

Note: in the contingency circumstances below, ATC will not issue clearances for lateral offsets and will not normally respond to actions taken by the pilots.

8.2 An aircraft that encounters wake vortex turbulence or experiences distracting aircraft system alerts shall notify ATC and request a flight level, track or speed change to avoid the condition. However, in situations where such a change is not possible or practicable, the pilot may initiate the following temporary lateral offset procedure with the intention of returning to centerline as soon as practicable:

(a) the pilot should establish contact with other aircraft. if possible, on the appropriate VHF inter-pilot air to air frequency, 123.45 MHz; and

(b) one (or both) aircraft may initiate lateral offset(s) up to 2 NM either Left or Right of track, provided that;

i) as soon as practicable to do so, the off setting aircraft notify ATC that temporary lateral offset action has been taken and specify the reason for doing so (ATC will not normally respond); and

ii) the offsetting aircraft notify ATC when re-established on assigned route(s) or track(s) (ATC will not normally respond).

9. **Flight Planning Requirement.**

9.1 Unless special arrangement is made as detailed below, RVSM approval is required for operators and aircraft to operate within designated RVSM airspace. The operator must determine that the appropriate State authority has granted them RVSM operational approval and they will meet the RVSM requirements for the filed route of flight and any planned alternate routes. The letter **"W"** shall be inserted in item 10 (Equipment) of the ICAO standard flight plan to indicate that both the aircraft and operator are RVSM approved.

9.2 Procedures for Operation of Non-RVSM Compliant Civil Aircraft in RVSM airspace.

9.2.1 Non-RVSM compliant civil aircraft shall not file flight plan between FL290 and FL410 inclusive within RVSM airspace, except non-RVSM civil aircraft unable to fly to an appropriate destination at or below FL280 and unable to fly at or above FL410 may, after special coordination as detailed in 9.2.2 below, flight plan at RVSM flight levels in the RVSM stratum provided the aircraft:

(a) is being initially delivered to the state of registry or operator; or

(b) was formerly RVSM approved but has experienced an equipment failure and is being flown

(c) to a maintenance facility for repair in order to meet RVSM requirements and / or obtain approval; or

(d) is transporting a spare engine mounted under the wing; or

(e) is being utilized for mercy or humanitarian purposes; or

(f) is a State aircraft.

9.2.2 Aircraft operators requesting approval as above shall:

(a) if departing within Dhaka FIR, obtain approval from Dhaka Area Control Center normally not more than 12 hrs and not less than 4 hrs prior to the intended departure time. Dhaka Area Control Center will provide notification of approval via Fax or E-mail or AFTN; or

(b) if transiting Dhaka FIR notify Dhaka Area Control Center after approval is received from the first affected center and prior to departure. (Note that filing of flight plan is not appropriate notification), and

(c) include the remarks " APVD non RVSM'' in field 18 of the ICAO flight plan.

9.2.3 Contact details for approval request or notification are as follows:

Dhaka Area Control Center

Telephone : +880-2-8901463
AFTN : VGHSZQZX
E-mail : acc_dhaka@caab.gov.bd
Fax : +880-2- 8901924

9.2.4 Non RVSM aircraft operation in the RVSM stratum will be separated from all other aircraft by a minimum 2,000 ft vertical separation.

9.2.5 This approval processes is intended exclusively for the purposes indicated above, and not as a means to circumvent the normal RVSM approval process.

10. Procedures for Operation of Non-RVSM Compliant State Aircraft in RVSM airspace.

10.1 Operation of State aircraft (military, customs or police service) that are not RVSM compliant may flight plan within Dhaka FIR RVSM airspace in accordance with the requirement of paragraph 9.2.2(b), 9.2.2(c), 9.2.3 and 9.2.4. Also, Bangladesh requires operators of State aircraft that are not RVSM approved intending to operate in Dhaka FIR to notify Dhaka Area Control Center not more than 72 hrs and not less than 4 hrs prior to the intended departure time. If transiting Dhaka FIR, notify Dhaka Area Control Center of intentions prior to departure. (Note that filing of flight plan is not appropriate notification. Notification constitutes approval).

11. Separation applied to non-RVSM compliant aircraft and Provision for continuous Climb/ Descent of non-compliant aircraft through RVSM airspace.

11.1 VERTICAL SEPARATION APPLIED. It should be noted that RVSM approved aircraft will be given priority for level allocation over non-RVSM approved aircraft. The vertical separation minimum between non-RVSM aircraft operating in the RVSM stratum and all other aircraft is 2000 ft.

11.2 CLIMB AND DESCENT THROUGH RVSM AIRSPACE. Non- RVSM compliant aircraft may be cleared to climb to and operate above FL410 or descend to and operate below FL290 provided that they

(a) Do not climb or descent at less than the normal rate for the aircraft and
(b) Do not level off at an intermediate level while passing through the RVSM stratum.

12.0 **Delivery Flights for Aircraft that are RVSM Compliant on Delivery**

12.1 An aircraft that is RVSM compliant on delivery may operate in the RVSM airspace of Dhaka FIR provided that the crew is trained on RVSM policies and procedures applicable in the airspace and the responsible State issues the operator a letter of authorization approving the operation. The State notification to the MAAR should be in the form of a letter, e-mail or fax documenting the one-time flight. The planned date of flight, flight identification and registration number and aircraft type/series should be included. **The details of such flights shall also be forwarded to the Dhaka Area Control Center at least 3 days in advance.**

Address is:

Dhaka Area Control Center

Telephone : +880-2-8901463
AFTN : VGHSZQZX
E-mail : acc_dhaka@caab.gov.bd
Fax : +880-2-8901924

13. **Procedures for Suspension of RVSM**

13.1 Air Traffic Services will consider suspending RVSM procedures within affected areas of the Dhaka FIR when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be 2,000 ft.

14. **Guidance for Pilots and Controllers for Actions in the Event of Aircraft System Malfunction or Turbulence Greater than Moderate.**

14.1 See Attachment A for Guidance in these circumstances.

15. Procedures for Air-Ground Communication Failure.

15.1 An aircraft operated as a controlled flight shall maintain continuous air–ground voice communication watch on the appropriate communication channel of, and establish two-way communication as necessary with the appropriate Air Traffic Control unit. For aircraft forming part of aerodrome traffic at a controlled aerodrome the conditions given in Para 15.2 shall apply.

Note 1: **SELCAL** or similar automatic signaling devices satisfy the requirement to maintain an air-ground voice communication watch.

Note 2: The requirement for an aircraft to maintain air-ground voice communication watch remains in effect after **CPDLC** has been established.

15.2 **Communication failure.**

If a communication failure precludes compliance with para 15.1, the aircraft shall comply with the communication failure procedures of Annex 10, Volume II, and with such of the following procedures as are appropriate. In addition, the aircraft, when forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for such instructions as may be issued by visual signals.

15.2.1 **Action by pilot-in-command.**

15.2.1.1 If in VMC, the aircraft shall:

a) continue to fly in VMC;
b) land at the nearest suitable aerodrome; and
c) report its arrival by the most expeditious means to the appropriate Air Traffic Control unit.

