# ATM CONTINGENCY PLAN FOR DHAKA FIR Level 2



# CIVIL AVIATION AUTHORITY OF BANGLADESH Air Traffic Management Division

Third Edition Effective: 15 January 2024

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#### FOREWORD

This is the second edition of the ATM Contingency Plan for the International En-route Flights in Dhaka FIR has been prepared in accordance with the provisions of Annex 11 to the Convention on Civil Aviation, ICAO Doc 9462, ATS Planning Manual, Doc 9673, Asia and Pacific Regions Air Navigation Plan, and the Asia/Pacific Region ATM Contingency Plan. The Plan, and activation of the Plan, is authorized by Chairman of Civil Aviation Authority of Bangladesh.

The Plan provides for the safe continuation of international air traffic through the Dhaka FIR during periods when ATS may be disrupted or unavailable, or when airspace may be affected by volcanic ash cloud, radioactive cloud, severe weather events, earthquake, industrial action, pandemic, nuclear emergency or military activity.

The Plan has been developed in close cooperation and collaboration with airspace users, military authorities and civil aviation authorities responsible for adjacent FIRs.

The Plan will be activated by NOTAM from Dhaka International NOTAM Office (NOF) as far in advance as is practicable. In case NOF Dhaka is unable to issue the NOTAM then Kolkata or Yangon NOFs are to be requested by the designated authority using the most expeditious alternative means available for issuance of NOTAM for activation of the Plan. It is expected that the concerned civil aviation authorities and the airline operators will fully cooperate to implement the Contingency Plan.

Any proposal for amendments to this plan may be forwarded to:

Member (An Traffic Management) CAAB Headquarters, Kurmitola, Dhaka-1229, Bangladesh. Tel: 88-02-41091003 E-mail: <u>matm@caab.gov.bd</u>

Amendment Number	Effective Date	Date Entered	Entered By	Paragraph/Reference
AMDT-1	15.01.2024			Table of Contents Page 3 Page 4 Page 5 Page 6 Page 7 Page 10 Page 11 Page 15 Page 16 Page 26 Appendix-A Appendix-B Appendix-E

## **RECORD OF AMENDMENTS**

## THE DHAKA FIR ATM CONTINGENCY PLAN FOR INTERNATIONAL FLIGHTS TO TRANSIT THROUGH UPPER AIRSPACE

## 1. <u>Objective</u>

- 1.1 The Air Traffic Management (ATM) Contingency Plan for Dhaka ACC details arrangements to ensure the continued safety of air navigation in the event of partial or total disruption of air traffic services in Dhaka FIR in accordance with ICAO Annex 11 *Air Traffic Services*, Chapter 2, paragraph 2.32 (15<sup>th</sup> Edition, July 2018). The Contingency Plan provides the ATS procedures and contingency route structure using existing airways in most cases that will allow aircraft operators to transit through the Dhaka FIR.
- 1.2 This Contingency Plan does not address arrangements for aircraft arriving and departing at airports or for domestic flight operations within the territory of Dhaka FIR.

## 2. <u>States and FIRs affected</u>

2.1 In the event that the Chairman, Civil Aviation Authority of Bangladesh activates this Contingency Plan, the civil aviation authorities of the adjacent FIRs will be notified in accordance with the Letter of Agreement (LOA) established between the States concerned. The adjacent States, FIRs and ACCs directly affected by this Contingency Plan are as follows:

States and FIR(s)	Affected ATS Units
India Kolkata FIR	Kolkata ACC
Myanmar Yangon FIR	Yangon ACC

2.2 The contact details of the Civil Aviation Authorities and ACCs concerned are contained in Appendix-'A'. These details shall be kept up to date and relevant information provided to the CAAB as soon as practicable.

## 3. <u>Management of the Contingency Plan</u>

- 3.1 The contingency measures set out in this plan are applicable in cases of foreseeable events caused by unexpected interruptions in ATS caused by natural occurrences or other circumstances, which, in one way or another, may impair or totally disrupt the provision of ATS and/or of the related support services in the Dhaka FIR.
- 3.2 Following arrangements have been put in place to ensure that the management of the contingency plan provides for international flights to proceed in a safe and orderly fashion through the Dhaka FIR.

## Central Coordinating Committee (CCC)

3.3 As soon as practicable in advance of, or after a contingency event has occurred, the Chairman, Civil Aviation Authority of Bangladesh shall convene the Central Coordinating Committee (CCC) comprised of the following representatives:

(1)	Member (ATM), CAAB HQs	President
(2)	Executive Director, HSIA	Member
(3)	Director (ATM), CAAB HQs	Member- Secretary
(4)	Director (ATS), BAF	Member
(5)	Director (FSR&IA), CAAB	Member
(6)	Director (Air Transportation), CAAB	Member
(7)	Director (CNS), CAAB HQs	Member
(8)	Director, Station Air Traffic Officer, HSIA	Member
(9)	Director (CNS-1), HSIA	Member
(10)	In-charge, Meteorology Office, HSIA	Member
(11)	Nominated Representative, Biman Bangladesh Airlines	Member
(12)	Nominated Representative, U S Bangla Airlines	Member
(13)	Nominated Representative, Novo Air	Member

(14) Any other member which is felt necessary at the time of contingency.

