



WORKING PAPER

**TWENTY-FOURTH INFORMAL MEETING FOR THE IMPROVEMENT OF AIR TRAFFIC SERVICES OVER THE SOUTH ATLANTIC (SAT/24)
LUANDA, ANGOLA, 3 TO 7 JUNE 2019**

Agenda Item: 3.6: ATM Contingency Plan Over the Atlantic Ocean

Update on ATM Contingency Plan for the SAT Area

(Presented by the SAT Secretariat)

SUMMARY

This paper provides an update on the project to harmonize the draft South Atlantic Oceanic FIRs ATM contingency plan with the North Atlantic (NAT) contingency plan (Doc 006) and provides an overview of the process to be followed.

The meeting is invited to agree to the actions proposed in paragraph 3.

COORDINATION

ICAO Secretariat, Dakar, Lima, Nairobi and Paris Regional Offices.

REFERENCES

* *NAT Contingency Plan* (Doc 006)

* ATM contingency plan
for South Atlantic oceanic FIRs

* Principal references

1. INTRODUCTION

1.3 The First Atlantic Coordination Meeting (ACM) was held in Paris, France on 31 January 2019 directly after the NAT 2030 vision workshop. The workshop was attended by representatives from fourteen (14) States and six (6) organizations/industries.

1.4 The meeting participants identified the need to harmonize the contingency plan of the South Atlantic area with that of the North Atlantic to further ensure seamless operations in the Atlantic area. It was noted that the proposed action was not in conflict with the on-going work in the SAT, but rather complementing it at the regional Atlantic level.

1.5 At that time, the the United Kingdom kindly agreed to make an expert on contingency planning available to lead and work with an ICAO Headquarters appointed expert to harmonize the North Atlantic (NAT) contingency plan with that of the South Atlantic Oceanic FIRs ATM draft contingency plan.

1.1 The International Federation of Airline Dispatchers (IFALDA) offered to contribute with a focus on the ICAO Global Aeronautical Distress and Safety System (GADSS) and the new tracking requirements. In general, the initiative was supported.

2. **DISCUSSION**

2.3 Work was done to align the approved *NAT Contingency Plan* (Doc 006) and the draft South Atlantic Oceanic FIRs ATM contingency plan. The draft SAT contingency plan was realigned to mirror Doc 006 to the extent possible. The only editorial difference at this is time is that the NAT State Contingency Plans were incorporated in the body of Doc 006 and in the case of the SAT Contingency Plan, all State Contingency Plans will be included as attachments. The draft document was fully coordinated between the NAT and SAT Secretariat.

2.4 It is important to note that a contingency plan is a living document and will require an amendment and update on a regular basis to reflect operational matters. It is therefore important to have a baseline document in place, and from there to further improve the required.

2.5 In light of the above, it is proposed that the SAT approve the SAT contingency plan, with the understanding that it is a living document.

3. **ACTION BY THE MEETING**

3.3 The meeting is invited to note the:

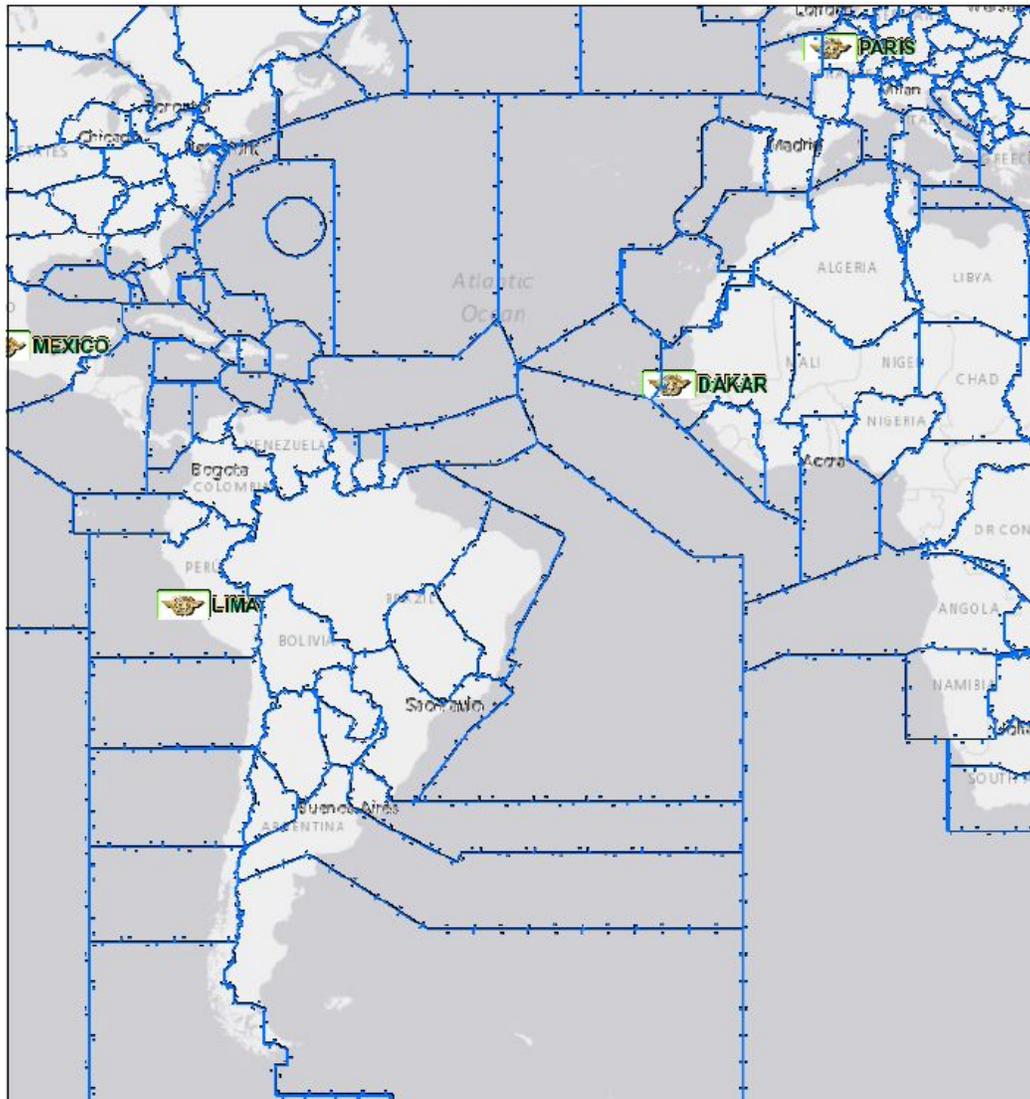
- a) approve the draft South Atlantic Oceanic FIRs ATM contingency plan;
- b) instruct the Secretariat to take the necessary steps to make the SAT contingency plan available to the relevant stakeholders.