15.2.1.2 If in IMC or when conditions are such that it does not appear feasible to complete the flight in accordance with Para 15.2.1.1 (see Note 1), the aircraft shall:

a) maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;

b) proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination aerodrome and, when required to ensure compliance with c) below, hold over this aid until commencement of descent;

c) commence descend from the navigation aid specified in (b) at, or as close as possible to, the EAT last received and acknowledged, at, or as close as possible to, the EAT resulting from the current flight plan;

d) complete a normal instrument approach procedure as specified for the designated navigation aid; and

e) land, if possible, within thirty minutes after the ETA specified in (c) or the last acknowledged EAT, whichever is later.

Note1: As evidenced by the meteorological conditions prescribed therein, Para 15.2.1.1 relates to all controlled flights, whereas Para 15.2.1.2 relates to IFR flights only.

Note 2: The provision of air traffic control service to other flights operating in the airspace concerned will be based on the premise that an aircraft experiencing communication failure will comply with the rules in Para 15.2.1.2.

15.2.2 **Action by Air Traffic Control Unit**

Note1. See also PANS- ATM Doc 4444 Chapter 6, Para 6.3.2.4 concerning departure clearances containing no geographical or time limit for an initial level and procedures to be applied in relation to an aircraft experiencing air-ground communication failure under such circumstances.

15.2.2.1 Action by Air Traffic Control units when unable to maintain two-way communication with an aircraft operating in a control area or control zone shall be as outlined in the following paragraphs.

15.2.2.2 As soon as it is known that two-way communication has failed, action shall be taken to ascertain whether the aircraft is able to receive transmissions from the Air Traffic Control unit by requesting it to execute a specified maneuver which can be observed by Radar or to transmit, if possible, a specified signal in order to indicate acknowledgement.

15.2.2.3 In the continental Airspace of Dhaka FIR the applicable vertical separation minimum between an aircraft experiencing a communication failure in flight and any other aircraft shall be 600 m (2000ft), unless an appropriate horizontal separation minimum exists. If the aircraft fails to indicate that it is able to receive and acknowledge transmissions, the separation shall be maintained between the aircraft having the communication failure and other aircraft, based on the assumption that the aircraft will:

a) if in VMC: comply with the provisions in para 15.2.1.1

b) if in IMC or when conditions are such that it dose not appear feasible to complete the flight in accordance with (a): comply with the provisions in para 15.2.1.2 above.

Note 1: Since ATC is often unable to determine the extent of any equipment failure for an aircraft experiencing a communication failure in flight, ATC shall provide a vertical separation as mentioned in para 15.2.2.3 above. However, no specific procedures are prescribed for the flights experiencing a communication failure in the oceanic airspace of Dhaka FIR where the communication coverage may not be adequate. In such cases, subject to traffic conditions, and with the subsequent FIR/ACC, the ATC may provide additional separation to such flights experiencing a communication failure in the oceanic airspace.

Note 2: Provisions related to minimum level are contained in Annex 2, para 5.1.1

Note 3: As evidenced by the meteorological conditions prescribed therein, para 15.2.2.2 (a) relates to all controlled flights, whereas para 15.2.2.3 (b) relates to IFR flights only.

15.2.2.4 Action taken to ensure suitable separation based on the assumption stated in para 15.2.2.3 shall cease when:

a) it is determined that the aircraft is following a procedure differing from that in para 15.2.2.3; or

b) through the use of electronic or other aids, Air Traffic Control units determine that action differing from that required by para 15.2.2.3 may be taken without impairing safety; or

c) positive information is received that the aircraft has landed.

15.2.2.5 As soon as it is known that two-way communication has failed, appropriate information describing the action taken by the Air Traffic Control unit, or instruction justified by any emergency situation, shall be transmitted blind for the attention of the aircraft concerned, on the frequencies available on which the aircraft is believed to be listening, including the voice frequencies of available radio navigation or approach aides. Information shall also be given concerning:

a) whether conditions favorable to a cloud-breaking procedure in where congested traffic may be avoided; and

b) weather conditions at suitable aerodromes.

15.2.2.6 Pertinent information shall be given to other aircraft in the vicinity of the presumed position of the aircraft experiencing communication failure.

15.2.2.7 As soon as it is known that an aircraft, which is operating in its area of responsibility, is experiencing an apparent radio communication failure, an ATS unit shall forward information concerning the radio communication failure to all ATS units concerned along the route of flight. The ACC in whose area the destination aerodrome is located shall take steps to obtain information on the Alternate Aerodrome(s) and other relevant information specified in the filed flight plan, if such information is not available.

15.2.2.8 If circumstances indicate that a controlled flight experiencing a communication failure might proceed to (one of) the alternate aerodrome(s) specified in the filed flight plan, the ATC unit(s) serving the Alternate Aerodrome(s) and any other Air Traffic Control units that might be affected by a possible diversion shall be informed of the circumstances of the failure and requested to attempt to establish communication with the aircraft at a time when the aircraft could possible be within communication range. This shall apply particularly when, by agreement with the operator or a designated representative, a clearance has been transmitted blind to the aircraft concerned to proceed to an alternate aerodrome, or when weather conditions at the at the aerodrome of intended landing are such that a diversion to an alternate is considered likely.

15.2.2.9 When an Air Traffic Control unit receives information that an aircraft, after experiencing a communication failure has re-established communication or has landed, that unit shall inform the Air Traffic Service unit in whose area the aircraft was operating at the time the failure occurred, and other Air Traffic Service units concerned along the route of flight, giving necessary information for the continuation of control if the aircraft is continuing in flight.

15.2.2.10 If the aircraft has reported within 30 minutes after:

a) the Estimated Time of Arrival furnished by the pilot;
b) the Estimated Time Arrival calculated by the ACC; or
c) the last acknowledged Expected Approach Time,
d) whichever is latest, pertinent information concerning the aircraft shall be forwarded to aircraft operators, or their designated representatives, and pilots-in-command of any aircraft concerned and normal control resumed if they so desire. It is the responsibility of the aircraft operators, of their designated representatives, and pilots-in-command of aircraft to determine whether they will resume formal operations or take other action.

15.2.2.11 The Radar Procedures

15.2.2.11.1 Aircraft radio transmitter failure

15.2.2.11.1.1 If two-way communication is lost with an aircraft, the Radar controller should determine whether or not the aircraft's receiver is functioning by instructing the aircraft on the frequency so far used to acknowledge by making a specified manoeuvre and by observing the aircraft's track, or by instructing the aircraft to operate IDENT or to make code changes.

Note: Transponder-equipped aircraft experiencing radio-communication failure will operate the transponder on Mode A Code 7600.

ENR 1.11 ADDRESS OF FLIGHT PLAN MESSAGES

1. Flight movement messages relating to traffic into or via Dhaka FIR shall be addressed as stated below in order to warrant correct relay and delivering.