- 3.4 The CCC shall oversee the conduct of the Contingency Plan and in the event that the Dhaka ACC premises are out of service for an extended period, make arrangements for and facilitate the temporary relocation of the responsibility of Air Traffic Service of Dhaka ACC to Kolkata ACC and the restoration of ATS services. The terms of reference of the CCC will be determined by the Chairman, CAAB.
- 3.5 Contact details of the members of the CCC are provided in Appendix-B

## ATM Operational Contingency Group (AOCG)

- 3.6 The ATM Operational Contingency Group (AOCG) will be convened by the CCC with a primary responsibility to oversee the day to day operations under the contingency arrangements, and coordinate operational ATS activities, 24 hours a day, throughout the contingency period. The terms of reference of the AOCG will be determined by the CCC.
- 3.6.1 The AOCG will include following officials:
  - (1) Deputy Director (ATM), CAAB HQs
  - (2) Deputy Director (AIM), CAAB HQs
  - (3) Deputy SATO, HSIA
  - (4) Deputy Director, SCOO, HSIA
  - (5) Deputy Director (CNS) (Communication & NAV Aids), HSIA
  - (6) Deputy Director (CNS) (Radar), HSIA
  - (7) Shift In-charge, Meteorology Office, HSIA

#### 3.6.2 The mission of the AOCG shall include the following:

(a) To review and update of the Contingency Plan as required;

- (b) To keep up to date at all times of the contingency situation;
- (c) To organize contingency teams in each of the specialized areas;
- (d) To keep in contact with, and update the ICAO Asia and Pacific Regional office, affected air operators and the IATA Regional Office and other airspace users;
- (e) To exchange up-to-date information with the adjacent ATS authorities concerned to coordinate contingency activities;
- (f) To notify the designated organizations in Bangladesh of the contingency situation sufficiently in advance and/or as soon as possible thereafter;
- (g) To take necessary actions for issuing NOTAMs according to this plan or as otherwise determined by the particular contingency situation. If the situation is foreseeable sufficiently in advance, the relevant NOTAMs will be issued 48 hours in advance of the contingency events.

(Specimen NOTAMS are provided in Appendix-C).

(h) To maintain a Log Book of all significant events and action.

## 4. <u>Contingency Route Structure</u>

- 4.1 In the event of disruption of the ATC services provided by Dhaka ACC, contingency routes will be introduced to ensure safety of flight and to facilitate limited flight operations commensurate with the prevailing conditions. Existing ATS routes form the basis of the contingency routes to be used, and a Flight Level Assignment Scheme (FLAS) introduced to minimize potential points of conflict and to limit the number of aircraft operating simultaneously in the system under reduced air traffic services.
- 4.2 The contingency route structure for international flights is detailed in Appendix-D. Additional contingency routes will be introduced as and when circumstances require, such as in the case of radioactive cloud or severe weather event.
- 4.3 In regard to domestic operations, if circumstances dictate, all flights to/from Dhaka shall be temporarily suspended until a full assessment of the prevailing conditions has been determined and sufficient air traffic services restored.

A decision to curtail or restart domestic operations will be made by the CCC.

- 4.4 Aircraft on long-haul international flights and special operations (e.g. Search and Rescue, State aircraft, humanitarian flights, etc.), shall be afforded priority for levels at FL290 and above.
- 4.5 For flight planning purposes regional operators should plan on the basis that FL290 and above may not be available.
- 4.6 International operators affected by the suspension of all operations from affected airports in Dhaka FIR will be notified by the relevant airport authority when operations may be resumed, and flight planning information will be made available pertaining to that airport. International flights who have received such approval may be required to flight plan via domestic routes to join international contingency routes.
- 4.7 International operators may elect to avoid the Dhaka FIR and route to the east and west around the Dhaka FIR via the Kolkata FIR.

## 5. <u>Air Traffic Management and Contingency Procedures</u>

Reduced ATS and Provision of Flight Information Services (FIS)

- 5.1 During the contingency period ATS including ATC may not be available, particularly communications and ATS surveillance services. In cases where services are not available, a NOTAM will be issued providing the relevant information, including an expected date and time of resumption of service.
- 5.2 Domestic civil flights and all international flights to and from Bangladesh will be suspended.

#### ATS responsibilities

- 5.3 During the early stages of a contingency event, ATC may be overloaded and tactical action taken to reroute aircraft on alternative routes not included in this Plan.
- 5.4 In the event that ATS cannot be provided in the Dhaka FIR a NOTAM shall be issued indicating the following:
  - (a) time and date of the beginning of the contingency measures;
  - (b) airspace available for landing and overflying traffic and airspace to be avoided;
  - (c) details of the facilities and services available or not available and any limits on ATS provision (e.g., ACC, Approach, Tower and FIS), including an expected date of restoration of services if available;
  - (d) information on the provisions made for alternative services;
  - (e) any changes to the ATS contingency routes contained in this Plan;
  - (f) any special procedures to be followed by neighboring ATS units not covered by this Plan;
  - (g) any special procedures to be followed by pilots; and
  - (h) any other details with respect to the disruption and actions being taken that aircraft operators may find useful.
- 5.5 In the event that Dhaka International NOTAM Office is unable to issue the NOTAM, the International NOTAM Office at Kolkata will take action to issue the NOTAM about the information given by the Chairman, CAAB or its designated authority.

### **Aircraft Separation**

- 5.6 Aircraft separation criteria will be applied in accordance with the *Procedures for Air Navigation* Services-Air Traffic Management (PANS-ATM, Doc 4444) and the Regional Supplementary Procedures (Doc 7030).
- 5.7 The longitudinal separation will be 10 minutes in conjunction with application of the Mach number technique. Differential Mach number technique with faster aircraft behind slower aircraft will not be permitted.
- 5.8 In cases where lateral separation is less than 100 NM, and for crossing routes, a minimum vertical separation of 2000 ft will be applied.
- 5.9 In the event that Dhaka ATC services are terminated, RVSM operations will be suspended and minimum 2000 ft vertical separation will be provided within Dhaka FIR using the RVSM flight levels contained in the table of cruising levels in ICAO Annex 2, Appendix 3.

Details of the flight level assignment on the contingency routes are contained in Appendix-E.

## **Flight level restrictions**

5.10 Where possible, aircraft on long-haul international flights shall be afforded priority for cruising levels.

## **Airspace Classifications**

5.11 Depending on the degree of disruption airspace classifications may be changed to reflect the reduced level of services. Changes to airspace classification will be notified by NOTAM.

## Aircraft position reporting

- 5.12 Pilots will continue to make or broadcast routine position reports in line with normal ATC reporting procedures.
- 5.13 Primary means of communication will be VHF or HF radio. Details of the communication requirements are provided in Appendix-E.