— — — — —

APPENDIX

ATM OPERATIONAL CONTINGENCY PLAN FOR SOUTH ATLANTIC OCEANIC FIRS ALLIGNED WITH THE NORTH ATLANTIC REGION

South Atlantic



First Edition
May 2019

Published on behalf of the South Atlantic Group for the Continued Improvement of Air Traffic Services
over the South Atlantic

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FOREWORD

This is the fifth edition of the Air Traffic Management (ATM) Contingency Plan for Air Traffic Services (ATS) of the SAT Oceanic FIRs (SAT). The Contingency Plan will come into effect with the approval and authority of (....).

This Contingency Plan provides the contingency arrangements to be introduced to permit international flights to transit the SAT airspace without disruption, in the event of a natural disaster, manmade disaster or any other event which makes the air traffic and supporting services normally undertaken by Area Control Centres (ACCs) within the SAT partially or totally unavailable.

The SAT has several Area Control Centres to control Air Traffic within their airspace. These Centres are responsible for the provision of Air Traffic Services within SAT. As such, in an event that the ACC becomes inoperable, and ATS becomes unavailable, the time span taken to restore normal level of service could vary. During this interim period, flight operations within a specific FIR would be restricted to a degree.

This Contingency Plan has been developed and in close co-operation and collaboration with the civil aviation authorities responsible for the adjacent FIRs and implemented with the knowledge of the representatives of the users of the airspace. Military authorities also have been consulted and the elements of the Plan and the associated contingency procedures thereto has been concurred.

The Contingency Plan will be activated by promulgation of a NOTAM issued by an International NOTAM Office as far in advance as is practicable. However, when such prior notification is impracticable for any reason, the Plan will be put into effect on notification by a Designated Authority, on behalf of and as authorized by the Civil Aviation Authority. It is expected that the civil aviation authorities concerned and the airline operators will fully cooperate to implement the Plan as soon as possible.

This Contingency Plan has been prepared in coordination with the International Civil Aviation Organization (ICAO) to meet the requirements in ICAO Annex 11 – *Air Traffic Services to the Convention* to provide for the safe and orderly continuation of international flights through all FIRs.

ABBREVIATIONS AND ACRONYMS

ACAS	Airborne Collision Avoidance System
ACC	Area Control Centre
ADS-B	Automatic Dependent Surveillance-Broadcast
ADS-C	Automatic Dependent Surveillance-Contract
AFTN	Aeronautical Fixed Telecommunication Network
AIDC	ATS Inter-facility Data Communications
AIM	Aeronautical Information Management
AIRAC	Aeronautical Information Regulation and Control
AMHS	ATS Message Handling System
ANSP	Air Navigation Service Provider
AN-Conf	Air Navigation Conference
APIRG	AFI Planning and Implementation Regional Group
ASBU	Aviation System Block Upgrade
ASECNA	Agency for the Safety of Air Navigation in Africa and Madagascar
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management
ATIS	Automatic Terminal Information Service
ATS	Air Traffic Services
ATM	Air Traffic Management
ACDM	Airport Collaborative Decision-Making
AOCG	ATM Operational Contingency Group
CFIT	Controlled Flight into Terrain
CLAM	Cleared Level Adherence Monitoring
CNS	Communications, Navigation, Surveillance
CPDLC	Controller Pilot Data-link Communications
CTA	Control Area
CTR	Control Zone
DME	Distance Measuring Equipment
ESAF	East and SOUTHERN AFRICAN REGION
FIR	Flight Information Region
FLAS	Flight Level Allocation Scheme
FUA	Flexible Use Airspace
GANP	Global Air Navigation Plan
GASP	Global Aviation Safety Plan
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFALPA	International Federation of Airline Pilots' Association
IFATCA	International Federation of Air Traffic Controllers' Association
IFBP	IATA IN-FLIGHT BROADCAST PROCEDURES
IMC	Instrument Meteorological Conditions
MET	Meteorological
METAR	Meteorological Aerodrome Report
MLAT	Multilateration

NAT	North Atlantic region
NOT	AM notice to airmen
OCA	OCEANIC CONTROL AREA
OACC	Oceanic area control centre
PBN	Performance-based Navigation
RAM	Route Adherence Monitoring
RANP	Regional Air Navigation Plan
RNAV	Area Navigation
RNP	Required Navigation Performance
RVSM	Reduced Vertical Separation Minimum
SAR	Search and Rescue
SAT	SOUTH ATLANTIC REGION
SBAS	Space Based Augmentation System
SIGMET	Significant Meteorological Information
SLOP	STRATEGIC LATERAL OFFSET PROCEDURE
STCA	Short Term Conflict Alert
SUA	Special Use of Airspace
SWIM	System-Wide Information Management
TAF	Terminal Area Forecast
TIBA	Traffic Information Broadcast by Aircraft
TMA	Terminal Control Area
TBO	Trajectory Based Operations
TCAS	Traffic Collision Avoidance System
TOC	Transfer of Control
VHF	Very High Frequency
VAAC	Volcanic Ash Advisory Centre
VMC	Visual Meteorological Conditions
VOLMET	Meteorological Information for Aircraft in Flight
VOR	Very High Frequency Omni-directional Radio Range
WACAF	West and Central African Region
WAFC	World Area Forecast Centre

1. CONTINGENCY SITUATIONS AFFECTING ACC FACILITIES

1.1 PREAMBLE

1.1.1 The objective of this ATM Contingency Plan is to specify co-ordination procedures between the SAT states. The signatories undertake that the procedures contained herein shall remain in force from the effective date. Amendments shall follow the procedures described in paragraph 2.3 below. This ATM Contingency Plan supersedes and cancels any existing SAT ATM Contingency Plans from the effective date.

