# Air Traffic Management (ATM) Contingency Plan for Colombo Flight Information Region

Version 2.0



### FOREWORD

This Contingency Plan forms part of the overall national contingency planning for Sri Lanka, in accordance with the provisions of Annex 11 to the Convention on Civil Aviation, ICAO Doc 9462 ATS Planning Manual and Doc 9673 Asia and Pacific Regions Air Navigation Plan, and the Asia/Pacific Region ATM Contingency Plan. The Plan, and any activation of the Plan, is authorized by **Central Coordinating Committee**.

The Plan provides for the safe continuation of international air traffic through the Colombo 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 or military activity.

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

The plan will be activated by NOTAM as far in advance as is practicable. In the event that such prior notification is impracticable the PLAN will be activated by the designated authority using the most expeditious alternative means available.

P A Jayakantha Director General of Civil Aviation & CEO Civil Aviation Authority of Sri Lanka

Date : 14.11.2023

# **Record of Amendments**

Amendment Number	Effective Date	Date Entered	Entered By	Paragraph/ Reference

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# **Abbreviations**

AASL	:	Airport and Aviation Services (Sri Lanka) Ltd
ACC	:	Area Control Service
ADS	:	Automatic Dependent Surveillance
AFTN	:	Aeronautical Fixed Telecommunication Network
AIP	:	Aeronautical Information Publication
AIS	:	Aeronautical Information Services
ATC	:	Air Traffic Control
ATC WI	M:	Air Traffic Control Watch Manager
AOCG	:	ATM Operational Contingency Group
ATM	:	The Air Traffic Management
ATS	:	Air Traffic Services
CAASL	:	Civil Aviation Authority of Sri Lanka
ссс	:	Central Coordination Committee
СОМ	:	Aeronautical Communications
CPDLC	:	Controller-pilot data link communications
DOM	:	Department of Meteorology
EGT	:	Exhaust Gas Temperature
FIR	:	Flight Information Region
FIS	:	Flight Information Service
FL	:	Flight Level
FLAS	:	Flight Level Allocation Scheme
HF	:	High Frequency
IFR	:	Instrument Flight Rules
ΙΑΤΑ	:	International Air Transport Association
ICAO	:	International Civil Aviation Organization
ICAO R	0:	International Civil Aviation Organization Regional Office

NOF	:	NOTAM Office
NOTAN	1:	Notice to Air Men
LoA	:	Letters of Agreement
MET	:	Aviation Meteorology
MWO	:	Meteorological Watch Office
OCA	:	Operational Coordination Arrangements
RVSM	:	Reduced Vertical Separation Minimum
RTF	:	Radio Telephone Frequency
SAR	:	Search and Rescue
SSR	:	Secondary Surveillance Radar
SMATC	:	Senior Manager Air Traffic Control
TAF	:	Terminal aerodrome forecast
TIBA	:	Traffic Information Broadcast by Aircraft
VA	:	volcanic ash
VAAC	:	Volcanic Ash Advisory Centre
VFR	:	Visual Flight Rules
VHF	:	Very High Frequency

# **Chapter 1 – General**

### 1 Objective

- 1.1 The Air Traffic Management (ATM) Contingency Plan for the Colombo FIR details arrangements to ensure the continued safety of air navigation in the event of partial or total disruption of air traffic services in the Colombo FIR in accordance with ICAO Annex 11 Air Traffic Services, Chapter 2, paragraph 2.29. The Contingency Plan provides the ATS procedures and contingency route structure using existing airways in most cases that will allow aircraft operators to transit the Colombo FIR.
- 1.2 This Contingency Plan does not address arrangements for aircraft arriving and departing at airports in Sri Lanka during Contingency periods.

### 2 ATS Units, Centres, States and FIRs affected

- 2.1 In the event that CAASL activates this Contingency Plan, the civil aviation authorities of Australia, India, Indonesia and Maldives FIRs affected will be notified in accordance with the Operational Coordination Arrangements (OCAs). The adjacent FIRs directly affected by this Contingency Plan are as follows:
  - a) Australia Melbourne FIR (ACC)
  - b) India Chennai FIR (ACC)
  - c) Indonesia Jakarta FIR (ACC)
  - d) Maldives Male FIR (ACC)
- 2.2 The contact details of the civil aviation authorities, organizations and ATS units are contained in Appendix A. These details should be kept up to date and relevant information provided to CAASL as soon as practicable.

### 3 Management of the Contingency Plan

- 3.1 The contingency measures set out in this Plan are applicable in cases of 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 Colombo FIR.
- 3.2 The 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 manner through the airspace of the Colombo FIR.
- 3.3 Central Coordinating Committee

As soon as practicable in advance of, or after a contingency event has occurred, the Director General of Civil Aviation shall convene the Central Coordinating Committee (CCC) comprised of representatives from:

- Civil Aviation Authority
- Representative from the Ministry of Civil Aviation
- Air Traffic Service Provider of Airport & Aviation Services (Sri Lanka) Ltd.
- Service Provider of AASL responsible for the provision of Communication, Navigation & Surveillance
- Aeronautical Information Service Provider of Airport & Aviation Services (Sri Lanka) Ltd.
- Aeronautical Communication Service provider of Airport & Aviation Services (Sri Lanka) Ltd.
- Airport Management
- Department of Meteorology
- Other relevant participants as required
- 3.4 The CCC shall oversee the conduct of the Contingency Plan and in the event that the provision of Air Traffic Services is disrupted for an extended period, make arrangements for and facilitate the temporary restoration of air traffic services. The terms of reference for the CCC will be determined by the Director General of Civil Aviation.
- 3.5 Contact details of the members of the CCC are provided in Appendix B.
- 3.6 ATM Operational Contingency Group