1	2		3
Category of flight IFR/VFR or Both	ROUTE		AFS Message Address
	Enter/Exit Dhaka FIR	Landing/Departing Aerodrome	
Both	Transit FIR		
Both	Enter/Exit	VGHS	VGHSZQZX
Both	Enter/Exit	VGEG	VGEGZTZX VGHSZQZX
Both	Enter/Exit	VGSY	VGSYZTZX VGHSZQZX

INTENTIONALLY LEFT BLANK

ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

1. Interception procedures

The following procedures and visual signals are applicable in the event of interception of an aircraft over the territory and territorial waters of Bangladesh.

(i) Interception of civil aircraft shall be governed by appropriate regulations and administrative directives issued by the Chairman in compliance with the Convention on International Civil Aviation.
(ii) The pilot-in-command of a civil aircraft, when intercepted, shall comply with the instructions as published by the Chairman.

(iii) If a Bangladesh registered aircraft or an aircraft operated by a Bangladeshi operator, while over flying the territory of another contracting state, is intercepted by the authority of that State shall follow the applicable rules of that authority.

1.1 An aircraft which is intercepted by another aircraft shall immediately to:

(a) follow the instructions given by the intercepting aircraft, interpreting and responding to the visual signals listed in ENR 1.12-2, ENR 1.12-3, ENR 1.12-4 and ENR 1.12-5
(b) notify, if possible, the appropriate air traffic services unit;
(c) attempt to establish radio communication with the Intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity and position of the aircraft and the nature of the flight.

2. If radio contact with the intercepting aircraft is established but communication in a common language is not possible, attempts shall be made to convey instructions and acknowledgement of instructions and essential information by using the following phrases and pronunciations, and transmitting each phrase twice:

Phrase	Pronunciation	Meaning
CALL SIGN (call- sign)	KOL SA-IN	MY call-sign is (call-sign)
WILCO	VILL-KO	Understood will comply
CANNOT	KANN NOTT	Unable to comply
REPEAT	REE-PEET	Repeat your instruction
AMLOST	AM-LOSST	Position unknown
MAYDAY	MAYDAY	I am in distress
HIJAK	HI-JAK	I have been hijacked
LAND (place name)	LAAND (place name)	I request to land at (place name)
DESCEND	DEE-SEND	I require descent

(1) In the second column, syllables to be emphasized are underlined.
(2) The call sign required to be given is that used in radio telephony communications with Air Traffic services units and corresponding to the aircraft identification in the flight plan.
(3) Circumstances may not always permit nor make desirable, the use of the phrase “HIJACK”.

Note: The following phrases are expected to be used by the intercepting aircraft in the circumstances described above:-

Phrase	Pronunciation	Meaning
CALL SIGN	KOL SIGN	What is call-sign
FOLLOW	FOL-LO	Follow me
DESCEND	DEE-SEND	Descend for landing
YOU LAND	YOU LAAND	Land at this aerodrome
PROCEED	PRO-SEED	You may proceed

3. If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.
4. If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.
5. The visual signals are detailed in the following table:

Signals initiated by intercepting aircraft and responses by intercepted aircraft.

Series	Intercepting Aircraft Signals	Meaning	Intercepted Aircraft Responds	Meaning
1.	DAY: Rocking wings from a position slightly above and ahead of normally to the left of the intercepted aircraft and after acknowledgement, a slow level turn, normally to the left,(or to the right in the case of a helicopter) on the desired heading. NIGHT: Same, and in addition, flashing navigational lights at irregular intervals. Note:1. Meteorological conditions or terrain may require the intercepting aircraft to take up a position in front and to right of the intercepted aircraft and to make the subsequent turn to the right.	You have been intercepted. Follow me.	AEROPLANES : At Day: Rocking and following. At Night: Same, and in addition, flashing navigational lights at irregular intervals. HELICOPTERS: DAY or NIGHT – Rocking aircraft, flashing navigational lights at irregular intervals and following.	Under-stood, will comply.

ENR 2 AIR TRAFFIC SERVICES AIRSPACE
ENR 2.1 FIR, CTR, ACA, TMA

1. FLIGHT INFORMATION REGION, CONTROL ZONES AND TERMINAL CONTROL AREA

Name Lateral limits Vertical limits Class of Airspace	Unit providing service	Call sign Languages Hours of service	Freq. Purpose	Remarks
1	2	3	4	5
Dhaka Flight Information Region 2100 N 09200 E 2138 N 08910 E then along the national boundary until it meets the Yangon FIR boundary at 2209 N 09237 E 2100 N 09200 E UNL GND/WATER G	Dhaka ACC(Upper): FM FL285 to FL460 and Dhaka ACC(Lower): FM GND to FL285	Dhaka ACC(Upper) &Dhaka ACC(Lower): FM 0200 to 1400. Dhaka Control :1400 to 0200(next day) EN	ACC(upper) :125.7 MHz, ACC(lower) : 126.7MHz and Dhaka Control 125.7 MHz	Except Dhaka CTR, CGP CTR and other Aerodrome control's jurisdiction and ATS Route L507 (responsibility for the provision of air traffic services within the Route L507 between FL280 and FL 460 is delegated to Kolkata ACC/FIC)
Dhaka Control Zone A circle of 25 NM radius centered on Dhaka VOR (234927.42N0902446.52E) except that portion which falls North of the straight line joining points 241147 N 0903711 E 241147 N 0901221 E FL 055 GND/WATER **C**	Dhaka TWR	Dhaka TWR EN H24	118.3 MHz (PRI), 119.3 MHz (SRY)	

Name Lateral Limits Vertical Limits Class of Airspace	Unit Providing Service	Call sign Languages Hours of Service	Freq. Purpose	Remarks
1	2	3	4	5
Chittagong control Zone A circle of 25 NM radius centered on Chittagong VOR (221527.85N 0914938.93 E) FL 145 GND /WATER **C**	Chittagong Tower	Chittagong Tower EN HO	118.4 MHz (PRI) 119.4 MHz (SRY)	
Dhaka Terminal Control Area A circle of 50 NM radius centered on Dhaka VOR excluding the area which falls within Indian territory & North of the straight line joining Points 241147 N 0911340 E 241147 N 0893552 E FL 460 FL 055 **C**	Dhaka ACC (Upper) and Dhaka ACC (Lower)	Dhaka Control EN H24	125.7 MHz and 126.7 MHz	FM 0200-1400 UTC both upper & lower. But FM 1400 to 0200(next day) Dhaka Control freq125.7 MHz
Dhaka Approach Control Area (ACA) To extend jurisdiction of Approach Control Service (Radar/non-radar) an Approach Control Area has been established at and around Hazrat Shahjalal Intl. Airport of Dhaka Terminal Control Area lateral limits being the same. FL 155 SFC/FL 055 C	Dhaka Approach Control office	Dhaka Approach EN 0130 to 1700 except sat. On sat BTN 0130 to 0630	121.3MHz (PRI) 120.3MHz (SRY)	