1.2 EFFECTIVE DATE

1.2.1 The provisions in this ATM Contingency Plan shall enter into force on (date).

1.3 AMENDMENTS

1.3.1 Any change to this ATM Contingency Plan, including its cancellation or replacement, requires the consent of the SAT states concerned. This applies to the substance of the change as well as to its date of applicability. Any change shall be made either in the context of meeting between the SAT states, or by exchange of correspondence, or by exchange of AFTN messages, with acknowledgment by all signatories.

1.3.2 Whilst temporary deviations from these procedures may be agreed between the SAT States supervisors concerned, permanent amendments to this document shall be effective only in the form of a written amendment duly signed by authorized representatives.

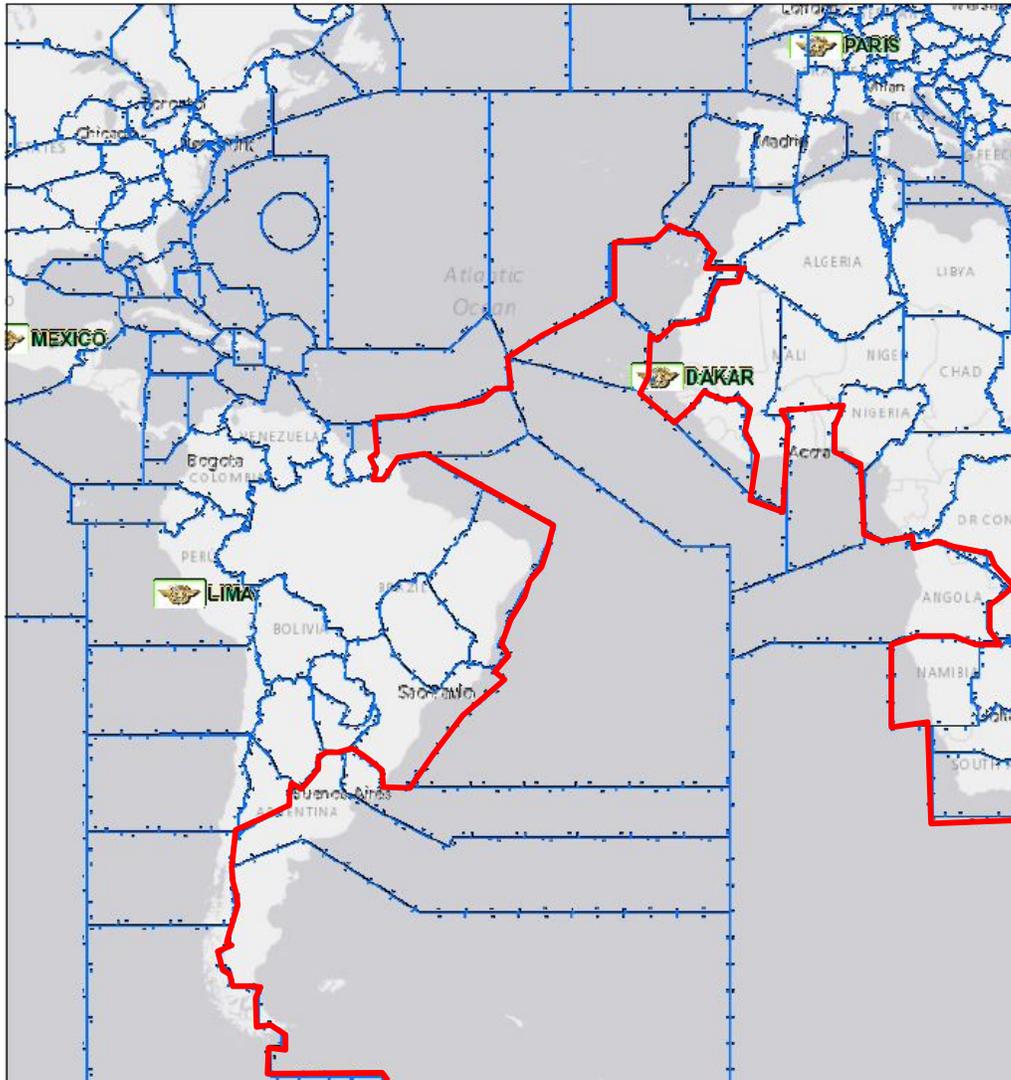
1.4 OBJECTIVE

1.4.1 The procedures contained herein are supplementary to the ICAO Standards and Recommended Practices annexes 2 and 11, the Procedures for air Navigation Services in Document 4444 and the Regional Supplementary Procedures in Document 7030. They detail the condition under which the responsibility for the provision of air traffic services shall be transferred between the ATS units mentioned within this document.

1.4.2 The This Air Traffic Management (ATM) Contingency Plan contains details of the arrangements in place to ensure, as far as possible, the continued safety of air navigation in the event of partial or total disruption of Air Traffic Services within the SAT Oceanic FIRs.

1.4.3 This document is produced in accordance with the requirement of ICAO Annex 11 – *Air Traffic Services* and it details both standard procedures throughout the SAT Oceanic FIRs and the procedures specific to the individual ACCs within the SAT.

South Atlantic



2. CONTINGENCY SITUATIONS AFFECTING ATC FACILITIES AND MULTIPLE FIRS

2.1 Part I: Contingency Situations Affecting ATC Facilities

2.1.1 ATC services within the SAT are provided from a number of geographical locations and this plan describes the contingency arrangements for these facilities. It is considered unlikely that any physical contingency at one particular facility will affect another directly.

2.2 **Part II: Contingency Situations Affecting Multiple FIRs**

This part of the plan considers events, which are likely to affect more than one facility within the SAT. In particular, these include the contingency arrangements in place to deal with the airspace suffering contamination by volcanic ash. See ACC specific contingency procedures.

3. **SCOPE OF THE PLAN**

3.1 This part of the Contingency Plan considers:

- a) Standard procedures for individual ACCs adopted by ATC facilities in the event of contingency situations. The plan considers contingency situations, which may result in a degradation of the ATC service, provided (limited service) as well as situations where there is a total loss of the ability to provide ATC services (no service).
- b) Outlining the steps taken by ACCs of different States to deal with a medium/long term unavailability of an ACC facility and in particular the procedures detailed by each State's Contingency Plan.

4. **STANDARD CONTINGENCY PLAN PROCEDURES**

ACCs Procedures in the event of contingency situation.

4.1 **Implementation of the plan**

4.1.1 In the event of adoption of contingency procedures ACCs will notify all affected agencies and operators appropriately.