The ATM Operational Contingency Group (AOCG) will be convened by the CCC with a primary responsibility to oversee the 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. The AOCG will include any necessary specialist personnel from the following disciplines:

- I. Air Traffic Services (ATS) Division of AASL
- II. Electronics & Air Navigation Engineering Division of AASL
- III. Aeronautical Information Services (AIS) of AASL
- IV. Aeronautical Communications (COM) Division of AASL

- V. Aviation Meteorology (MET) Division of DOM
- 3.7 The mission of the AOCG shall include:
  - I. Review and update of the Contingency Plan as required;
  - II. Keep up to date at all times of the contingency situation;
  - III. Organize contingency teams in each of the specialized areas;
  - IV. Exchange up-to-date information with the adjacent ATS authorities concerned to coordinate contingency activities;
  - V. Notify the designated organizations, including ICAO RO in Bangkok of the contingency situation sufficiently in advance and/or as soon as possible thereafter;
  - VI. Take necessary action for issuing NOTAMs according to this plan or as otherwise determined by the particular contingency situation. Where the contingency situation is sufficiently foreseeable, relevant NOTAMs will be issued 48 hours in advance of the contingency events. NOTAM templates are provided in Appendix C.
  - VII. Keep in contact with and update CAASL who shall coordinate with the ICAO, Asia Pacific Regional Office, the IATA Regional Office and other airspace users;

### 4 Contingency Route Structure

- 4.1 In the event of disruption of the ATC services provided by Colombo ACC, contingency routes will be specified 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 allocation 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. The contingency route structure for international flights in Colombo FIR, which is in alignment with the ICAO APAC regional contingency plan version 3.0 is detailed in Appendix D. Additional contingency routes may be introduced as and when circumstances require, such as in the case of volcanic ash cloud, radioactive cloud or severe weather event.
- 4.2 Aircraft on long-haul international flights and special operations (e.g. Search and Rescue (SAR), State aircraft, humanitarian flights, etc), shall be afforded priority for levels at FL290 and above. Other operators who intend to join international contingency routes should plan on the basis that the Colombo FIR airspace is safe to fly, however, no air traffic services are available within the airspace. The operators under unavoidable circumstances, intends fly through Colombo FIR during the contingency period are expected to follow the Flight level allocations scheme (FLAS) associated with the Contingency route Structure available in the APPENDIX E to this document.

- 4.3 International operators affected by the suspension of all operations from airports in Sri Lanka will be notified by the Airport Management of AASL when operations may be resumed, and flight planning information will be made available pertaining to that airport. International flights those have received such approval may be required to flight plan to join international contingency routes.
- 4.4 International operators may elect to avoid the Colombo FIR by using ATS routes in Melbourne, Chennai, Jakarta and Male FIRs.

### 5 Air Traffic Management and Contingency Procedures

Reduced ATS and Provision of Flight Information Services (FIS)

- 5.1 During the contingency period, ATS including ATC services may not be available, particularly communications and 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. The contingency plan provides for limited flight information and alerting services to be provided by Colombo ACC.
- 5.2 FIS and flight monitoring will be provided by the designated ATS authorities for the adjacent FIRs on the contingency routes that enter their respective FIRs. A table depicting the airspace arrangement is provided in Appendix E.
- 5.3 ATS Responsibilities

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 Colombo FIR, a NOTAM shall be issued indicating the following:
  - I. Time and date of the beginning of the contingency measures;
  - II. Airspace available for overflying traffic and airspace to be avoided;
  - III. Details of the facilities and services available or not available and any limits on ATS provision (e.g., ACC, APPROACH, TOWER etc.), including an expected date of restoration of services if available;
  - IV. Information on the provisions made for alternative services;
  - V. Any changes to the ATS contingency routes contained in this Plan;
  - VI. Any special procedures to be followed by neighbouring ATS units not covered by this Plan;
  - VII. Any special procedures to be followed by pilots; and
  - VIII. Any other details with respect to the disruption and actions being taken that aircraft operators may find useful.
- 5.5 In the event that the VCBI International NOTAM Office is unable to issue the NOTAM, the alternate International NOTAM Office at or CAASL will take action to issue the contingency NOTAM upon receipt of the requirement, of notification by CAASL.

#### 5.6 Aircraft Separation

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 15 minutes.
- 5.8 The route structure provides for lateral separation of 100 NM and in cases where this is less, and for crossing routes, a minimum vertical separation as per table in Appendix E will be applied.
- 5.9 In the event that Colombo ATC services are terminated, a Flight Level Allocation Scheme (FLAS) utilizing, where necessary, RVSM separation minimum shall apply. Non RVSM approved aircraft shall not operate in contingency airspace. Details of the flight level assignment on the contingency routes are contained in Appendix E.

#### 5.10 Flight level restrictions

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

#### 5.11 Airspace Classifications

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.