## VFR Operations

5.14 VFR flights shall not operate in the Dhaka FIR if there are extensive disruptions to ATC facilities, except in special cases such as State aircraft, Medevac flights, and any other essential flights authorized by the Civil Aviation Authority, Bangladesh.

## **Procedures for ATS Units**

5.15 The ATS units providing ATC services will follow their unit emergency operating procedures and activate the appropriate level of contingency procedures in line with the operational Letter of Agreement.

These procedures include the following:

- 5.15.1 Dhaka ACC on determining that ATS may be reduced or may be disrupted due to a contingency event will inform pilots about the emergency condition and advise if it is likely that the ACC will be evacuated and ATS suspended. In the event of it becoming necessary to evacuate the ACC building, the unit evacuation procedures will be activated, and time permitting, controllers will make an emergency evacuation transmission on the radio frequency in use providing pilots with alternate means of communication;
- 5.15.2 During the period the contingency procedures are in effect, flight plan messages shall continue to be transmitted by operators to the Dhaka FIC (VGHSZQZX) and to the Kolkata FIC/ACC (VECFZQZX) via the AFTN using normal procedures;

**Note-1:** Depending on the circumstances, the Dhaka NOF may be suspended and alternative AFTN service, e.g. the AFTN of Kolkata ACC, may be introduced. Also, the Kolkata NOF may be used to issue NOTAMs for Dhaka.

- 5.15.3 On notification by the Chairman, CAAB, the ATS authorities of Kolkata and Yangon ACCs will activate the contingency procedures in accordance with their respective operational Letter of Agreement;
- 5.15.4 During the contingency period when ATS including ATC may not be available within Dhaka FIR, NOTAM will be issued providing the relevant information. Kolkata ACC will provide FIS

and alerting service to international civil flights through Dhaka FIR for the period contingency exists.

- 5.15.5 Routes A201and B465 will be available for overflying; route G463 and A599 will not be available.
- 5.15.6 There will be no change in the status of route L507. ATS will continue to be provided by Kolkata ACC as usual.
- 5.15.7 Usable levels along the routes A201 and B465 are shown in Appendix E. Except on route L507, no level change will be effected within Dhaka FIR.
- 5.15.8 SAR action will be taken as mentioned in 9.2.
- 5.15.9 Prior to entry to the Dhaka FIR under the contingency arrangement, authorization shall be obtained from Chairman CAAB by operators to over- fly the Dhaka FIR, and ATC approval shall be obtained from Kolkata and Myanmar as the case may be.
- 5.15.10 The adjacent ACC responsible for aircraft entering for transit through Dhaka FIR shall communicate via ATS coordination circuits, not less than 30 minutes before the estimated time over the reporting point for entry into Dhaka FIR;
- 5.15.11 The ACC responsible for aircraft entering Dhaka FIR will instruct pilots to maintain the last flight level assigned and speed (Mach number if applicable) while overflying the Dhaka FIR;
- 5.15.12 The ACC responsible shall not authorize any change in flight level or speed (Mach number, if applicable) later than 10 minutes before the aircraft enters the Dhaka FIR.
- 5.15.13 The ACC responsible prior to aircraft entering Dhaka FIR will inform aircraft that they shall communicate with the next (downstream) ATC unit 10 minutes before the estimated time of entry into the next FIR; and
- 5.15.14 Operators may also choose to avoid the Dhaka FIR, and the controlling authorities of the FIRs concerned will provide alternate contingency routes as appropriate and these will be published by NOTAM.

## **Transition to Contingency Scheme**

- 5.16 Alternate routes outlined in the Contingency Plan would be promulgated by Bangladesh vide NOTAM or AIP for familiarization and information to operators. During times of uncertainty when airspace closures seem possible, aircraft operators should be prepared for a possible change in routing while en-route.
- 5.17 In the event of airspace closure that has not been promulgated, ATC should, if possible, broadcast to all aircraft in their airspace, what airspace is being closed and to stand by for further instructions.
- 5.18 ATS providers should recognize that when closures of airspace or airports are promulgated, individual airlines might have different company requirements as to their alternative routings. ATC should be alert to respond to any request by aircraft and react commensurate with safety.

## **Transfer of Control and Coordination**

5.19 The transfer of control and communication would be at the points specified in the special LOA/ contingency plan.

5.20 The concerned ATS providers will review the effectiveness of current coordination requirements and procedures in light of contingency operations or short notice of airspace closure, and make any necessary adjustments to the Contingency Plan and LOAs.

## 6. <u>Pilots and Operator Procedures</u>

### 6.1 **<u>Filing of flight plans</u>**

Flight planning requirements for the Dhaka FIR are to be followed in respect to normal flight planning requirements contained in the AIP Bangladesh and as detailed in Appendix-G.

### 6.2 **Over flight approval**

Aircraft operators shall obtain over flight approval from the CAAB, prior to operating flights through the Dhaka FIR. During the period of activation of this Contingency Plan, the designated ATS authority will approve aircraft to enter the Dhaka FIR on the basis that operators have obtained prior approval, and the responsibility remains with the operator to ensure that such approval has been obtained.

### 6.3 <u>Pilot operating procedures</u>

Aircraft over flying the Dhaka FIR shall follow the following procedures:

- 6.3.1 All aircraft proceeding along the ATS routes established in this Contingency Plan will comply with the instrument flight rules (IFR) and will be assigned a flight level in accordance with the flight level allocation scheme applicable to the route(s) being flown as specified in Appendix-E;
- 6.3.2 Flights are to flight plan using the Contingency Routes specified in Appendix-F, according to their airport of origin and destination;
- 6.3.3 Aircraft are to operate as close as possible to the centre line of the assigned contingency route;
- 6.3.4 Pilots are to keep a continuous watch on the specified contingency frequency as specified in Appendix-E and transmit the aircraft's position in line with normal ATC position reporting procedures;
- 6.3.5 Aircraft position reports and other information as necessary shall be broadcast in accordance with the ICAO Traffic Information Broadcasts by Aircraft (TIBA) procedures defined in AIP-Bangladesh.
- 6.3.6 Aircraft navigation and anti-collision lights shall be kept on.
- 6.3.7 Except in cases of emergency or for reasons of flight safety, pilots shall maintain during their entire flight within Dhaka FIR, the last assigned flight level, Mach number and last assigned SSR transponder code. If no transponder code has been assigned, aircraft shall squawk SSR code 2000.
- 6.3.8 Aircraft are to reach the flight level last assigned by the responsible ACC at least 10 minutes before entering the Dhaka FIR or as otherwise instructed by the ATC unit in accordance with the LOA with Dhaka;
- 6.3.9 Pilots are to include in their last position report prior to entering Dhaka FIR, the estimated times over the entry and exit points of Dhaka FIR;