4.1.2 In Limited Service situations the individual ACCS will decide upon the level of notification necessary and take action as required to cascade the information.

4.1.3 In No Service situations it is likely that the ATC facility involved will be subject to evacuation. In this instance the will issue NOTAMs and broadcast on appropriate frequencies that contingency procedures have been initiated. The notification process employed by individual ACCSs is detailed in their respective Contingency Plans.

4.1.4 Issue a NOTAM advising operators of the evacuation.

4.1.5 Broadcast an evacuation message on appropriate frequencies.

“Emergency evacuation of (OACC) is in progress. No air traffic control service will be provided by (OACC). Use extreme caution and monitor (control frequencies), emergency

frequencies and air-to-air frequencies. Contact the next air traffic control unit as soon as possible”

4.2 Traffic Information Broadcast by Aircraft (TIBA) procedures

4.2.1 The following communications procedures have been developed in accordance with the Traffic Information Broadcast by Aircraft (TIBA) procedures recommended by ICAO (Annex 11 – *Air Traffic Services*, Attachment B). These procedures should be applied when completing an altitude change to comply with the oceanic clearance.

4.2.2 At least 3 minutes prior to the commencement of a climb or descent the flight should broadcast on the last assigned frequency, 121.5, 243.0 and 123.45 the following:

“ALL STATION (callsign) (direction) DIRECT FROM (landfall fix) TO (oceanic entry point) LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (distance)(direction) FROM (oceanic entry point) AT (time)”.

- a) When the level change begins, the flight should make the following broadcast:
“ALL STATIONS (callsign) (direction) DIRECTION FROM (landfall fix) TO (oceanic entry point) LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number).”
- b) When level, the flight should make the following broadcast:
“ALL STATIONS (callsign) MAINTAINING FLIGHT LEVEL (number)”.

5. AREA CONTROL CENTRE (ACC) PROCEDURES

5.1 The plan considers contingency situations, which may result in a degradation of the ATC service, provided (limited service) as well as situations where there is a total loss of the ability to provide ATC services (no service).

5.2 Where available, information is also provided outlining the steps taken by ACCs to deal with a long-term unavailability of an ATC facility. In particular, the procedures detailed by each ACC facility will, insofar as possible, comprise the following:

- FIRs for which the contingency plan applies
- FIRs with supporting procedures
- notification procedures
- implementation of the plan
- limited service
- disruption of ground/air communication capability
- disruption of ability to provide control services
- no service
- loss of ground/air communication capability
- loss of ability to provide control services

- contingency route structure
- long-term contingency arrangements
- interception
- SAR
- public health
- volcanic ash
- contact details

6. STATES AND FIRS AFFECTED

6.1 This document contains contingency procedures for those ACCs who provide an ATC service within the SAT, and those ACCs whose airspace has a common boundary with the NAT region for which supporting procedures are published.

6.2 The states, FIRs and ACCs affected by this contingency plan and for which procedures are promulgated are as follows:

- Angola, Luanda
- Argentina, Ezeiza, Comodoro Rivadavia
- Brazil, Recife, Atlántico
- Cape Verde, Sal Oceanic
- French Guiana, Cayenne
- Ghana, Accra
- Piarco – Mexico
- Roberts
- Senegal, Dakar Oceanic
- South Africa, Cape Town, Johannesburg, Johannesburg Oceanic
- Spain, Canarias
- Uruguay, Montevideo

7. NOTIFICATION PROCEDURES

7.1 In a limited service situation notification of any service limitations and traffic management measures will be promulgated to operators and adjacent ACCs via AFTN.

7.2 In a no service situation, the OACC is likely to have been evacuated. As soon as possible after evacuation a contingency message will be sent. Agencies, which receive the message, will broadcast an evacuation message on appropriate frequencies and operators in receipt of the contingency message are asked to forward this information to affected flights wherever possible.

8. CONTINGENCY PROCEDURE IMPLEMENTATION

8.1 In the event of implementing contingency procedures, the ACC will notify all affected agencies and operators appropriately.

8.2 In Limited Service situations the individual ACC will decide upon the level of notification necessary and take action as required to cascade the information.

8.3 In No Service situations it is likely that the ATC facility involved will be subject to evacuation. In this instance the ACC will issue NOTAMs and broadcast on appropriate frequencies that contingency procedures have been initiated. The notification process employed by individual ACCs is detailed in their respective entries in this plan.

8.4 Issue a NOTAM advising operators of the evacuation. The following is an example of the type of information, which may be promulgated:

“Due to emergency evacuation of (OACC) all ATC services are terminated. Flights within (OCA) FIR should continue as cleared and contact the next ATC agency as soon as possible. Flights not in receipt of an oceanic clearance should land at an appropriate airfield or request clearance to avoid (OAC) FIR. Flights should monitor (defined frequencies).”

8.5 Broadcast an evacuation message on appropriate frequencies:

“Emergency evacuation of (OACC) is in progress. No air traffic control service will be provided by (OACC). Use extreme caution and monitor (control frequencies), emergency frequencies and air-to-air frequencies. Contact the next air traffic control unit as soon as possible”.

9. EVACUATION MESSAGES BY ADJACENT ACC

9.1 The ACC assuming responsibility for a specific FIR shall endeavour to provide an ATC service throughout the Contingency FIR as soon as evacuation commences. The ACC will send a signal to appropriate addresses advising of the specific ACC evacuation:

“EMERGENCY Evacuation of “ABC” Oceanic Control Centre is in progress. “ABC” will provide no IFR control. “DEF” OAC shall endeavour to monitor traffic within the “ABC”. HF communication is unaffected. Instruct all flights to monitor VOLMET, emergency and air-to-air frequencies. Flights not in receipt of an oceanic clearance must land at an appropriate aerodrome, or request appropriate re-clearance to avoid “ABC”. Flights within ABC FIR should contact the next ACC as soon as possible. Refer to contingency documentation for advice”

9.2 “DEF” shall ensure and verify that information on all cleared aircraft proceeding from “DEF”, through their Oceanic Airspace is passed to the next affected unit. The following telephone numbers may be used:

10. NOTAM

10.1 In addition, the ACC with contingency situation will issue the following NOTAM:

- a) *“Due to evacuation of the “ABC” Oceanic Area Control Centre, operations have been suspended. Contingency plans have been activated and a contingency service will commence shortly.*
- b) *Oceanic clearance for aircraft will not be issued until the commencement of a contingency service and adjacent ATS providers will not permit aircraft without an Oceanic clearance to enter the “ABC” OCA.*
- c) *Aircraft operators are advised that stringent ATFM plans have been implemented for this airspace and slot tolerance is essential in order to obtain the maximum capacity from the contingency service.*
- d) *Further information on the services available will be issued prior to the commencement of operations.”*

11. HF VOLMET

11.1 ABC ACC will broadcast the following message on HF VOLMET:

“Emergency evacuation of “ABC” OACC is in progress. No air traffic control service will be provided by “ABC” ACC. Use extreme caution and monitor “ABC” Radio, emergency frequencies and air-to-air frequencies. Contact the next air traffic control unit as soon as possible”.