#### 5.12 Aircraft position reporting

Pilots will continue to make or broadcast routine position reports in line with normal ATC reporting procedures.

5.13 The primary means of communication will be by HF radio. Details of communications frequencies are provided in Appendix E. Traffic Information Broadcast by Aircraft (TIBA) procedures shall apply in Colombo airspace. Details of communications requirements are provided in Appendix J.

#### VFR operations

5.14 VFR flights shall not operate within the Colombo FIR during contingency operations, except in special cases such as State aircraft, Medivac flights, and any other essential flights as authorized by the CAASL.

#### **Procedures for ATS Units**

- 5.15 The ATS units providing ATC services will follow their Unit Contingency plans and activate the appropriate level of contingency procedures in line with the operational Letter of Agreement. These procedures include the following:
  - a) Where ATS provided by Colombo may be reduced or disrupted by a short-notice contingency event, ATC will inform pilots of the contingency 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 evacuation procedures given in Unit level "I" Contingency plans 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;

- b) During the period the contingency procedures are in effect, flight plan and other aircraft movement messages must continue to be transmitted by operators to Colombo via the AFTN using normal procedures;
- c) On notification by CAASL, the ATS authorities operating the ACCs of adjacent FIRs, viz. Melbourne, Chennai, Jakarta and Maldives will activate the contingency procedures in accordance with their contingency arrangement written in respective Operational Coordination Agreements (OCAs).
- d) Prior to entry to the Colombo FIR during contingency operations, prior authorization must be obtained from CAASL, and flights must comply with the ATC clearance and communication instructions issued by the ATC authority responsible for the airspace **immediately adjacent to the contingency airspace**.
- e) Coordination of aircraft boundary estimates and flight levels by the adjacent ATC authority responsible for aircraft entering the Colombo FIR shall be in accordance with the respective Operational Coordination Agreements.
- f) The ACC responsible for aircraft entering the Colombo FIR will instruct pilots to maintain the last flight level assigned and speed (Mach number if applicable) while operating in the Colombo FIR;
- g) The ACC responsible for aircraft entering the Colombo FIR will not authorize any change in flight level or speed (Mach number, if applicable unless specifically authorized under the Operational Coordination Agreements).
- h) The ACC responsible prior to aircraft entering the Colombo FIR will inform aircraft that they must establish contact with the first ATS unit after transiting the Colombo FIR not less than 10 minutes before the estimated time of entry to the Colombo FIR.
- i) The ACC responsible prior to aircraft entering the Colombo FIR will inform aircraft that they must communicate with the next (downstream) ATC unit 10 minutes before the estimated time of entry into the next FIR; and
- Aircraft may also choose to avoid the Colombo FIR, and the controlling authorities of the adjacent FIRs concerned will promulgate any necessary alternative contingency routes by NOTAM.

#### Transition to contingency scheme

5.16 During times of uncertainty when airspace closures seem possible, aircraft operators should be prepared for a possible change in routing while en-route, familiarization of the alternative routes outlined in this Contingency Plan.

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.

### Transfer of control and coordination

5.18 The transfer of control and communication should be at the common FIR boundary between ATS units unless there is mutual agreement between adjacent ATS units and authorization given to use alternative transfer of control points. These will be specified in the respective Operational Coordination Agreements or LoAs.

### 6 Pilots and Operator Procedures

#### Filing of flight plans

6.1 Flight planning requirements detailed in Sri Lanka AIP continue to apply during contingency operations, except where modified by the ATS route and requested flight levels detailed in this plan.

#### **Overflight approval**

6.2 Aircraft operators must obtain over-flight approval from CAASL prior to operating flights through the Colombo FIR. During the period of activation of this Contingency Plan the adjacent ATS authority will provide normal ATC clearances for aircraft to enter Colombo FIR on the basis that operators have obtained prior approval, and the responsibility remains with the operator to ensure such approval has been obtained.

#### **Pilot operating procedures**

- 6.3 Pilots of aircraft operating within the Colombo FIR during contingency operations shall comply with the following procedures:
  - a) 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;
  - b) Flights are to flight plan using the Contingency Routes specified in Appendix D, according to their airport of origin and destination;
  - c) Aircraft are to operate as close as possible to the centre line of the assigned contingency route;
  - d) A continuous communications watch shall be maintained on the specified contingency frequency as specified in Appendix L;
  - e) aircraft position reports and other information as necessary shall be broadcast in accordance with TIBA procedures defined in AIP Sri Lanka
  - f) Aircraft navigation and anti-collision lights shall be displayed;
  - g) Except in cases of emergency or for reasons of flight safety, pilots are to maintain during their entire flight within Colombo FIR, the flight level, last assigned in accordance with the contingency FLAS. Mach number and SSR transponder code. If no transponder code has been assigned, aircraft shall squawk code 2000.
  - Aircraft are to reach the flight level last assigned accordance with the contingency FLAS by the responsible ACC at least 10 minutes before entering the Colombo FIR or as otherwise instructed by the ATC unit acting in accordance with the Operational Coordination Agreement;