ENR 3 ATS ROUTES
ENR 3.1 ATS ROUTES (INTERNATIONAL and DOMESTIC)

Route Designator Name of Significant Points Coordinates	Track MAG (GEO) VOR RDL DIST(COP)	Upper Limits Lower Limits MFA Airspace Classification	Lateral Limits (NM)	Direction of Cursing Levels Odd	Even	Remarks Controlling Unit Frequency
1	**2**	**3**	**4**	**5**		**6**
L507						
▲ AVPOP 221809N 0890050E ▲ ESDOT 212045 N 0903250E	124° 304° 103 NM	FL 460 FL 280 ALT 4000 FT Class E (as per AIP India)	RNP10	↓	↑	The route has been delegated to Kolkata ACC/FIC for ATS purpose only. Kolkata ACC 120.575/132.25 MHz
A 201						
▲ VOR AAT 235322.4N0911423E	285°/105° 42 NM	FL460/FL 265 ALT 2000 FT		↓		Airway Minimum cruising Level FL 270 due to military training area (VGR 5) Dhaka ACC 125.7/125.7 MHz
▲ BOGEP (ABM DAC VOR) 240408N 0902450 E	285°/105° 103 NM					
▲ VOR RAJ 242621.18N0883654.10E	295°/115° 35 NM	FL 270	10		↑	
▲ TEBID 244102N 0880150 E		Class B				
A 462 (Dhaka-Kolkata)						
▲ VOR DAC 234935.12N 0902447.58 E	237°/057° 25 NM	FL 460 GND/Water 2000 FT Class C		↓		Airway Dhaka TWR 118.3 MHz within Dhaka CTR Dhaka ACC 126.7/125.7 MHz
▲ AKEVO 233603N 0900250 E	237°/057° 25 NM	FL 460 FL 055 2000 FT Class C				
▲ IKOGU 232239N 0893850 E	237°/057° 30 NM	FL 460 FL075 2000 FT Class B	10			
▲ ABM NDB JR 230603N 0891250 E	237°/057°2 0 NM					
▲ BEMAK 225539N 0885356 E					↑	
A 599 (Chittagong-Chila)						
▲ VOR CTG 221527.85N 0914938.93 E	082°/262° 25 NM	FL460/FL145 3000 FT Class B	10	↓		Airway ATAS: below FL 245 and above FL 150 All aircraft are to make simultaneous board-cast of Lashio Position to Kolkata and Yangon Dhaka ACC 126.7/125.7 MHz
▲ 25 DME	082°/262° 28 NM	FL460/FL245 3000 FT Class B	20			
▲ CHILA 222303N 0924456 E					↑	

Route Designator Name of Significant Points Co-ordinates	Track MAG (GEO) VOR RDL DIST (COP)	Upper Limits Lower Limits MFA Airspace Classification	Lateral Limits (NM)	Direction of Cursing Levels		Remarks Controlling Unit Frequency
				Odd	Even	
1	**2**	**3**	**4**	**5**		**6**
B 465						
▲SUMAG 223539N 088526 E	277°/097° 139 NM	FL 460/FL 115 2000 FT Class B	10	↓		Airway btn FL 460 /FL 115
▲DAKID 221833N 0912250 E	277°/097° 25 NM	FL 460 GND/Water FL 3000 FT Class C / B				Airway btn FL 460/ FL 145
▲VOR CTG 221527.85N0914938.93 E	094°/274° 25 NM					
▲AVDAX 221333N 0921625 E	094°274° 22 NM	FL 460/FL 245 3000 FT Class B	20			Airway btn FL 460/FL 245 ATAS: below FL 245 and above FL 150
▲APAGO 221211N 0924013 E				↑		Dhaka ACC 126.7/125.7 MHz.
B 593						
▲NOKAT 224727N 0885630 E	073°/253° 61 NM	FL 460/FL 075 2000 FT Class B	10	↓		Airway btn FL 460/ FL 075
▲BAVAN 230409N 0895930 E	073°/253° 29 NM	FL 460/FL 075 2000 FT Class C				.
▲AGUNU 231421N 0902614 E	073°/253° 40 NM					
▲VOR CML 232601.6N 0911124.33 E	187°/07° 7 NM					
▲DAC-KOL FIR BDRY 233257N 0911150 E		FL 460/FL 075 2000FT Class F				ATAS: above FL 150 Dhaka ACC 126.7/125.7 MHz
▲DAC-KOL FIR BDRY 235702N 0911350 E	007°/187° 21NM					
▲VOR AAT 235322.4N 0911423.0 E	009°/189° 77 NM					
▲IBAPA 251102N 0912609 E				↑		

ENR 4 RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS EN-ROUTE

Name of station	ID	Frequency	Hours of operation	Coordinates	ELEV Antenna	Remarks
DHAKA, DVOR	DAC	112.7MHz	H24	234927.42N0902446.52E		
DHAKA, DME	DAC	1161MHz	H24	234927.42N0902446.52E		
DHAKA, NDB	DCN	298KHz	H24	235034.32N0902503.67E		
DHAKA, LO	DA	375KHz		235558.39N0901936.52E		
CHITTAGONG, DVOR	CTG	113.4 MHz	H24	221527.85N0914938.93E		
CHITTAGONG, DME	CTG	1168 MHz	H24	221527.85N0914938.93E		
CHITTAGONG,NDB	EG	287 KHz	H24	221504.61N0914904.53E		
SYLHET, DVOR	SYT	116.4 MHz	HO	245747.70N 0915143.23E		
SYLHET, DME	SYT	1198 MHz	HO	245747.70N 0915143.23E		
SYLHET, NDB	SY	372 KHz	HO	245719.74N0915220.64E		
SYLHET, T/DME		1013 MHz	HO	245801.86N 0915112.18E		
BARISAL, NDB	BR	368 KHz	HO	224752.16N0901752.21E		
COX'S BAZAR, NDB	CB	396 KHz	HO	212710.32N 0915756.82E		
COMILLA, DVOR	CML	115.5 MHz	HO	232601.60N0911124.33E		
COMILLA, NDB	CM	330 KHz	HO	232610.31N0911115.81E		
ISHURDI, NDB	IS	350 KHz	HO	240910.25N 0890241.43E		
JESSORE,VOR	JSR	113.0 MHz	HO	231036.98N0890947.23E		
JESSORE, NDB	JR	280 KHz	HO	231030.57N0890942.29E		
RAJSHAHI, DVOR	RAJ	114.6 MHz	H24	242621.18N0883654.10E		
RAJSHAHI, NDB	RJ	228 KHz	H24	242632.87N0883649.35E		
RAJSHAHI, DME	RAJ	1180 MHz	H24	242621.18N0883654.10E		
SAIDPUR,VOR	SDP	115.8 MHz	HO	254516.30N0885435.64E		
SAIDPUR, NDB	SD	268 KHz	HO	254552.27N0885434.83E		