12. LIMITED AIR TRAFFIC SERVICE

12.1 **Disruption of ground/air communication capability**

12.1.1 A limited communication service will be maintained with the assistance of adjacent Aeronautical Radio Stations. HF services on the South Atlantic normally provided by will be delegated as appropriate to the other Aeronautical Radio Stations namely Radio, Radio, ≥.... Radio and...

12.2 **Situations, which could result in a Limited Service**

12.2.1 **Equipment Failure**

- Transmitters (Loss of a number of Transmitters) Receivers (Loss of a number of Receivers)
- Aerials (Loss of a number of Aerials)
- Data Lines (Loss of data lines betweenRadio and OACC)

- 12.2.2 **Propagation**
- Radio Propagation resulting in partial fade-out can be affected by many factors including Solar
 - Flares and Geomagnetic Storm

- 12.2.3 **Staffing**
- Reduced Staffing
 - Illness
 - Weather (Severe Weather i.e. Storm, Snow, Flooding) Industrial Relations issues

- 12.2.4 **ADS/CPDLC/ Failure**
- Resulting in increased HF congestion as flights revert to voice communications

- 12.2.5 **Security Threat**
- Depending on the level of the Security threat and if essential staff are allowed to remain on station

12.3 **Dispersal of traffic**

12.3.1 The ACC with contingency situation shall determine and coordinate necessary oceanic restrictions. Traffic with oceanic clearance or already approved to enter their specific FIR shall have priority over the remaining services. Traffic without oceanic clearances or not coordinated with above mentioned ACC may be subject to restrictions to meet the limited oceanic service capability

12.4 **Communications**

- Communications services will be maintained using available equipment and with the assistance of adjacent facilities.
- SATCOM equipped flights using INMARSAT network may contact ACC with Contingency through published short codes 426302 and 426305.
- SATCOM equipped flights using other satellite network than INMARSAT may contact the specific ACC dialing directly TEL number as per State AIP or paragraph 24 of this document.
- Flights reporting via ADS and using CPDLC communications may maintain data link services until otherwise instructed by a ground facility.
- Flights reporting via ADS and using CPDLC communications may maintain data link services until otherwise instructed by a ground facility.

12.5 **Notification**

12.5.1 The ACC experiencing a contingency situation shall be responsible for notification of oceanic service changes. Notification will be through typical channels.

12.5.2 The Supervisor of this ACC shall coordinate with adjacent Aero-radio facilities the required level of assistance.

12.6 **Roles and responsibilities of adjacent facilities**

12.6.1 The action required of adjacent service providers will vary depending of the nature of the service limitation. After notification by ACC with contingency situation, the adjacent facilities shall be responsible to implement the necessary procedures to meet any Oceanic restrictions.

12.6.2 Adjacent Aero-radio facilities shall be responsible to implement the necessary procedures to meet the ACC with contingency situation Radio requirements.

12.7 **Separation Minima**

12.7.1 The ACC with contingency situation shall determine and co-ordinate additional separation requirements according to the level of service available.

12.8 **Air Traffic Management**

12.8.1 The ACC experiencing a contingency situation shall coordinate traffic restrictions with the adjacent units and/or ATFM Centres, as appropriate. Restrictions may be applied to the following: Traffic volume (flow rate, slots); Oceanic routings; En-route clearance change requests; Separation to be applied; activation of contingency routes and associated FLAS. Network Manager Operations Center (NMOC) can be requested to assist with establishing and coordinating service levels in Santa Maria OAC for the westbound flow.

12.9 **Effect On Flights**

12.9.1 Joint Operations between this specific FIR and adjacent FIR increases the ability to provide a 'normal' service with assistance from adjacent aeronautical stations. In the event that the operation is degraded substantially, ATFM measures may be imposed as necessary.

12.9.2 In the event of ADS/CPDLC/ORCA failure, flights will revert to HF/VHF/SATCOM causing frequency congestion, which may result in ATFM measures being imposed as necessary.

12.10 **Disruption of Ability to Provide Control Services**

12.10.1 The FIR experiencing contingency situation shall determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. Traffic in possession of a valid oceanic clearance shall have priority over any other traffic. En-route re-clearance of such traffic shall not be permitted except in emergency.

12.10.2 Traffic without a valid oceanic clearance may be subject to tactical traffic management measurements to meet the requirements of the service limitation.

- a) Separation standards: The identified ACC will be responsible for ensuring the co-ordination and implementation of any additional separation requirements.
- b) Air Traffic Flow Management: The identified ACC shall co-ordinate any necessary traffic management measures where necessary. Such measures may include, but are not limited to, temporary capacity restrictions and tactical re-routing measures. This ACC shall co-ordinate these restrictions where necessary with adjacent ACCs where they may affect the flow of traffic through these units' airspace.
- c) Responsibilities of adjacent ACCs: The action required of adjacent ACCs will vary dependent on the nature of the service limitation. Where such action is not contained within the inter-centre Letters of Agreement (LOAs) the requirement will be promulgated within the initial failure and restrictions message.

13. NO SERVICE

13.1 General

13.1.1 In **No Service** situations it is likely that the ACC facility involved will be subject to evacuation. In this instance the ACC will issue NOTAMs and broadcast on appropriate frequencies that contingency procedures have been initiated. The notification process employed by individual ACCs is also detailed in their respective entries in this plan.

13.2 Loss of Air Ground Communication

13.2.1 In the event of an ACC being unable to provide ground/air communications for Oceanic Area of Responsibility, it will coordinate with adjacent aeronautical radio stations of the SAT Oceanic FIRs to provide ground/communications to the best of their ability.