- i) Pilots are to include in their last position report prior to entering the Colombo FIR, the estimated time over the entry point of the Colombo FIR and the estimated time of arrival over the relevant exit point;
- j) Pilots are to contact the next adjacent ACC as soon as possible, and in any event not less than ten (10) minutes before the estimated time of arrival over the relevant exit point from the Colombo FIR;
- k) Pilots are to strictly adhere to the ICAO Traffic Information Broadcasts by Aircraft (TIBA), reproduced in Appendix J, on the specified VHF and HF frequencies listed in Appendix J. When necessitated by emergency conditions or flight safety requirements, 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;
- Whenever emergencies and/or flight safety reasons make it impossible to maintain the flight level assigned for transit of Colombo FIR, pilots are to climb or descend well to the right of the centreline of the contingency route, and if deviating outside the Colombo FIR, to immediately inform the ACC unit responsible for that airspace. Pilots are to broadcast details of any level change including aircraft identification, aircraft position and route, vacated flight level, intended flight level, flight level passed and cruising flight level maintained on 121.5MHz;
- m) Pilots are to maintain own longitudinal separation of 15 minutes from preceding aircraft at the same cruising level; and
- n) 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 a contingency routing requiring aircraft to operate off normal traffic flows may result in interception by military aircraft. Aircraft operators must 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 the Colombo FIR and no contingency routes are available, aircraft will be required to remain clear of Colombo FIR. As much warning as possible will be provided by the appropriate ATS authorities in the event of the complete closure of airspace.
- 6.7 Pilots shall 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 the last discrete code assigned by ATC or select code 2000 if no code was assigned.

### 7 Communication Procedures

- 7.1 Degradation of Communication Pilot Radio Procedures
- 7.1.1 When operating within the contingency airspace, 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.
- 7.1.2 If communications 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 communication with ATC, the pilot should continue to make routine position reports through HF, and also broadcast positions in accordance with the TIBA procedures.

#### 7.2 Communication frequencies

7.2.1 A list of frequencies to be used for the contingency routes and the ATS units providing FIS and airground communication monitoring for the Colombo FIR is detailed at Appendix E.

### 8 Aeronautical Support Services

- 8.1 Aeronautical Information Services (AIS)
- 8.1.1 Contingency NOTAM services will be provided by Civil aviation Authority in accordance with this plan.
- 8.2 Meteorological Services (MET)
- 8.2.1 The Department of Meteorology (DOM) is the designated meteorological authority of Sri Lanka. DOM 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, DOM should ensure regular provision of the following products and services:
  - a) Aerodrome observations and reports local MET REPORT and SPECIAL, as well as WMOcoded METAR and SPECI; METAR and SPECI should be provided for all international aerodromes listed in the AOP Table of ASIA/PAC Basic ANP;
  - b) Terminal aerodrome forecast TAF;
  - c) SIGMET for Colombo FIR;
  - d) Information for the ATS units (TWR, APP, ACC) as agreed between the meteorological authority and the ATS units concerned;
  - e) Flight briefing and documentation as per Annex 3, Chapter 9.

8.4 It is expected that the Colombo MET services would continue to be available in the event of an ATS contingency situation. However, should ATS services for the Colombo 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 Colombo FIR will be provided to the extent possible through the adjacent ATS authorities.

### 9. CAT B and CAT C Contingency Event

Colombo FIR will be closed and the closure will be coordinated to the ICAO regional office by Civil Aviation Authority of Sri Lanka.

# Appendix A - Contact Details of Adjacent FIRs

No	Address	Telephone No	Fax.	AFTN			
Aust	Australia						
		+61 3 9235 7349	+61 3 9235 2744				
	Melbourne ACC	+61 3 9235 7492					
1		+61 3 9235 7420					
	Civil Aviation Safety Authority Australia	<u>+61 2 6217 1449</u>					
India	3						
	Channai Unnar Araa Cantral (UT)()	+91 4 422561224					
	Chennal Opper Area Control (UTV)	+91 4 422561284					
2	Trivandrum Lower Area Control (LTV)	+91 4 712500507	+91 4 712505092				
		+91 4 712500199					
	Ministry of Civil Aviation	+91 11-24604283					
Indo	nesia						
	Jakarta ACC	+62 2 15505302	+62 2 15506182				
3	lakarta FIC	+62 2 15590907					
		+62 2 15506582					
Malo	lives						
		+96 0 3322071	+96 0 3309905				
4	Male ACC	+96 0 3317202					
Sri L	anka						
		+94 1 1262 5555	+94 1 12635106				
5	Colombo ACC	+94 1 1261 1572					
		+94 1 1260 5182					

# **Appendix B – Contact Details of the Central Coordinating Committee**

	Telephone	Fax	E-mail	AFTN
Civil Aviation	+94 112358801	+94 112304706	sldgca@caa.lk	VCCCYAYX
Authority of Sri				
Lanka				
Air Traffic Service	+094 11225 2062	+94 11 225 2062	head.ans@airport.lk	VCCCZQZX
Provider				
CNS Services	+94 11 226 3600	+94 11 263	head.eane@airport.lk	
Provider		3488		
Aeronautical	+94 11 226 4249	+94 11 225 9916	manager.aim@airport.lk	VCBIYOYX
Information Services				
Provider				
Aeronautical	+94 11 2635759	+94 11 2635760	aerocomaasl@sltnet.lk	VCCCYFYX
Communication				
Services Provider				
Airport	+94 11 225 2020	+94 11 225 9435	head.am@airport.lk	VCCCYDYX
Management				
Department of	+94 11 2694104	+94 11 2698311		VCCCYNYX
Meteorology	+94 11 2694846			

# **Appendix C – NOTAM Templates**

#### Specimen NOTAMs

#### (a) Avoidance of airspace

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

#### (b) Airspace available Limited ATS

NOTAM... DUE TO ANTICIPATE DISRUPTION OF ATS IN THE COLOMBO 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 COLOMBO FIR ALL ACFT ARE ADVISED THAT THE SRI LANKA CONTINGENCY PLAN FOR ACFT INTENDING TO OVERFLY THE FIR IS IN EFFECT.