INTENTIONALLY LEFT BLANK

ENR 4.3 NAME CODE DESIGNATOR FOR SIGNIFICANT POINTS

Name code designator	Coordinates	ATS Route or Other Route
ADMIL	23 10 51 N 090 59 26 E	G 463
AGODA	24 19 22 N 088 35 56 E	R472
AGUNO	23 14 21 N 090 26 14 E	B593
AKEVO	23 36 03 N 090 02 50 E	A462
APAGO	22 12 11 N 092 40 13 E	B465
ATOGA	25 16 02 N 090 01 02 E	R472
AVDAX	22 13 33 N 092 16 25 E	B465
AVLED	21 40 03 N 092 20 49 E	G463
AVPOP	22 18 09 N 089 00 50 E	L507
BATEL	24 06 42 N 089 34 56 E	G463
BAVAN	23 04 09 N 089 59 30 E	B593
BELKU	24 20 02 N 089 36 50 E	W3
BEMAK	22 55 39 N 088 53 56 E	A462
BOGEP	24 04 08 N 092 24 50 E	A201
CHILA	22 23 03 N 092 44 56 E	A599
DAKID	22 18 33 N 091 22 50 E	W14
ESDOT	21 20 45 N 090 32 50 E	L507
GURSO	23 24 03 N 090 20 50 E	W9
IBANU	23 24 57 N 089 37 14 E	W2
IBAPA	25 11 02 N 091 26 09 E	B593
IKOGU	23 22 39 N 089 38 50 E	A462
KAKBO	23 00 03 N 090 18 50 E	W9
KANDI	23 30 13 N 090 42 05 E	G463
LATIM	24 05 30.11N 090 45 45.57E	W1
MEXIV	24 02 42 N 090 03 05	W3
MIGOP	25 12 20 N 088 47 08 E	R598
MIMAR	23 37 03 N 090 01 00 E	W2
NIKLI	24 11 45 N 090 53 00 E	W1
NOKAT	22 47 27 N 088 56 30 E	B593
NUPUR	23 06 08 N 090 51 56 E	W14
OLPAS	23 57 32 N 090 00 05 E	G463
ONEKA	22 34 48 N 091 32 14 E	G463
PABAN	21 51 41 N 092 10 24 E	W15
REDAP	24 54 00 N 088 11 15 E	R344
SARAR	25 16 02 N 089 09 23 E	W6
SETAR	23 27 49 N 090 38 23 E	W14
SUMAG	22 35 39 N 088 56 26 E	B465
TANAP	21 56 27 N 092 06 37 E	G463
TEBID	24 41 02 N 088 01 50 E	A201
TEGAK	24 10 40 N 089 50 15 E	W3
UBLIN	21 50 03 N 091 53 49 E	W4
VANTU	26 05 32 N 089 14 40 E	R598
VINAD	25 22 14 N 088 49 20 E	R598
VINET	22 25 28 N 091 24 35 E	W5

INTENTIONALLY LEFT BLANK

ENR 4.4 AERONAUTICAL GROUND LIGHTS-EN-ROUTE

NAMES OF AIRPORT	TYPE	CHARACTERISTICS / CODE	HOURS	CANDELAS	CO-ORDINATES
1	**2**	**3**	**4**	**5**	**6**
DHAKA/ Hazrat Shahjalal International	ABN	Altn G.W. every 5 seconds	HN & VIS<5KM	W 500 G 75	235054 N 0902423 E
CHITTAGONG/ Shah Amanat International	ABN	Altn G.W. every 5 seconds	HN & VIS< 5KM	W 500 G 73	2216 N 09149 E
JESSORE	ABN	Altn G.W. every 5 seconds	HN & VIS< 5KM	---	---

INTENTIONALLY LEFT BLANK

ENR 5 NAVIGATION WARNINGS

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

1. Introduction

All air space in which a potential hazard to aircraft operations may exist and all areas over which the operation of civil aircraft may, for one reason or another, be restricted either temporarily or permanently, are classified according to the following three types of areas as defined by ICAO.

2. Danger Area

2.1 An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times. This term is used only when the potential danger to aircraft has not led to the designation of the airspace as restricted or prohibited. The effect of the creation of the danger area is to caution operators or pilots of aircraft that it is necessary for them to assess the dangers in relation to their responsibility for the safety of their aircraft.

3. Prohibited Area

3.1 An airspace of defined dimensions, above the lands areas or territorial waters of a State within which the flight of aircraft is prohibited. This term is used only when the flight of civil aircraft within the designated airspace is not permitted at any circumstances.

4. Restricted Area

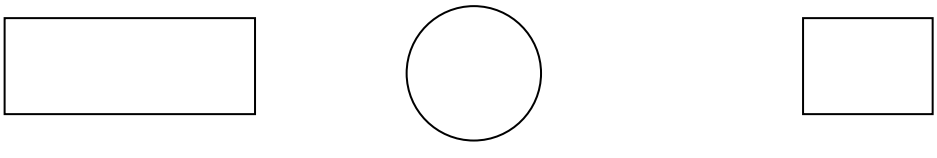
4.1 An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions. This term is used whenever the flight of civil aircraft within the designated airspace is not absolutely prohibited but may be made only of specified times leads to the designation of the airspace a “restricted area’ as would prohibition except in certain meteorological conditions. Similarly, prohibition of flight unless special permission has been obtained, leads to he designation of restricted area. However, conditions of flight imposed as a result of application of rules of the air or air traffic services practices or procedures (for example airspace) do not constitute conditions calling for designation as a restricted area.

→ 5. Each area is numbered and a single series of numbers is used for all areas, regardless of type, to ensure that a number is never duplicated.

6. The types of area involved is indicated by the letter “P” for Prohibited, “R” for Restricted and “D” for Danger preceded by the nationality letters VG. For example areas are assigned numbers and letters in the following manner , VGP1, VGD2, VGD3, VGP4, VGR5, VGD6, ... etc

7. Each area is described in the tabulation found in ENR 5.1-3 to 5.1-10 which indicates its lateral and vertical limits, the type of restriction or hazard involved, the times at which it applies and other pertinent information.

7.1 These areas are also shown on Radio Navigation Charts using the chart symbols shown in the following examples:



VGD1
UNL
GND

VGR5
UNL
FL 260

VGP22
FL 100
GND

The upper and lower limits are shown in the manner indicated

Altitudes are given in feet.