- 6.3.10 Pilots are to contact the next adjacent ACC as soon as possible, and in any event not less than 10 (ten) minutes before the estimated time of arrival over the relevant exit point of Dhaka FIR;
- 6.3.11 Pilots are to strictly adhere to the TIBA reproduced in Appendix F, and maintain a continuous listening watch on the international air to air VHF frequency 123.45 MHz, as well as on the specified VHF and HF frequencies listed in Appendix-E. When necessitated by emergency conditions, pilots are to transmit blind on these frequencies, their current circumstances and the commencement and completion of any climb and descent or deviation from the cleared contingency route and level;
- 6.3.12 Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit through Dhaka FIR, pilots are to climb or descend well to the right of the centerline of the contingency route, and if deviating outside Dhaka FIR, to inform immediately the ACC responsible for that airspace. Pilots are to make blind broadcast on the IFBP (In-flight Broadcast Procedure) VHF frequency 123.45 MHz of the relevant emergency level change message (comprising the aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc);
- 6.3.13 Pilots are to maintain own longitudinal separation of 10 minutes from preceding aircraft at the same cruising level; and
- 6.3.14 Not all operational circumstances can be addressed by this Contingency Plan and pilots are to maintain a high level of alertness when operating in the contingency airspace and take appropriate action to ensure safety of flight.

## **Interception of civil aircraft**

- 6.4 Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off normal traffic flows, could result in an intercept by military aircraft. Aircraft operators shall therefore be familiar with international intercept procedures contained in ICAO Annex 2 –*Rules of the Air*, paragraph 3.8 and Appendix 2, Sections 2 and 3.
- 6.5 Pilots are to comply with instructions given by the pilot of the intercepting aircraft. In such circumstances, the pilot of the aircraft being intercepted shall broadcast information on the situation.
- 6.6 If circumstances lead to the closure of Dhaka FIR and no contingency routes are available, aircraft will be required to route avoiding the Dhaka FIR. As much warning as possible will be provided by the appropriate ATS authorities in the event of the complete closure of Dhaka FIR.
- 6.7 Pilots need to continuously guard the VHF emergency frequency 121.5 MHz and should operate their transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where secondary surveillance radar (SSR) is used for ATS purposes. Transponders should be set on a discrete code assigned by ATC or select code 2000 if ATC has not assigned a code.

## 7. <u>Communication Procedures</u> Degradation of Communication - Pilot Radio Procedures

- 7.1 When operating within the contingency airspace of Dhaka FIR, pilots should use normal radio communication procedures where ATS services are available. These will be in accordance with the communication procedures in this Plan or as otherwise notified by NOTAM.
- 7.2 If communication are lost unexpectedly on the normal ATS frequencies, pilots should try the next applicable frequency, e.g. if en-route contact is lost then try the next appropriate frequency, that is, the next normal handover frequency. Pilots should also consider attempting to contact ATC on the last frequency where two-way communication had been established. In the absence of any communication with ATC, the pilot should continue to make routine position reports on the assigned frequency, and also broadcast positions in accordance with the TIBA procedures.

## **Communication frequencies**

7.3 A list of frequencies to be used for the contingency routes and the ATS units providing FIS and air-ground communication monitoring for the Dhaka FIR is detailed in Appendix-E.

## 8. <u>Aeronautical Support Services</u>

## **Aeronautical Information Services (AIS)**

- 8.1 In case Dhaka NOF is not functioning NOTAM services will be provided by Kolkata or Yangon NOF.
- 8.2 The NOTAMs will establish the actions to be taken in order to reduce the impact of the failures in the air traffic services. The NOTAMs will also establish the necessary coordination and operational procedures that would be established before, during and after any contingency phase.
- 8.2.1 Thus a major disruption of NOTAM services is not anticipated.

## **Meteorological Services (MET)**

- 8.3 The Bangladesh Meteorological Department (BMD) is the designated meteorological authority of Bangladesh. BMD is also the provider of meteorological services for the international and domestic air navigation. In order to comply with the ICAO requirements on aeronautical meteorology specified in Annex 3, Meteorological Service for International Air Navigation and the ASIA/PAC Air Navigation Plan Doc 9673, BMD would ensure regular provision of the following products and services:
  - (a) Aerodrome observations and reports local MET REPORT and SPECIAL, as well as WMO-coded METAR and SPECI; METAR and SPECI would be provided for all international aerodromes listed in the AIP Bangladesh
  - (b) Terminal aerodrome forecast -TAF;
  - (c) SIGMET for the Dhaka FIR Dhaka; SIGMET would be issued by the appropriate meteorological watch offices (MWO)
  - (d) Information for the ATS units (TWR, APP, ACC) as agreed between the BMD and the ATS HQ CAAB;
  - (e) Flight briefing and documentation as per Annex 3, Chapter 9.
- 8.4 It is expected that the Bangladesh MET services would continue to be available in the event of an ATS contingency situation. However, should ATS services for the Dhaka FIR be withdrawn, timely MET information may not be immediately available to pilots in flight. Alternative means of obtaining up to date MET information concerning the Dhaka FIR will be provided to the extent possible through the adjacent ATS authorities through VOLMET Broadcast/making use of communication networks of communication service providers SITA.