FLIGHT PLANNING MUST BE IN ACCORDANCE WITH THE CONTINGENCY ROUTES LISTED AND FLIGHT LEVEL

ASSIGNMENT. PILOTS MUST STRICTLY ADHERE TO THE CONTINGENCY PROCEDURES.

ONLY APPROVED INTERNATIONAL FLIGHTS ARE PERMITTED TO OVERFLY COLOMBO AIRSPACE.

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

NOTAM... OPERATORS NOT ABLE TO ADHERE TO THE CONTINGENCY PLAN

SHALL AVOID THE COLOMBO FIR.



# **Appendix D – Contingency Route Structure in Colombo FIR**

# Appendix E – CONTINGENCY ROUTES, FREQUENCIES and FLIGHT LEVELS ALLOCATED for FLIGHT INFORMATION / MONITORING SERVICES

				-		
CONTINGENCY ROUTE (CR)	ATS ROUTE & SEGMENT	Transfer of Communi cation Point	ACC unit concerned	Frequencies to be used	FLAS	DIRECTION
CR- 1	SEBLO to KAT		MALE Control	HF - 5670KHz, 3470KHz, 11285KHz, 13318KHz VHF – 123.900MHz	Eastbound FL270	Bidirectional
<b>G465/P762</b> (SEBLO G465 KAT P762 DUGOS)	KAT to DUGOS	КАТ	CHENNAI Oceanic Control	HF -   3470KHz, -   5670KHz -   6556KHz ,   11285KHz, 13318KHz   ADS/CPDLC -   VOMF -	Westbound FL280	Bidirectional
CR-2 P570 to KAT	BASUR to KAT	Join CR-3 up to GODAV	CHENNAI Upper Control	HF - 3470KHz, 5670KHz 6556KHz , 11285KHz, 13318KHz VHF - 132.500MHZ ADS/CPDLC – VOMF	Eastbound FL 290 (BASUR to KAT)	Eastbound only (One- way)
<b>CR-3</b> <b>M766/P756</b> (KAT M766 OBDAL P756 NISOK)	KAT to OBDAL	GODAV	CHENNAI Upper Control	HF - 3470KHz, 5670KHz 6556KHz , 11285KHz, 13318KHz VHF - 132.500MHZ ADS/CPDLC – VOMF	Eastbound FL410 (KAT to OBDAL) Westbound FL400 (OBDAL to KAT)	Bidirectional

	OBDAL to NISOK	GODAV	JAKARTA Control / JAKARTA Radio	VHF – 128.3 Mhz / 132.85 MHz HF - 11396KHz, 6556KHz ADS/CPDLC – WIIF	Eastbound FL410 (OBDAL to NISOK) Westbound FL400 (NISOK to OBDAL)	Bidirectional
CR-4	KAT G325 IDIBI		CHENNAI Upper Control	HF - 3470KHz, 5670KHz 6556KHz , 11285KHz, 13318KHz VHF - 132.500MHZ ADS/CPDLC – VOMF	Westbound FL400	One-way
<b>CR-5</b> <b>P756</b> (UBKIN P756 NISOK)	UBKIN to RUXER NISOK to RUXER	RUXER	MALE Control JAKARTA	HF - 5670KHz, 3470KHz, 11285KHz, 13318KHz VHF – 123.900MHz VHF – 128.3 Mhz / 132.85 MHz	Eastbound FL370	Bidirectional
CR – 6		RUXER	Control / JAKARTA Radio Melbourne	HF - 11396KHz, 6556KHz ADS/CPDLC – WIIF HF- 13306KHz,	Westbound FL340	
P627 (KADAP P627 NIXUL)	KADAP to GUTOX	GUTOX	(Brisbane radio)	17961KHz, 8879KHz, 3476KHz. ADS/CPDLC - YMMM	Eastbound FL390	Bidirectional
	GUTOX to NIXUL	GUTOX	Control / JAKARTA Radio	HF - 11396KHz, 6556KHz ADS/CPDLC - WIIF	Westbound FL280	

The adjacent ATS providers HF frequencies both primary and secondary are interchangeable subject to climatic conditions. When CPDLC is being used, this will be the primary means of communication and HF will be secondary. When ADS is being used for automatic position reporting, pilots are not required to report position on CPDLC or HF unless requested by ATC.

Note: In the event that the Colombo ACC is out of service and no ATS is available for the Colombo FIR, flight information services will be delegated to the designated ATS authority specified above, FIS will be provided by the adjacent ACCs in accordance with the LOAs signed with the neighboring States.

### Appendix F: ATM VOLCANIC ASH CLOUD CONTINGENCY PROCEDURE

This Chapter of the ATM Contingency Plan includes the Air Traffic Management (ATM) Volcanic Ash Contingency procedures which sets out standardized guidelines and procedures for the provision of information to airlines and en-route aircraft before and during a volcanic eruption in adjacent FIRs.