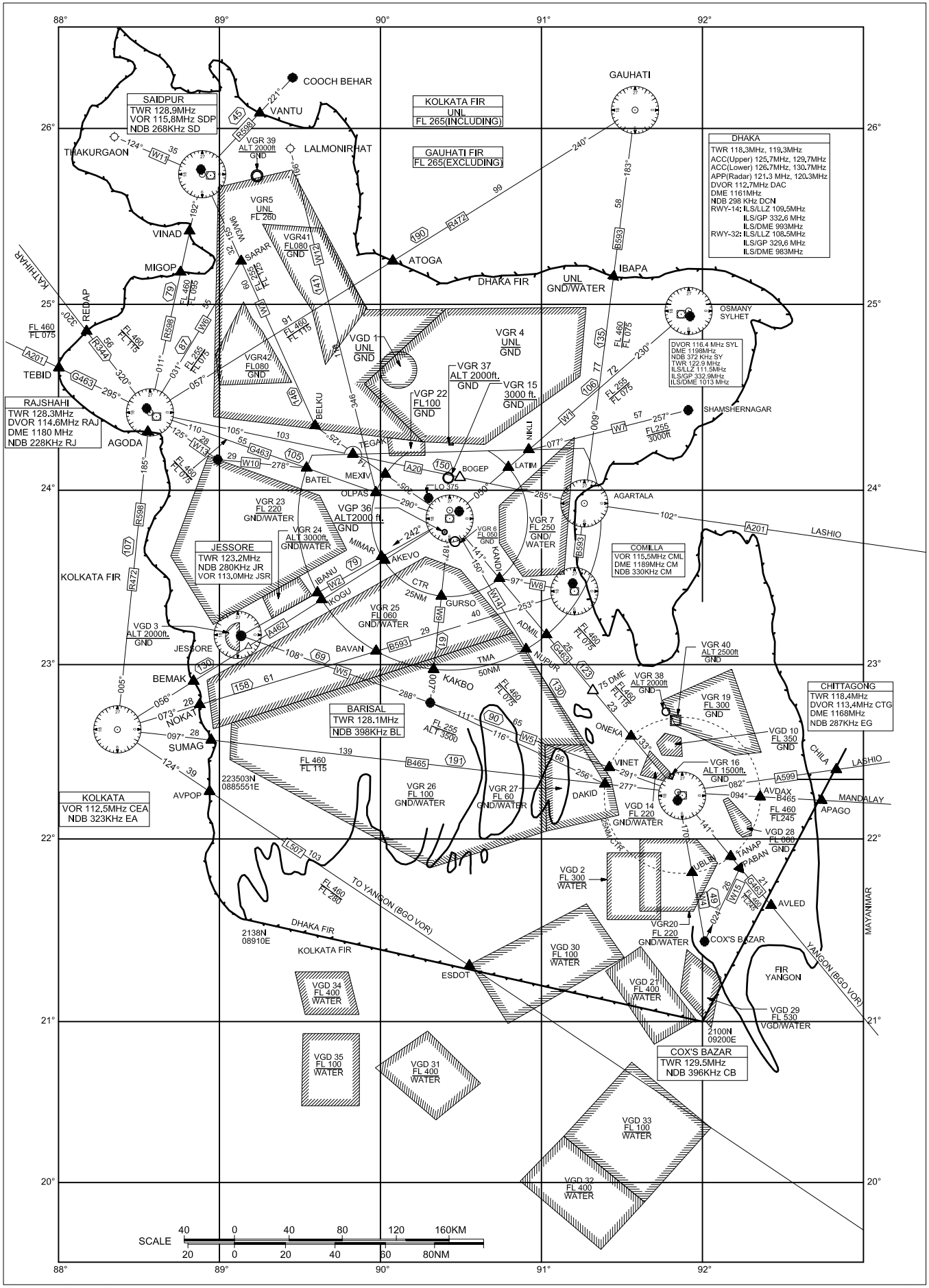
DANGER, RESTRICTED AND PROHIBITED AREAS		
Identification, name and lateral limits	Upper Limit Lower Limit	Remarks (Time of activity, Type of restriction, nature of hazard, risk of interception)
1	2	3
VGD 1 **(Rasulpur)** A Circle of 7NM radius centered on 244002N 0900650 E	UNL GND	Air to ground firing Active : HJ
VGD 2 **(Kutubdia)** Area Bounded by lines joining successively the following points 2155 00 N 0914249 E 2130 03 N 0914249 E 2130 03 N 0912250 E 2155 00 N 0912250 E 2155 00 N 0914249 E	FL 300 WATER	Air to Air Firing Active : Date and period of activity will be notified by NOTAM
VGD 3 **(Monoharpur)** In the western half of Jessore ATZ	2000 FT GND	Practice ground Firing Active : HJ
VGR 4 **(Mymensingh)** Area Bounded by lines joining successively the following points 241302 N 0903850 E 2438 02N 0911149E 250002 N 0911449 E 250002 N 0902150 E 243802 N 0895350 E 241502 N 0901450E 241302 N 0903850 E	UNL GND	Military Jet Flying Active : H 24 ←
VGR 5 **(Bogra)** Area Bounded by lines joining successively the following points 242402 N 0885950 E 254102 N 0885950 E 254702 N 0892450 E 250002 N 0895350 E 250002 N 0902150 E 243802 N 0895350 E 241502 N 0901450 E 242402 N 0885950 E	UNL FL 260	Military Jet Flying Active : H 24 ←

Identification, name and lateral limits	Upper Limit Lower Limit	Remarks (Time of activity, Type of restriction, nature of hazard, risk of interception)
1	2	3
VGR 6 **(Dhaka)** Area Bounded by a circle of 1KM radius centered the following point : 234324 N 0902500 E	FL 050 GND	President's House Active : Permanent
VGR 7 **(Dhaka)** Area Bounded by lines joining successively the following points 241702 N 0911050 E 233103 N 0910550 E 232803 N 0905350 E 234103 N 0904350 E 235502 N 0904350 E 241702 N 0911050 E	FL 250 GND/ WATER	Military Jet Flying Active : HJ
VGD 10 **(Hathazari, Chittagong)** Area Bounded by lines joining successively the following points 223327 N 0914143 E 223657 N 0914404 E 223527 N 0914744 E 223223 N 0914749 E 222923 N 0914819 E 222953 N 0914259 E 223327 N 0914143 E	FL 350 GROUND	Practice Firing Active : H 24