### 9. <u>Search and Rescue</u>

9.1 The SAR authority responsible for the Dhaka FIR is the Dhaka Rescue Coordination Centre (Dhaka RCC).

IDD :+88-02-8901462,+88-02-8901463,+88-02-8901464 Fax :+88-02-8901924 AFS : VGHSYCYX,VGHSZQZX Email : rcc\_dhaka@caab.gov.bd

- 9.2 During non-availability of ATS in Dhaka FIR Kolkata RCC will assume responsibility for SAR alerting services for the whole Dhaka FIR.
- 9.3 ACCs involved in this Contingency Plan are required to assist as necessary to ensure that the Search and Rescue (SAR) authorities are provided with the information necessary to support downed aircraft or aircraft with an in-flight emergency in respect to the Dhaka FIR.
- 9.4 Each ACC shall assist as necessary in the dissemination of INCERFA, ALERFA and DETRESFA in respect to incidents in the Dhaka FIR.
- 9.5 The AOCG will also oversee SAR coordination and disseminate relevant contact information.

## 10. <u>Public Health Emergency</u>

10.1 Management of Public Health Emergency on board Aircraft during disruption of air traffic services.

- i) In the event of disruption or potential disruption of air traffic services (ATS) or related supporting services at the Dhaka ACC, if there is any suspected case of communicable disease on board, the Pilot-in-command of the aircraft shall ask for medical assistance for the health and safety of the passengers from the adjacent ACC such as Kolkata or Yangon as no service will be available from Dhaka ACC.
- ii) The Pilot-in-command of the aircraft shall notify the Kolkata or Yangon ACC, as applicable, about the following information:
  - Aircraft Identification
  - Departure Aerodrome
  - Destination Aerodrome
  - Estimated time of Arrival
  - Number of passengers on board
  - Number of suspected case (s) on board; and
  - Nature of the public health risk, if any
- iii) The event shall also be recorded on the Health part of the Aircraft General Declaration.
- 10.2 On receipt of information from the Pilot-in-command on Public Health Emergency on board an aircraft, relevant ATS Unit shall inform the following units/offices:
  - a. Concerned Public Health Authority (PHA),
  - b. Airport Health office,
  - c. Relevant Aircraft Operator,
  - d. ATS unit serving the destination/departure, and
  - e. Any other agency that may be relevant.

(Ref: International Health Regulation (2005), Article 28.4 and ICAO PANS-ATM, Doc 4444, chapter 16.6.)

## **APPENDIX-A**

### **Contact Details of Relevant Organizations:**

SN	Address	Tel NO.	FAX No.	E-Mail / AFTN
1.	Bangladesh			
	Chairman,	+880241091000	+880241091111	chairman@caab.gov.bd
	Civil Aviation			VGHQYAYX
	Authority, Bangladesh			
2.	India	1	1	
	Airports Authority of	+919830028827/	+913325130134	vecc.wso@aai.aero
	India	+919831479366		
	WSO Kolkata ACC			VECCZQZX
	Airports Authority of	+913325119966	+913325112610	gmatmkol@aai.aero
	India			
	GM(ATM), Kolkata			VIDDYDYX
3.	Myanmar			
	Director (ANSD),	+951533215	+951533016	ats@dca.gov.mm,ansd.
	Department of Civil			myanmar@gmail.com
	Aviation Myanmar,			
				VYYFYAYX
	Deputy General	+951533043,	+951533016	
	Manager(ATMD),Dep	+951533268		aungmyintthein.dca@g
	artment of Civil	+951533040		mail.com,vyyy.wso@g
	Aviation, Myanmar			mail.com
				VYYFZRZX
4.	ICAO			
	Regional Director	+61 2 5378189	+61 2 537 8199	icaoapac@bangkok.icao.int
	Asia/Pacific Regional	Ext 37		
	Office			
	252/1 Vibhavadi			
	Rangsit Rd,			
	Chatuchak, Bangkok,			
	10110, Thailand			
	Regional Officer ATM	+61 2 5378189	+61 2 537 8199	icaoapac@bangkok.icao.int
	Asia/Pacific Regional	Ext 152		
	Office			
	252/1 Vibhavadi			
	Rangsit Rd, Chatuchak, Bangkok,			
	10110, Thailand			
5.	IATA	1	1	
5.	IATA Regional Office	+6564384555	+6564384666	mcleank@iata.org
	for Asia/Pacific,	10001001000	10201201000	moreantenationg
	111 Somerset Road,			
	14-05 Singapore-			
	238164			
6.	IFALPA			
	Interpilot House	+441932571711	+441932570920	ifalpa@ifalpa.org
	Gogmore Lane			_
	Chertsey			
	Surrey			
	KT169AP			
	UK			

## APPENDIX-B

## Contact details of Central Coordinating Committee (CCC):

SN	Address	Tel NO.	FAX No.	E-Mail / AFTN
1	Member (ATM), CAAB HQs	+88-02-41091003	-	matm@caab.gov.bd
2	Executive Director HSIA, CAAB	+88-02-8901449	+88-02-8901450	edhsia@caab.gov.bd
3	Director (ATM), HQ, CAAB	+88-02-41091031	+88-02-8901428	datm@caab.gov.bd VGHQYAYS
4	Director (ATS), Bangladesh Air Force	+88-02-55060000	-	dats@baf.mil.bd
5	Director (FSR & IA), HQ, CAAB	+88-02-41091012	-	dfsr@caab.gov.bd VGHQYAYR
6	Director (Air Transportation) CAAB	+88-02-41091016	-	dat@caab.gov.bd
7	Director (CNS), HQ, CAAB	+88-02-41091032	+88-02-8901428	dcnshq@caab.gov.bd VGHQYAYC
8	Director, Station Air Traffic Officer, HSIA	+88-02-8901460	+88-02-8901924	satohsia@caab.gov.bd
9	Director (CNS-1), HSIA	+88-02-8901461	-	dcnsdiv1@caab.gov.bd
10	In-charge, Meteorology Office, HSIA	-	-	-
11	Nominated Representative, Biman Bangladesh Airlines	+88-02-8901298	-	dfobiman@bdbiman.com
12	Nominated Representative, U S Bangla Airlines	-	-	dfo@usbair.com head.safety@usbair.com
13	Nominated Representative, Novo Air	-	-	-
14	Any other member which is felt necessary at the time of Contingency	-	-	-

#### APPENDIX-C

#### Specimen NOTAMs

#### a) Avoidance of airspace:

NOTAM......DUE TO DISRUPTION OF ATS IN DHAKA FIR ALL ACFT ARE ADVISED TO AVOID THE FIR.