Considering the location of Colombo FIR which is closely positioned to the active Volcanos situated in (Indonesia), most probable area that the safety hazard of volcanic eruption may take place would be at the Eastern and South Eastern boundary of Colombo FIR bordering the Jakarta FIR.



Any volcanic eruption and the subsequent volcanic ash (VA) cloud movement towards the Colombo FIR will be informed via coordination between the two Area Control units (Colombo ACC & Jakarta ACC). The SIGMETS will be issued by Indonesian Meteorological watch office to Colombo Meteorological watch office.

Based on the SIGMETS and movement of the VA cloud ASHTAM will be issued by NOF Colombo.

Coordination will take place with related ATS units and mark an "Impact area" analysis and shall report to Colombo NOTAM Office whether the area and route are closed or restricted for the promulgation of NOTAM.

Volcanic contamination, of which volcanic ash and volcanic gases are the most serious, is a hazard for safe flight operations. During an eruption, volcanic contamination can reach and exceed the cruising altitudes of turbine-powered aircraft, among others, within minutes and spread over vast geographical areas within a few days. Encounters with volcanic ash may result in a variety of hazards including one or more of the following:

- i. The malfunction, or failure, of one or more engines leading not only to reduction, or complete loss of thrust but also to failures of electrical/electronic, pneumatic and hydraulic systems;
- ii. The blockage of Pitot and static sensors resulting in unreliable airspeed indications and erroneous warnings;

- iii. Windscreens rendered partially or completely opaque;
- iv. smoke, dust and/or toxic chemicals, as sulphur dioxide gas, contamination of cabin air requiring crew to wear oxygen masks, thus impacting verbal communication; electronic systems may also be affected;
- v. The erosion of external and internal aircraft components;
- vi. reduced electronic cooling efficiency leading to a wide range of aircraft system failures;

### 2 AIR TRAFFIC CONTROL PROCEDURES

If a volcanic ash cloud is reported or forecasted in Colombo FIR, Colombo Area Control Centre is responsible for taking following actions:

- a) Relay all pertinent information immediately to flight crews whose aircraft could be affected to ensure that they are aware of the ash cloud's position and levels affected;
- b) Request the intention of the flight crew and accommodate requests for re-routing or level changes to the extent practicable;
- c) suggest re-routing to avoid or exit areas of reported or forecast ash clouds when requested by the pilot or deemed necessary by the controller; and
- d) When practicable, request a special air-report when the route of flight takes the aircraft into or near the forecast ash cloud and provide such special air-report to the appropriate VAAC.

When the flight crew advises that the aircraft has inadvertently entered a volcanic ash cloud, ACC should:

- I. Take such action applicable to an aircraft in an emergency situation; and
- II. Initiate modifications of route or level assigned only when requested by the pilot or necessitated by airspace requirements or traffic conditions.

### 3 SUMMARY OF ACTIONS BY THE DUTY CONTROLLER RECEIVING THE INFORMATION FROM THE PILOT ENCOUNTERING VOLCANIC EVENT

- a) Ensure information received from the pilot has been copied, clarified (if necessary) and disseminated to other pilots as well as to the ACC Duty Watch Manager. In addition, ATCOs could ask other pilots flying within the same area if they have observed any volcanic activity.
- b) Ensure that information is provided to Pilots flying towards the area affected by the volcanic contamination.

#### 4 SUMMARY OF ACTIONS BY THE ATC WATCH MANAGER

Use most expeditious means of communication and available forms to ensure that the information received from the duty controller has been:

- a) passed on to the Colombo Meteorological Watch Office (MWO)
- b) passed to the Colombo International NOTAM Office (NOF) to promulgate ASHTAM as required;
- c) immediately disseminated, to adjacent sectors and the neighbouring sectors and ACCs (if necessary);
- d) passed on to the regional ATFM centre;
- e) Passed on to the ATM Contingency Committee.
- f) Be prepared to cope with the possible changes of the traffic flows;

#### 5 INFORMATION ON ASHTAMS

- a) ASHTAM and SIGMET, together with AIREPs, are critical to dispatchers for flight planning purposes. Operators need as much advance notification as possible on the status of a volcano for strategic planning of flights and the safety of the flying public.
- b) They are originated by the ACC and issued through the international NOTAM office based on the information received from any one of the observing sources and/or advisory information provided by the associated Volcanic Ash Advisory Centre (VAAC).
- c) In addition to providing the status of activity of a volcano, the ASHTAM also provides information on the location, extent and movement of the ash contamination and the air routes and flight levels affected. NOTAM can also be used to limit access to the airspace affected by the volcanic ash. Complete guidance on the issuance of NOTAM and ASHTAM is provided in Annex 15.
- d) Volcano level of activity ICAO colour code chart given in Annex 15 may be used to provide information on the status of the volcano,

Level of alert colour code	Status of activity of volcano
GREEN ALERT	Volcano is in normal, non-eruptive state or; after a change from a higher alert level: Volcanic activity considered to have ceased, and volcano reverted to its normal, non-eruptive state.
YELLOW ALERT	Volcano is experiencing signs of elevated unrest above known background levels or; after a change from a higher alert level: Volcanic activity has decreased significantly but continues to be closely monitored for possible renewed increase.
ORANGE ALERT	Volcano is exhibiting heightened unrest with increased likelihood of eruption or, Volcanic eruption is underway with no or minor ash emission. (Specify ash-plume height if possible).
RED ALERT	Eruption is forecast to be imminent with significant emission of ash into the atmosphere likely or, Eruption is underway with significant emission of ash into the atmosphere. (Specify ash-plume height if possible).