13.3 Situations which could result in No Service being provided:

- a) Equipment Failure
 - Transmitters (Loss of all Transmitters) Receivers (Loss of all Receivers) Aerials (Loss of all Aerials)
 - Data Lines (Loss of data lines between (ACC) Radio and (ACC) OACC) ROFDS
- b) Propagation
 - Radio Propagation resulting in total fade-out, which can be caused by many factors including;
 - Solar Flares and Geomagnetic Storms
- c) Staffing

- No Staff
 - Illness (seasonal influenza) weather
 - Industrial Relations issues
- d) Evacuation of Radio Station
- Fire
 - Bomb threat
- e) Dispersal of traffic
- Traffic within the FIR or already coordinated with the ACC experiencing a contingency situation, shall comply with their Oceanic clearance. All other traffic that has not been approved shall remain clear of this specific FIR.
- f) Communications
- The ACC with a contingency situation will monitor aircraft as far as possible by VHF coverage. Flights reporting via ADS and using CPDLC communications must revert to voice procedures.
- g) Notification
- In the event of no service situation the ACC with contingency situation shall be responsible for notification to adjacent ACCs. This may not be possible in the event of an unexpected catastrophic situation. Any Control unit that is unable to establish communications with the above mentioned ACC shall request assistance in determining the status of this specific ACC from adjacent units.
- h) Roles and Responsibilities of Adjacent OAC's and ACC's
- Until Contingency Routes can be implemented adjacent units will take immediate actions for necessary traffic management procedures in accordance with this plan. The adjacent units will not issue re-clearances within the FIR experiencing a contingency situation after notification of the no service situation, unless any loss of separation minima between aircraft is detected. Adjacent ACCs shall not clear any aircraft into this FIR after notification of the loss of service.

14. LOSS OF ABILITY TO PROVIDE CONTROL SERVICES

14.1 Should a specific OACC be evacuated the potential would exist for a major disruption to Air Traffic Control (ATC) within the OCA/FIR.

14.2 The HF radio communications for Oceanic Centres are remotely located and should not be affected.

14.3 In the event that an ACC is evacuated, the adjacent Oceanic Centre will assume responsibility for the provision of Air Traffic Services (ATS) within the FIR to the best of their ability.

The procedures to be adopted by Adjacent ACC are described in the Contingency Plan of the specific ACC/FIR.

14.4 As soon as possible after evacuation, a contingency message will be sent to the appropriate agencies, detailed in evacuated ACC Contingency Plan. In turn they are expected to advise the affected traffic. HF congestion is likely. Communications should be kept to a necessary minimum. Unnecessary routing changes will not be issued. Other ATSU's will provide guidance as far as possible in the circumstances.

14.5 Contact information that may be used in the event of an emergency evacuation is described in paragraph 24.

15. FLIGHT CREW AND OPERATOR PROCEDURES WITHIN FIR

15.1 General

15.1.1 The procedures outlined below are to be used as guidance for pilots in the immediate aftermath of a sudden withdrawal of the ATC service.

15.1.2 On receipt of the contingency message pilots are requested to broadcast to other flights on 121.5 Mhz. and 123.45 Mhz. A listening watch on these frequencies must be maintained.

15.2 Procedures to be followed by Operators and Aircraft

15.2.1 All aircraft transiting through the South American Oceanic Flight Information Regions shall strictly comply with the following:

- a) As soon as the Pilots receive a message of Contingency in the airspace where a total disruption of ATS takes place, they will apply a 2 NM offset SLOP (according to ICAO doc 4444, Paragraph 16.5). In all cases they will maintain their present flight level. An aircraft experiencing an emergency or for flight safety reasons, that are unable to maintain an assigned flight level, shall climb or descend according to the ICAO doc 4444, 15.2. (Aircraft will offset 15 NM to the right of centerline of the airway and, once established, will change the Flight Level). Aircraft shall transmit at suitable intervals on the emergency frequency 121.5 MHz or on the IATA In-flight Broadcast Procedures (IFBP) VHF frequency 126.9 MHz, as well as on the published frequencies at the commencement and completion of any maneuver. All transmissions shall comprise of the following: aircraft call sign, the aircraft position, the flight levels being vacated and crossed, etc.
- b) Pilots shall adhere to the IFBP and maintain a continuous listening watch on the VHF frequency 123.45 MHz as well as the published VHF and / or HF frequencies. Suitably equipped aircraft may communicate with the appropriate sector via

ADS/CPDLC or SATCOM. Pilots shall report their position over all compulsory reporting points established along the respective contingency air traffic service route. In the event of an emergency, traffic shall transmit blind on these published frequencies at the commencement and completion of any maneuver.

- c) Aircraft intending to enter the next Oceanic FIR shall include in the last position report with the adjacent FIR the estimated time of arrival over the relevant entry point of the next Oceanic FIR and an estimated time of arrival at destination.
- d) Pilots shall contact the adjacent FIR at least ten (10) minutes before the estimated time of arrival over the relevant entry point of adjacent FIR.
- e) Pilots shall display navigation and anti-collision lights at all times.
- f) SSR Transponder will be kept on at all times.
- g) Pilots shall maintain own longitudinal separation of twenty (20) minutes from the preceding aircraft at the same cruising level. After the contingency airspace is flown, the adjacent ACC may resume normal separations minima as per agreed LOP.
- h) h) Aircraft equipped with ADS/CPDLC operating within this airspace are requested to contact, if available, the affected FIR via ADS/CPDLC on the published address for FANS1 equipped aircraft or FANS/A, equipped aircraft.
- i) In the case that airspace is available but no ATS Services at all, the possible actions by Airspace Users will be avoidance of airspace, expect coordination with adjacent FIRs or/and follow NOTAM actions.

16. CONTINGENCY ROUTE STRUCTURE AND FLAS

16.1 General

16.1.1 The Flight Level Allocation Scheme presented in this Section will be used for the ACC to maintain a flow of traffic overflying Airspace with no ATS service at all. Otherwise, ACC with ATS service degraded will establish the rate of traffic acceptance and will decide if maintains the normal Flight Level Operations.