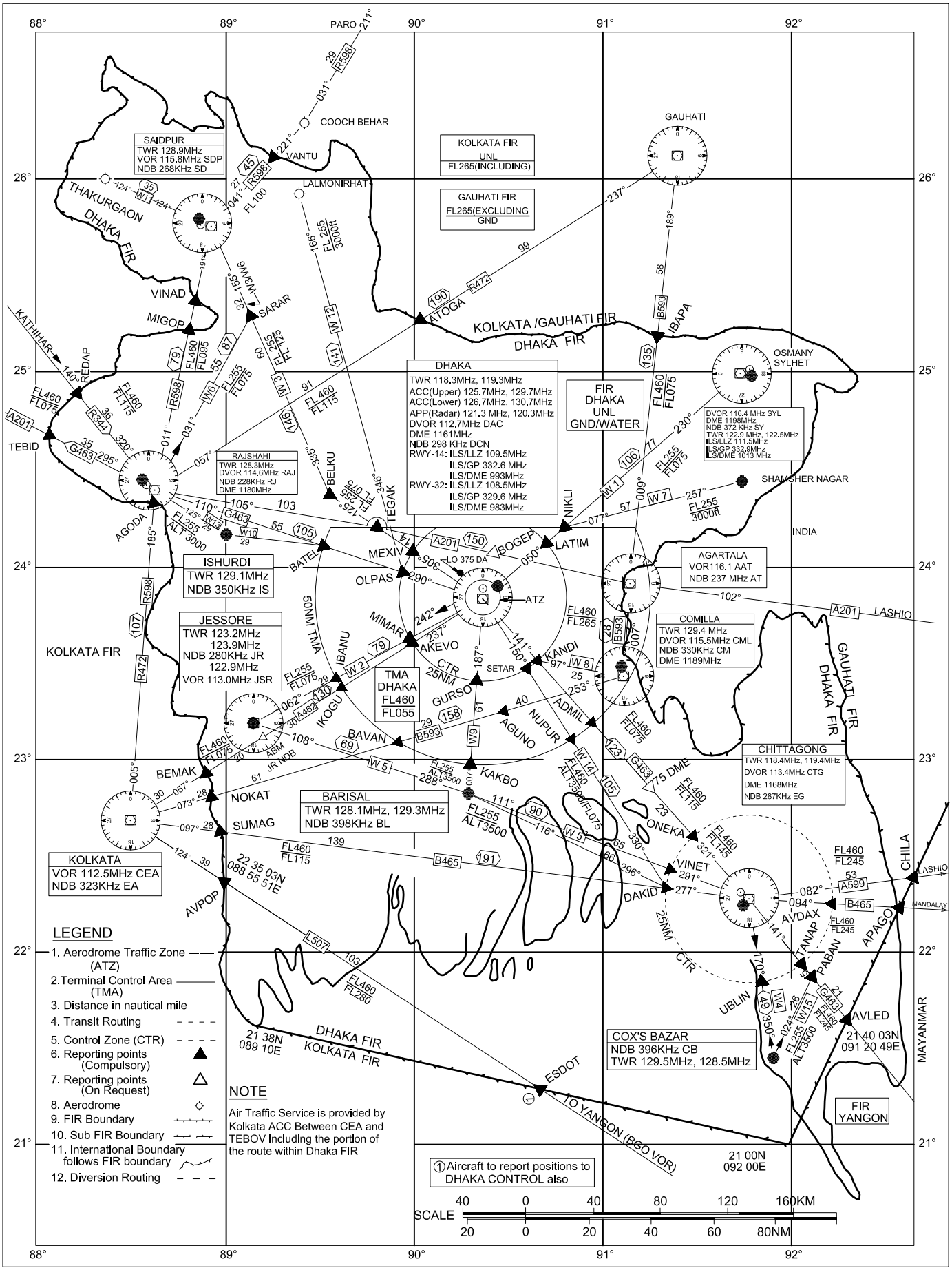
DANGER, RESTRICTED AND PROHIBITED AREAS		
Identification, name and lateral limits	Upper Limit Lower Limit	Remarks (Time of activity, Type of restriction, nature of hazard, risk of interception)
1	2	3
VGD 14 **(CHITTAGONG, Halishahar)** Area Bounded by lines joining successively by the following points: 222333 N 0914532 E 222048 N 0914532 E 222213 N 0913730 E 223103 N 0914019 E 222333 N 0914532 E	FL 220 GND /Water	Ground to Air firing Active: Date and period of activity will be notified by NOTAM 1) During the period of activity all aircraft flying below FL230 shall avoid the area. (a) Aircraft flying via routs G463 below FL 230 on sector DAK-CTG-DAK should follow the ATS route W14 and (b) Aircraft flying via W5 are to follow the diversion route as given below: CTG-Barisal-CTG: CTG VOR Radial-277-DAKID-296/116 MAG NDB "BL" Upper limit-FL255, Lower limit-3500ft (AMSL), Width-10NM (Bi-directional)
VGR 15 **(DHAKA)** Area Bounded by a circle of 1 (one) NM radius centered at a point 240237 N 0902455 E	3000 FT GND	Active : Permanent
VGR 16 **(CHITTAGONG)** A circle of half NM radius centered at a point 222233 N 0914609 E Dist : 7.75 NM Bearing 336 from ARP, Chittagong Airport	1500 FT GND	Cold venting of Gas from Gas Installation Centre Active : Permanent

Identification, name and lateral limits	Upper Limit Lower Limit	Remarks (Time of activity, Type of restriction, nature of hazard, risk of interception)
1	2	3
VGR 19 Area Bounded by lines joining successively the following points : 23 0103N 092 0849E 22 3003N 0921949 E 22 2900N 0921000 E 22 3903N 0914749 E 22 4930N 0914300 E 23 0103N 0920849E	FL 300 GND	Military Training Flying Active : Permanent
VGR 20 Area Bounded by lines joining successively the following points 220000 N 0915600 E 215110 N 0920404 E 213310 N 0915500 E 213310 N 0913500 E 220000 N 0913500 E 220000 N 0915600 E	FL 220 GND / Water	Military Training Flying Active : Permanent 1) The areas will be active during day light hrs only. 2) Flights via ATS Route W-4 shall be allowed when VGR 20 is not active. 3) South bound flights departing from Shah Amanat Int'l Airport, Chittagong shall establish route G463 by 10 DME from CTG.
VGD 21 Area Bounded by lines joining successively the following points : 212503 N 0913450 E 211703 N 0912250 E 205303 N 0913950 E 210103 N 0915349 E 212503 N 0913450 E	FL 400 Water	Firing by Naval Ship Active : Date and period of activity will be notified by NOTAM
VGP 22 (Dhaka) Area Bounded by lines joining successively the following points : 242032 N 0900250 E 242032 N 0901320 E 241032 N 0901320 E 241032 N 0900250 E 242032 N 0900250 E	FL 100 GND	Active : Permanent
VGR 23 (Kushtia) Area Bounded by lines joining successively the following points : 241102 N 0885750 E 235702 N 0894050 E 233902 N 0894850 E 231503 N 0890051 E 233802 N 0884551 E 241102 N 0885750 E	FL 220 GND/Water	Military Jet Flying Active : H 24