Note. — The colour code for the level of alert indicating the status of activity of the volcano and any change from a previous status of activity should be provided to ACC by the responsible volcanological agency in the State concerned. (e.g. "RED ALERT FOLLOWING YELLOW" OR "GREEN ALERT FOLLOWING ORANGE").

- a) It is very important that NOTAM related to dangerous zone for volcanic ash be cancelled and ASHTAM be updated as soon as the volcano has reverted to its normal pre-eruption status, no further eruptions are expected by volcanologists and no volcanic ash is detectable or reported within the FIR concerned.
- b) Information concerning an operationally significant change in volcanic activity, volcanic eruption and/or volcanic ash cloud shall be reported in the Format of ASHTAM given in Appendix C.

#### 6 ANTICIPATED FLIGHT CREW ISSUES WHEN ENCOUNTERING VOLCANIC ASH

ATCOs should be aware that flight crews, when they encounter volcanic ash will be immediately dealing with some or all of the following issues:

- 1. Smoke or dust appearing in the cockpit which may prompt the flight crew to wear oxygen masks (could interfere with the clarity of voice communications);
- 2. Acrid odor similar to electrical smoke;
- 3. Multiple engine malfunctions, such as stalls, increasing exhaust gas temperature (EGT), torching, flameout, and thrust loss causing an immediate departure from assigned altitude;
- 4. On engine restart attempts, engines may accelerate to idle very slowly, especially at high altitudes (could result in inability to maintain altitude or Mach number);
- 5. At night, static discharges, which are a luminous electric discharge, may be observed around the windshield, wing extreme sides, etc, accompanied by a bright orange glow in the engine inlet(s);
- 6. Because of the abrasive effects of volcanic ash on windshields visibility may be limited.

Simultaneously, ATCOs can expect flight crews to be executing contingency procedures such as:

- 1. immediately reduce thrust to idle;
- 2. Exit volcanic ash cloud as quickly as possible. The shortest distance/time out of the ash may require an immediate descending, 180-degree turn (terrain permitting);
- 3. Unreliable airspeed or a complete loss of airspeed indication occurs (volcanic ash may block the Pitot system), the flight crew will establish the appropriate pitch attitude;
- 4. Land at the nearest suitable aerodrome.

### 7 COMMUNICATION AND DISSEMINATION OF PILOT REPORTS OF VOLCANIC ACTIVITY

ICAO Annex 3 — Meteorological Service for International Air Navigation prescribes that volcanic ash clouds, volcanic eruptions and pre-eruption volcanic activity, when observed, shall be reported by all aircraft. The ICAO Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444) contain detailed provisions on this special air report requirement in paragraphs 4.12.3 and 4.12.5, and the Volcanic Activity Report form in Appendix 1.

(Ref. Appendix G for the Volcanic Activity Report form in this document)

# **Appendix G – Volcanic Activity Report**

#### VOLCANIC ACTIVITY REPORT

Air-reports are critically important in assessing the hazards which volcanic ash cloud presents to aircraft operations.

OPE	OPERATOR:				A/C IDENTIFICATION: (as indicated on flight plan)				
PILC	PILOT-IN-COMMAND:								
DEP FROM: DATE: TIME; UTC:				ARR AT:	DATE:		TIME; UTC:		
ADD	RESSEE					AIREP SPECIAL			
Item	s 1–8 are to be reporte	ed immediate	ly to the	ATS unit that you are i	in cont	act with.			
1)	AIRCRAFT IDENTIFIC	CATION				2) POSITION			
3)	TIME					4) FLIGHT LEVEL OR	ALTITUDE		
5)	VOLCANIC ACTIVITY (position or bearing, e	OBSERVED / OBSERVED	AT of ash cl	oud and distance from a	ircraft)				
6)	AIR TEMPERATURE					7) SPOT WIND			
8)	8) SUPPLEMENTARY INFORMATION					Other			
	SO <sub>2</sub> detected	Yes 🗆	No 🗆						
	Ash encountered	Yes 🗆	No 🗆			(Brief description of activit and, where possible, horize	y especially ve ontal movemen	rtical and t, rate of g	lateral extent of ash cloud rowth, etc.)
Afte the i	r landing complete iter meteorological authori	ms 9–16 then ity and the op	fax form erator co	n to: (Fax number to be oncerned.)	e provid	led by the meteorological	l authority bas	ed on loca	al arrangements between
9)	DENSITY OF ASH CL	OUD		(a) Wispy		(b) Moderate dense		(c) Very	dense
10)	COLOUR OF ASH CL	.OUD	□ (d) Bla	(a) White ack		(b) Light grey (e) Other		(c) Dark	grey
11)	ERUPTION			(a) Continuous		(b) Intermittent		(c) Not v	isible
12)	POSITION OF ACTIV	ITY		(a) Summit (d) Multiple		(b) Side (e) Not observed		(c) Singl	e
13)	OTHER OBSERVED FEATURES OF ERU	PTION		(a) Lightning (d) Ash fallout		(b) Glow (e) Mushroom cloud		(c) Large (f) All	e rocks
14)	EFFECT ON AIRCRA	FT		(a) Communication (d) Pitot static		(b) Navigation systems (e) Windscreen		(c) Engir (f) Windo	nes ows
15)	OTHER EFFECTS			(a) Turbulence		(b) St. Elmo's Fire		(c) Other	r fumes
16)	OTHER INFORMATIO (Any information cons	DN idered useful.)	)						