17. THE ATS CONTINGENCY ROUTE SYSTEM WITHIN THE SOUTH ATLANTIC (EUROSAM CORRIDOR)

17.1 Southbound & Northbound

Aircraft from Europe via Canarias (Spain) / Sal Oceanic (Cape Verde) / Dakar Oceanic (Senegal) and Atlántico (Brazil) Flight Information Regions to South America will be guided through the ATS route network of the FIR, according to the following:

S	ROUTE UN 741 Uni-directional SOUTH bound	ROSTA – NORED – EDUMO – GAMBA – KENOX – SAGRO – DIGUN – NANIK – DIKEB – PUGSO – JOBER
	FLAS	FL 300 or FL340 or FL 360 or FL380. (EXCLUSIVELY EVEN FLIGHT LEVELS)

N	ROUTE UN 866 Uni-directional NORTH bound	MAGNO – SAKSI – OBKUT – DEKON – BUXON – NELTO – AMDOL – IREDO – TENPA – USOTI – APASO – ORVEK – GOMER – BRICK – GURKA – KONBA – LUPEX – KUBIL – BEXAL
	FLAS	FL 290 or FL330 or FL350 or FL370 or FL390. (EXCLUSIVELY ODD FLIGHT LEVELS).

S	ROUTE UN 873 SOUTH bound only during contingency situations	BAROK – BENTU – NEVEL – MITLA – SAMAR – GDV – LIMAL – ISOKA – IPERA – CVS – POMAT – SAGMA – ASEBA – TASIL – ORARO – SALPU – INTOL – FEMUR – IBAGA – NTL – RODES – SEVIL – ISUSO – VACAR – EVPAB – AVILA – TOMAS – ADOLF – BORPA – KOGBU – KODSA – DEDOR – ELEFA – GONZA – BUXER FERMA – MORGA – EVPAD
	FLAS	FL 300 or FL340 or FL 360 or FL380. (EXCLUSIVELY EVEN FLIGHT LEVELS).

Note: UN873 to be a unidirectional route SOUTH bound only during contingency situations.

N	ROUTE UN 857 NORTH bound only during contingency situations	(BIDEV – IRUMI – ESLIB – MEDIT – RUBEN – AMBET – FNQ) – NEURA – PUGUN – NOISE – ERUTU – MARAO – DELAX – BOTNO – ORABI – GUNET – ETIBA – BIPET – DEREV – LZR – TERTO – VEDOD
	FLAS	FL 290 or FL330 or FL350 or FL370 or FL390. (EXCLUSIVELY ODD FLIGHT LEVELS).

Note: UN857 to be a unidirectional route NORTH bound only during contingency situations.

N	ROUTE UL206 NORTH bound only during contingency situations	REGIS – ARUNA – BUTAP – KODOS – TAROT
	FLAS	FL370 ONLY

Note: UL206 to be a Uni-directional route NORTH bound only during contingency situations.

17.2 Westbound and Eastbound

17.2.1 Aircraft routing westbound crossing the EUROSAM CORRIDOR will be guided through the ATS route network of the FIR, according to the following:

W	ROUTE UL375	BUXIR – OSEPA – BOLUM - USENA – BUTOG – ETAXO – Siset – LOKIM - ISUPA – ETIMO – UDIGA – ARUNU – DIGOR – PUGSA – NOISE – BODAK – ORARO – OBKUT – DIKEB – EGIMI – UKEDI
	FLAS	FL320 ONLY

17.2.2 Aircraft routing eastbound crossing the EUROSAM CORRIDOR will be guided through the ATS route network of the FIR, according to the following:

E	ROUTE UL375	UKEDI - EGIMI – DIKEB – OBKUT – ORARO – BODAK – NOISE – PUGSA – DIGOR – ARUNU – UDIGA – ETIMO – ISUPA – LOKIM - Siset – ETAXO – BUTOG – USENA – BUXIR
	FLAS	FL310 ONLY

17.2.3 Aircraft routing from westbound Luanda FIC Oceanic FIR to South America via Atlántico (Brazil) will be guided through the ATS route network of the FIR, according to the following:

W	ROUTE UA611 F / UL340	ONTAR- AVIGI- EGOLI– BUTOG– EKALO - LOBIK
	FLAS	FL 260 or FL300

17.2.4 Aircraft routing Eastbound from South America via Atlántico (Brazil) to Luanda FIC Oceanic FIR will be guided through the ATS route network of the FIR, according to the following:

E	ROUTE UA611 F / UL340	LOBIK – EKALO – BUTOG - EGOLI - AVIGI – ONTAR
	FLAS	FL 270 or FL370

17.2.5 Aircraft eastbound from South America via Atlántico (Brazil) to Johannesburg Oceanic FIR will be guided through the ATS route network of the FIR, according to the following:

E	ROUTE UL224	ROKAD – CIDER – ITGIV – GERAM – ETULA - ITMEK - APKIN VULGO – ROKAD - CIDER - ITMEK – APKIN – ITGIV – GERAM – ETULA - ITMEK
	FLAS	FL 270 or FL370

17.2.6 Aircraft going westbound from Johannesburg Oceanic FIR to South America via Atlántico will be guided through the ATS route network of the FIR, according to the following:

W	ROUTE UL224	APKIN - ITMEK – ETULA – GERAM – ITGIV -- CIDER – ROKAD
	FLAS	FL 280 or FL360 or FL380

17.2.7 Aircraft Eastbound going from Ezeiza FIR via Johannesburg Oceanic to Cape Town FIR will be guided through the ATS route network of the FIR, according to the following:

E	ROUTE UL211F	PAGAD – ANKOK – KILOS – KAKIN – KETIS – MORSI - MUNES – EKBED – ANTES - ITLIK - APKIN
	FLAS	FL270 or FL370

17.2.8 Aircraft going Westbound from Cape Town FIR via Johannesburg Oceanic to Ezeiza FIR will be guided through the ATS route network, according to the following:

W	ROUTE UL211F	APKIN – ITLIK – ANTES – EKBED – MUNES – MORSI – KETIS – KAKIN – KILOS – ANKOK - PAGAD
	FLAS	FL320 ONLY

Note: As per AIP Supplement S74/11 ATM CONTINGENCY PLAN ROBERTS FIR paragraph 3.2 – “The system of Contingency Routes is not required in the Roberts FIR”.