#### b) Airspace available with Limited ATS:

NOTAM .....DUE TO ANTICIPATED DISRUPTION OF ATS IN THE DHAKA FIR ALL ACFT ARE ADVISED THAT THERE WILL BE LIMITED ATS. PILOTS MAY EXPERIENCE DLA AND OVERFLIGHTS MAY CONSIDER AVOIDING THE AIRSPACE.

#### c) Contingency plan activated:

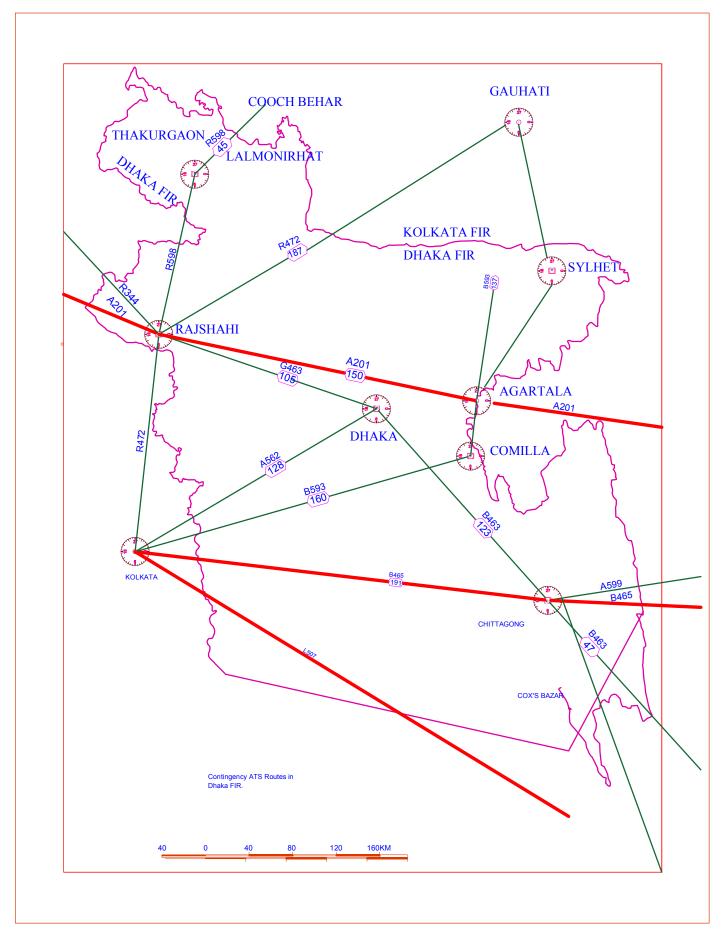
NOTAM ......DUE TO DISRUPTION OF ATS IN DHAKA FIR ALL ACFT ARE ADVISED THAT THE BANGLADESH INTERNATIONAL CONTINGENCY PLAN FOR ACFT INTENDING TO OVERFLY DHAKA FIR IS IN EFFECT. FLIGHT PLANNING MUST BE IN ACCORDANCE WITH THE CONTINGENCY ROUTES LISTED AND FL ASSIGNMENT. PILOTS MUST STRICTLY ADHERE TO THE CONTINGENCY PROCEDURES. ONLY APPROVED INTERNATIONAL FLIGHTS ARE PERMITTED TO OVERFLY DHAKA AIRSPACE.

#### d) Non adherence to the Contingency Plan:

NOTAM .....OPERATORS NOT ABLE TO ADHERE TO THE CONTINGENCY PLAN SHALL AVOID THE DHAKA FIR. ------

## APPENDIX-D

## **CONTIGENCY ROUTES**



## APPENDIX-E

## **Chart of Contingency Routes and Communications:**

Continge	Route	Direction	Flight L	evels	ACCs	Communications
ncy Route			East bound	West bound		
CRC-1	A201 TEBID-AAT	Bi-direc tional	290	320-380	Kolkata	HF: 10066/6556 KHz VHF: 133.75,125.775 MHz ADS-CPDLC VECF
					Yangon	HF: 10066/6556 KHz VHF: 126.75, 128.75 MHz
CRC-2	L507 AVPOP- ESDOT	Bidirec tional	350	320-340	Kolkata	HF: 10066/6556 KHz VHF: 133.75,125.775 MHz ADS-CPDLC VECF
					Yangon	HF: 10066/6556KHz VHF: 126.75, 128.75 MHz
CRC-3	<u>B465</u> SUMAG- CTG	Bidirec tional	330- 410	300-380	Kolkata	HF: 10066/6556 KHz VHF: 133.75,125.775 MHz ADS-CPDLC VECF

#### APPENDIX -F

#### TRAFFIC INFORMATION BROADCAST BY AIRCRAFT (TIBA) PROCEDURES

#### 1. <u>Introduction and applicability of broadcasts</u>

- 1.1 Traffic information broadcasts by aircraft are intended to permit reports and relevant supplementary information of an advisory nature to be transmitted by pilots on a designated VHF radiotelephone (RTF) frequency for the information of pilots of other aircraft in the vicinity.
- 1.2 TIBAs should be introduced only when necessary and as a temporary measure.
- 1.3 The broadcast procedures should be applied in designated airspace where:
  - (a) there is a need to supplement collision hazard information provided by air traffic services outside controlled airspace; or
  - (b) there is a temporary disruption of normal air traffic services.
- 1.4 Such airspaces should be identified by the States responsible for provision of air traffic services within these airspaces, if necessary with the assistance of the appropriate ICAO Regional Office(s), and duly promulgated in aero- nautical information publications or NOTAM, together with the VHF RTF frequency, the message formats and the procedures to be used. Where, in the case of 1.3 a), more than one State is involved, the airspace should be designated on the basis of regional air navigation agreements and promulgated in Doc 7030.
- 1.5 When establishing a designated airspace, dates for the review of its applicability at intervals not exceeding 12 months should be agreed by the appropriate ATS authority(ies).