# **Appendix H - INTERCEPTION OF CIVIL AIRCRAFT**

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

(Note - See Chapter 3, 3.8 of the Annex)

#### 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 over flown, the aerodrome designated for the landing is to be suitable for the safe landing of the aircraft type concerned.

Note – in the unanimous adoption by the 25<sup>th</sup> 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 – Special recommendations regarding a method for the manoeuvring are contained in Attachment A, Section 3.

1.3 Contracting States shall ensure that provision is made for the use of secondary surveillance radar or ADS-B, 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 of Annex 2:
  - 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.
  - e) If equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if available, 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 A 2.1 and transmitting each phrase twice:

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

## **APPENDIX I - Pandemic Epidemic Recovery Procedure.**

#### Introduction

In the event of any impact to the ANS staff due to any pandemic situation the following recovery procedure shall be implemented.

#### Actions

- a) The affected watch shall be isolated and a thorough disinfection program shall be conducted at the Concerned ATS Unit and the associated areas by SMATC or any other ATC WM attached to the ATS unit.
- b) SMATCs who are current with license and Ratings shall take over operations as an immediate measure and summon duty controllers to report for duty (ATCs Residing near ATS Unit/ The relieving ATCs of the effected shift).
  - i. An emergency roster shall be prepared by SMATC for the duration of this medical contingency in order to provide uninterrupted service, with the available staff not affected by the pandemic or Epidemic.
- c) If the situation is further aggravated to the extent of only one shift at the ATS Unit is fit to perform duties, the roster will be strengthen with the ATCs attached to the other ATS Units.
- d) Shall maintain a regular disinfectant program at the ATS unit including the equipment.
- e) Maintain social distancing among the duty staff, and also wear face masks, hand glows etc.

ATC rest rooms shall be disinfected regularly and shall have good hygienic standards.

# Appendix J -TRAFFIC INFORMATION BROADCASTS BY AIRCRAFT (TIBA)

#### 1. Introduction and Applicability of Broadcasts

- 1.1. Traffic information broadcasts by aircraft are intended to permit reports and relevant supplementary information of an advisory nature shall be transmitted by pilots on a designated VHF radio telephone (RTF) frequency for the information of pilots of other aircraft in the vicinity.
- 1.2. The Colombo TIBA frequency shall be 124.9MHz and Emergency Frequency 121.5 MHz shall also remain.
- 1.3. TIBAs should be introduced only when necessary and as a temporary measure.
- 1.4. The broadcast procedures should be applied in designated airspace where:
  - a. There is 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.
- 1.5. When establishing a designated airspace, dates for their view of its applicability at intervals not exceeding 12 months should be agreed by the appropriate ATS authority/ies.

#### 2. Details of Broadcasts

- 2.1. VHFRTF frequency to be used
  - 2.1.1.The VHFRTF 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 VHFRTF 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 issued 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 Time of broadcasts

A broadcast should be made:

When a loss of normal communications requires TIBA procedures to be implemented, pilots shall make broadcasts in English on 124.9 MHz as follows:

- 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, i.e. the broadcasts

Referred to in 2.3 a), b), c), d) and g), should be in the following Form:

ALL ST ATTONS (necessary to identify a traffic information broadcast) (callsign)

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) (callsign) FLIGHT LEVEL (number) (direction)

#### Fictitious example:

"ALL STATIONS ABC123 FLIGHT LEVEL 370 NORTHWEST BOUND DIRECT FROM PUNTASAGA TOPAMPA POSITION 5040 SOUTH 2010 EAST AT 2358 ESTIMATING CROSSING ROUTE LIMA THREE ONE AT 4930 SOUTH 1920 EAST AT 00 12 ABC123 FLIGHT LEVEL 350 NORTHWEST BOUND OUT"

2.4.2 Before a change in flight level, the broadcast (referred to in 2.3e) should be in the following

#### ALL STATIONS

(callsign)

(direction)

(ATS route) (or DIRECT FROM (position) TO (position)

LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (position and time)

2.4.3. Except as provided in 2.4.4 the broadcast at the time of a change in flight level (referred to in 2.3) should be in the following form

ALL STATIONS

(callsign)

(direction)

(ATS route) (or DIRECT FROM (position) TO (position)

LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (position and time)

Followed by:

ALL STATIONS (callsign)

MAINTAIN FLIGHT LEVEL (number)

2.4.4 Broadcasts reporting a temporary flight level change to avoid an imminent collision risk should be in the following from:

ALL STATIONS

(callsign)

(direction)

LEAVTNG FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number)

Followed as soon as practicable by:

ALL STATIONS

(callsign)

RETURNING TO FLIGHT LEVEL (number) NOW

2.5 Acknowledgement of the broadcasts

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