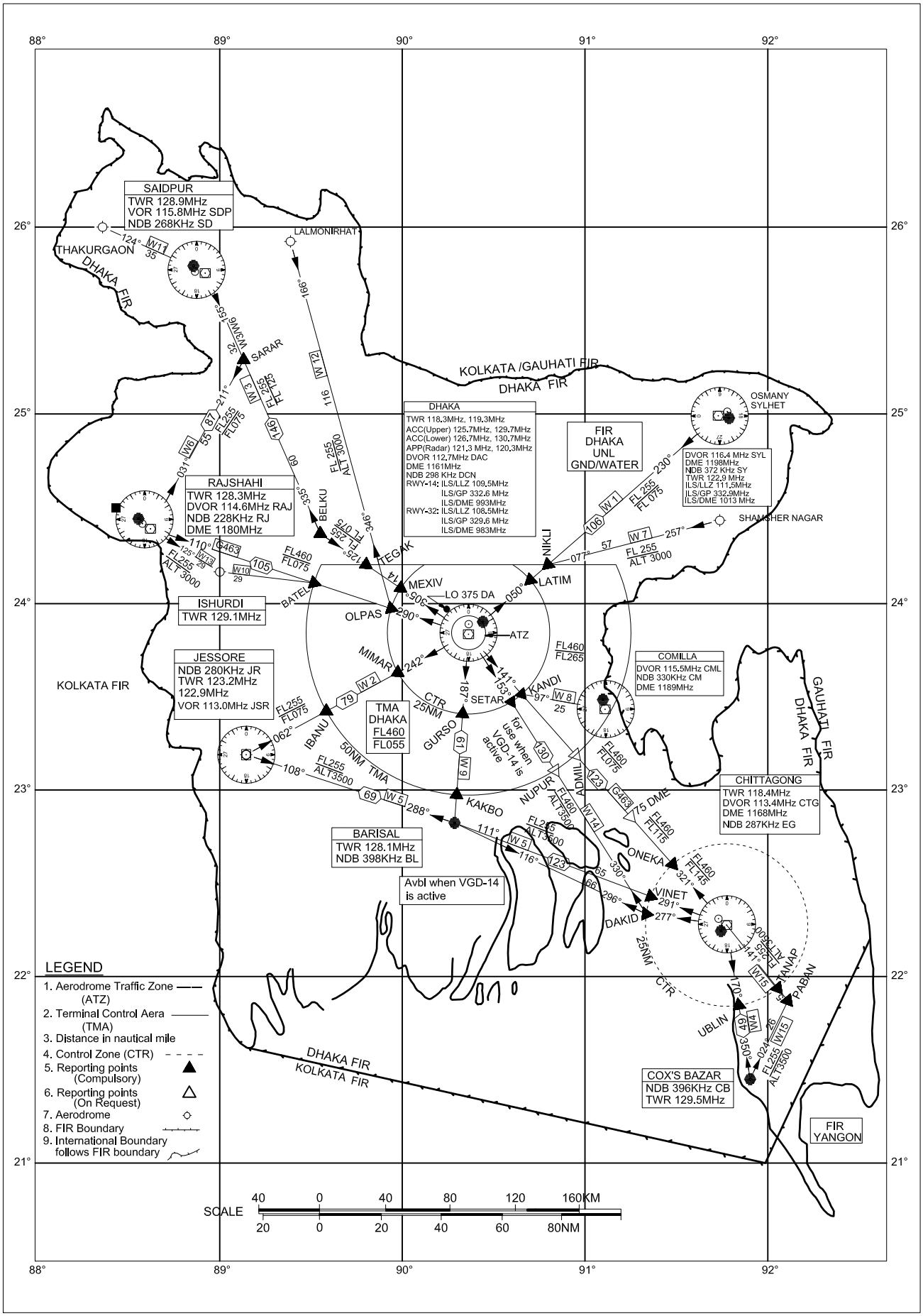
PROHIBITED RESTRICTED AND DANGER AREA - CHART



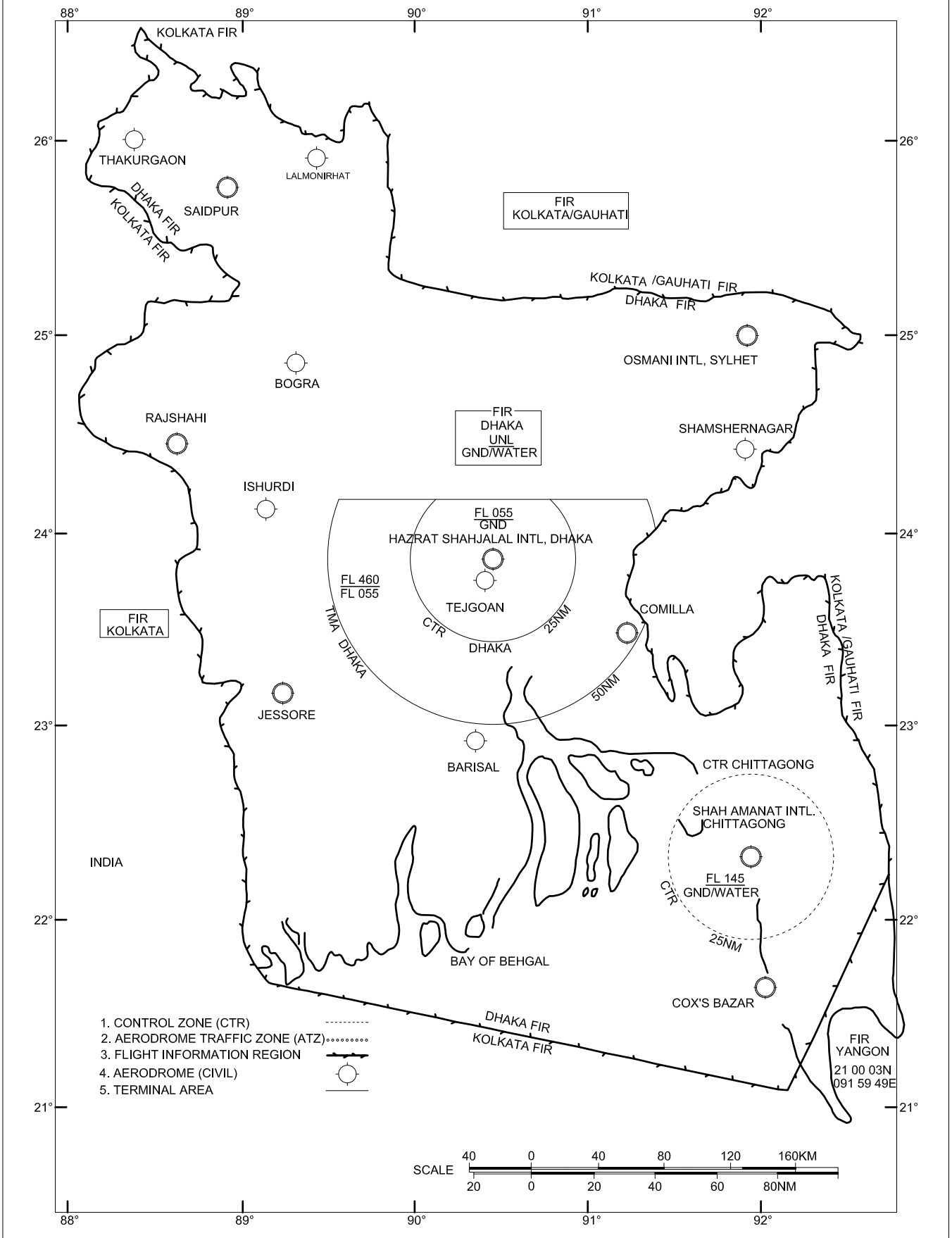
INTERNATIONAL & DOMESTIC ATS ROUTES



DOMESTIC ATS ROUTES IN BANGLADESH



FLIGHT INFORMATION REGION, TMA, CONTROL ZONES AERODROME TRAFFIC ZONES AND AERODROMES



DHAKA TERMINAL AREA