#### 2. <u>Details of broadcasts</u>

#### 2.1 <u>VHF RTF frequency to be used</u>

- 2.1.1 The VHF RTF frequency to be used should be determined and promulgated on a regional basis. However, in the case of temporary disruption occurring in controlled airspace, the States responsible may promulgate, as the VHF RTF frequency to be used within the limits of that airspace, a frequency used normally for the provision of air traffic control service within that airspace.
- 2.1.2 Where VHF is used for air-ground communications with ATS and an aircraft has only two serviceable VHF sets, one should be tuned to the appropriate ATS frequency and the other to the TIBA frequency.

#### 2.2 Listening watch

A listening watch should be maintained on the TIBA frequency 10 minutes before entering the designated airspace until leaving this airspace. For an aircraft taking off from an aerodrome located within the lateral limits of the designated airspace listening watch should start as soon as appropriate after take-off and be maintained until leaving the airspace.

#### 2.3 <u>Time of broadcasts</u>

A broadcast should be made:

- (a) 10 minutes before entering the designated airspace or, for a pilot taking off from an aerodrome located within the lateral limits of the designated airspace, as soon as appropriate after take-off;
- (b) 10 minutes prior to crossing a reporting point;
- (c) 10 minutes prior to crossing or joining an ATS route;
- (d) at 20-minute intervals between distant reporting points;
- (e) 2 to 5 minutes, where possible, before a change in flight level;
- (f) at the time of a change in flight level; and
- (g) at any other time considered necessary by the pilot.

#### 2.4 Forms of broadcast

2.4.1 The broadcasts other than those indicating changes in flight level :

ALL STATIONS (necessary to identify a traffic information broadcast) (call sign) FLIGHT LEVEL (number) (or CLIMBING TO FLIGHT LEVEL (number)) (direction) (ATS route) (or DIRECT FROM (position) TO (position)) POSITION (position) AT (time) ESTIMATING (next reporting point, or the point of crossing or joining a designated ATS route) AT (time) (call sign) FLIGHT LEVEL (number) (direction)

#### Example:

"ALL STATIONS > WINDAR 671 > FLIGHT LEVEL 350 > NORTHWEST BOUND DIRECT FROM PUNTA SAGA > TO PAMPA > POSITION 5040 SOUTH- 2010 EAST > AT 2358 > ESTIMATING CROSSING ROUTE LIMA THREE ONE > AT 4930 SOUTH -1920 EAST > AT 0012 > WINDAR 671 > FLIGHT LEVEL 350 > NORTHWEST BOUND > OUT"

- 2.4.2 Before a change in flight : ALL STATIONS (call sign) (direction) (ATS route) (or DIRECT FROM (position) TO (position)) LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (position and time)
- 2.4.3 At the time of a change in flight level:

ALL STATIONS (call sign) (direction) (ATS route) (or DIRECT FROM (position) TO (position)) LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number)

<u>Followed by</u>: ALL STATIONS (call sign) MAINTAINING FLIGHT LEVEL (number)

2.4.4 When reporting a temporary flight level change to avoid an imminent collision risk :

ALL STATIONS (call sign) LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number) Followed as soon as practicable by:

#### ALL STATIONS (call sign) RETURNING TO FLIGHT LEVEL (number) NOW.

#### 2.4.5 <u>Collision avoidance</u>

If, on receipt of traffic information broadcast from another aircraft, a pilot decides that immediate action is necessary to avoid an imminent collision risk, and this cannot be achieved in accordance with the right-of-way provisions of Annex 2 to the Chicago Convention, the pilot should:

- (a) Unless an alternative maneuver appears more appropriate, immediately descend 500 ft if at or below FL290, or 1000 ft if above FL290 in an area where a vertical separation minimum of 2000 ft is applied;
- (b) Display all available aircraft lighting which would improve the visual detection of the aircraft;
- (c) As soon as possible, reply to the broadcast advising action being taken;
- (d) Notify the action taken on the appropriate ATS frequency; and
- (e) As soon as practicable, resume normal flight level, notifying the action on the appropriate ATS frequency.

#### 2.4.6 Acknowledgement of the Broadcast:

TIBA broadcasts should not be acknowledged unless a potential collision risk is perceived.

- **2.4.7 Operation of Transponders:** When implementing TIBA procedures, pilots shall operate aircraft transponders on Modes A and C at all times. In the absence of alternative instructions from the appropriate ATS unit, aircraft not assigned a discrete code should squawk code 2000.
- **2.4.8 Operation of TCAS:** Unless otherwise directed by an appropriate authority, pilots should operate TCAS in TA/RA Mode at maximum range setting during the cruise phase of flight and at a range setting appropriate to the traffic situation when in the departure or terminal phases of flight.
- **2.4.9** Activation and termination of TIBA: Activation and termination of TIBA should be declared through NOTAMs.

#### **APPENDIX-G**

#### **Flight Planning Requirement**

Airline operators are expected to familiarize themselves with the Regional Contingency Plan as well as Contingency Plans of Dhaka FIR and the activation times. For aircraft intending to operate in areas during periods when the contingency plans are activated, the operators shall plan the flight to conform to the activation times of the Contingency Plans. Airline operators shall ensure that flights are established on contingency routes prior to entering an area which is under Contingency Plan procedure. The flight planning requirements during contingency periods will be in accordance with ICAO Annex 2 Chapter 3 and Doc. 4444 Chapter 4 and Appendix 2. Airline operators are required to file flight plans in accordance with the Contingency flight planning procedures. Additional information will be required to indicate that the flight will operate in airspace where the Contingency Plan is active.

This information is to be indicated in the 'RMK/' field of item 18 of the ICAO flight plan.

Example: "Remarks/aircraft will be operating on Contingency Routes in the Dhaka FIR".

#### **APPENDIX -H**

#### **ICAO Interception Procedures**

Ref.: CC Article 3 *bis*\*, ICAO Annex 2 and CAR 84 Part-2.

#### Article 3 bis\*

"The contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. This provision shall not be interpreted as modifying in any way the rights and obligations of States set forth in the Charter of the United Nations."

(Extract from ICAO Annex 2 — *Rules of the Air*)

#### **3.8 Interception**

Note.— The word "interception" in this context does not include intercept and escort service provided, on request, to an aircraft in distress, in accordance with Volumes II and III of the International Aeronautical and Maritime Search and Rescue Manual (Doc 9731).

3.8.1 Interception of civil aircraft shall be governed by appropriate regulations and administrative directives issued by Contracting States in compliance with the Convention on International Civil Aviation, and in particular Article 3(d) under which Contracting States undertake, when issuing regulations for their State aircraft, to have due regard for the safety of navigation of civil aircraft. Accordingly, in drafting appropriate regulations and administrative directives due regard shall be had to the provisions of Appendix 1, Section 2 and Appendix 2, Section 1.

Note.— Recognizing that it is essential for the safety of flight that any visual signals employed in the event of an interception which should be undertaken only as a last resort be correctly employed and understood by civil and military aircraft throughout the world, the Council of the International Civil Aviation Organization, when adopting the visual signals in Appendix 1 to this Annex, urged Contracting States to ensure that they be strictly adhered to by their State aircraft. As interceptions of civil aircraft are, in all cases, potentially hazardous, the Council has also formulated special recommendations which Contracting States are urged to apply in a uniform manner. These special recommendations are contained in Attachment A.

3.8.2 The pilot-in-command of a civil aircraft, when intercepted, shall comply with the Standards in Appendix 2, Sections 2 and 3, interpreting and responding to visual signals as specified in Appendix 1, Section 2.

**Note-5:** See also 2.1.1 (states applicability of the Rules to aircraft bearing the nationality and registration marks of a contracting State, wherever they may be, to the extent that they do not conflict with the rules published by the State having jurisdiction over the territory overblown) and 3.4.(states the Signals) of Annex 2.

#### **INTERCEPTION OF CIVIL AIRCRAFT**

(Appendix 2 of ICAO Annex 2 — Rules of the Air)

#### **1. Principles to be observed by States**

- 1.1. To achieve the uniformity in regulations which is necessary for the safety of navigation of civil aircraft due regard shall be had by Contracting States to the following principles when developing regulations and administrative directives:
  - a) interception of civil aircraft will be undertaken only as a last resort;
  - b) if undertaken, an interception will be limited to determining the identity of the aircraft, unless it is necessary to return the aircraft to its planned track, direct it beyond the boundaries of national airspace, guide it away from a prohibited, restricted or danger area or instruct it to effect a landing at a designated aerodrome;
  - c) practice interception of civil aircraft will not be undertaken;
  - d) navigational guidance and related information will be given to an intercepted aircraft by radiotelephony, whenever radio contact can be established; and
  - e) in the case where an intercepted civil aircraft is required to land in the territory overflown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned.

**Note-6:** In the unanimous adoption by the 25th Session (Extraordinary) of the ICAO Assembly on 10 May 1984 of Article 3 bis to the Convention on International Civil Aviation, the Contracting States have recognized that "every State must refrain from resorting to the use of weapons against civil aircraft in flight."

1.2. Contracting States shall publish a standard method that has been established for the manoeuvring of aircraft intercepting a civil aircraft. Such method shall be designed to avoid any hazard for the intercepted aircraft.

**Note-7:** Special recommendations regarding a method for the manoeuvring are contained in Attachment A, Section 3 of Annex 2.

1.3. Contracting States shall ensure that provision is made for the use of secondary surveillance radar, where available, to identify civil aircraft in areas where they may be subject to interception.

#### 2. Action by intercepted aircraft

- 2.1. An aircraft which is intercepted by another aircraft shall immediately:
  - a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1;
  - 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 of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz;
  - d) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.
- 2.2. 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.

2.3. 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.

#### 3. Radio communication during interception

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in Table 2.1 and transmitting each phrase twice:

Phrases for use by INTERCEPTING aircraft				
Phrase	Pronunciation	Meaning		
CALL SIGN	KOL SA-IN	What is your call sign?		
FOLLOW	FOL-LO	Follow me		
DESCEND	DEE- <u>SEND</u>	Descend for landing		
YOU LAND	YOULAAND	Land at this aerodrome		
PROCEED	PRO- <u>SEED</u>	You may proceed		
Phro	uses for use by INTERCEPTED ai	rcraft		
CALL SIGN (call sign) <sup>2</sup>	KOL SA-IN (call sign)	My call sign is (call sign)		
WILLCO Will comply	<u>VILL</u> -KO	Understood		
CAN NOT	<u>KANN</u> NOTT	Unable to comply		
REPEAT	REE- <u>PEET</u>	Repeat your instruction		
AM LOST	AMLOSST	Position unknown		
MAYDAY	<u>M</u> AYDAY	I am in distress		
HIJACK <sup>3</sup>	HI-JACK	I have been hijacked		
LAND (place name)	LAAND (place name)	I request to land at (place name)		
DESCEND	DEE- <u>SEND</u> I require descent			

Table-2-1

*1. In the second column, syllables to be emphasized.* 

- 2. The call sign required to be given is that used in radiotelephony 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 phrase "HIJACK"

**Note-8:** 'INTERCEPTION PROCEDURE' of Civil Aircraft within DHAKA FIR is available in Art ENR 1.12 of AIP Bangladesh.

#### **Special Operations**

- 1. Specific aircraft may need to be involved in special operations during the period when a FIR is an activated contingency zone. These aircraft may therefore be unable to utilize the contingency route structure for a significant period of their flights. Aircraft that will be classified as special operations are as follows:
  - (a) Special operations of State aircraft.
  - (b) Aircraft in emergency situations or operating with significant reduction in operating efficiency.
  - (c) Mercy flights and aircraft engaged in search and rescue, medical evacuation, and coastal surveillance operations.