18. CONTINGENCY MANAGEMENT

18.1 Basic Principles

18.1.1 The present plan is based on the following principles:

- a) Only international civil aviation operations, conducted in accordance with IFR in the upper airspace of SAT Oceanic FIRs and performed along the contingency air traffic routes established as described in the respective LOPs, are catered for by this plan.
- b) Air Traffic Services are assumed to be limited or not available within the FIRs mentioned.
- c) A flight level allocation scheme is applied so that over points of crossing or converging traffic, vertical separation will always be provided.
- d) All Random Routing (i.e. AORRA) shall be suspended and will not be authorized during the contingency situation. Aircraft shall be routed according to one of the ATS routes described in this document.
- e) In the event of an ATS contingency situation, air traffic will be allocated with restricted use of flight levels and routes as described in Section 7.3.10.
- f) Each State, according to its own Contingency Plan shall take other measures as follows:
 - Suspension of all VFR operations;
 - Delay and/or suspension of all general aviation IFR operations;
 - Delay and/or suspension of all commercial IFR operations.

18.2 Transition to Contingency Scheme

18.2.1 During times of uncertainty when airspace closures seem possible, aircraft operations should be prepared for a possible change in routing while en-route.

18.2.2 In the event of airspace closure that has not been promulgated, ATC should, if possible, broadcast to all traffic what airspace has been closed and to standby for further instructions.

18.2.3 South Atlantic Oceanic Flight Information Regions should recognize that when closure of airspace and/or airports is promulgated, individual airlines might have different company requirements

as to their alternative routings. ATC should be alert to respond to any requests by aircraft and react commensurate with safety.

18.2.4 When a specific ACC of the SAT FIRs starts a contingency situation, it will proceed as follows.

18.3 Short Term Actions

18.3.1 Will inform, by its entire possible and quickest means, its concerned ACC's about its contingency situation, specifying that the general contingency procedures of the SAT FIRs and the specific contingency procedures reflected in the contingency annex to its LOA's are in force. Depending on the deterioration caused by the contingency, the neighboring ACC shall expect a reduction in the inbound traffic to the affected Airspace, even a Rate 0, and be prepared for re-routings or diversions.

18.3.2 Will inform its collateral ACC's about the real situation of the air traffic under its responsibility, as well as the information about the estimated traffic at the moment that the contingency situation started.

18.3.3 Neighboring ACC will expect that traffic overflying the affected Airspace will maintain last assigned Flight Level and will fly offset according to SLOP, proceeding to the affected Airspace according to the responsible ACC requests.

18.4 Medium Term Actions

18.4.1 After a reasonable period of time, The ACC affected by the Contingency will communicate to its collaterals the level of degradation in its ATS service. Neighboring ACC will manage the traffic

18.5 Long Term Contingency Arrangements

18.5.1 In the event that a FIR loses the ability to provide an ATC service from the OACC/ACC for an extended period, contingency plans are in place to provide the service from an alternate location.

18.5.2 The facility will be established at another SAT location but will take some time to put in place, as equipment and communication links have to be brought into operation and staff relocated. The nature of the loss of the specific ACC facility may influence the time required to bring the contingency facility into service, but it is expected that under most circumstances an ATC service would be available in that specific ACC within 48 hours. In the interim period no ATC service will be available and all flights will be required to route clear of the FIR.

18.5.3 When established, the contingency facility will comprise a slightly reduced complement of control and support workstations, but with the existing range of communication facilities including VHF clearance delivery, OCL, ADS, CPPLC and AFTN.

18.5.4 Operators can expect that ATFM regulations will be in place throughout the period of the transition, with a gradual buildup to near normal operating levels. The facility is designed to meet 95 per cent of demand and is sustainable in the long term.

18.6 **Procedures to be followed by ATS Units**

18.6.1 Within the South Atlantic, filed flight plan messages shall continue to be transmitted through the AFTN and processed as per normal procedure.

18.6.2 The adjacent FIRs, shall be responsible for:

- a) Transmitting flight plans and estimate messages, to the extent practicable, through the AFTN:
 - A current flight plan message, at least one hour before the aircraft's estimated time of arrival over the relevant entry point of the next Oceanic FIR. An estimate message for the relevant entry point of a next Oceanic FIR, at least 30 minutes before the aircraft's estimated time of arrival over that point.
- b) Transmitting, through the AFTN, to the ACC serving the first FIR which an aircraft will enter after departing or transiting the Oceanic FIR, an estimate message for the aircraft over the relevant exit point of the Oceanic FIR, as soon as the aircraft's last position report has been received, containing the aircraft's estimated time of arrival over the exit point.
- c) Applying a longitudinal separation of at least twenty (20) minutes over the relevant entry point of Oceanic FIR, between aircraft flying at the same flight level and following the same contingency air traffic route and instructing the respective pilot-in-command to maintain the flight level and the Mach number assigned throughout the respective Oceanic FIR.
- d) Not authorizing any flight level or Mach number changes of any aircraft transiting through the respective Oceanic FIRs, within a period of ten (10) minutes before entering the next Oceanic FIRs.
- e) Requesting aircraft intending to enter the next Oceanic FIR the last position report with the adjacent FIR, the estimated time of arrival over the relevant entry point of the next Oceanic FIRs and an estimated time of arrival at destination, on the contingency air traffic route used.
- f) Informing inbound aircraft of contingency measures within the respective Oceanic FIR's. Neighboring FIRs shall in turn be advised of the intentions of the affected flight.
- g) Tactical ATC considerations during periods of overloading may require

re assignment of routes or portions thereof.

- h) Where possible, aircraft on long-haul international flights shall be given priority with respect to cruising levels.
- i) Transfer of control and communications shall normally coincide with the transfer of control point. The transfer of control point is the Common FIR Boundary unless otherwise coordinated.

18.6.3 In the event that Air Traffic Services cannot be provided within a specific South Atlantic Oceanic Flight Information Region, the respective CAA/Authority shall publish a NOTAM (see Appendix A) indicating the following:

- a) The time and date of the beginning, and if available, the ending of the contingency measures.
- b) Airspace available for overflying traffic and airspace to be avoided.
- c) Details of facilities and services available and/or not available and any limits on ATS provision including an expected date of restoration of service.
- d) Information on the provision of alternate services.
- e) ATS Contingency routes.
- f) Procedures to be followed by pilots.
- g) Any other details with respect to the distribution and actions being taken.

18.7 Aircraft interception

18.7.1 Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off of normal traffic flows, could result in an intercept 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.

18.7.2 Pilots need to continuously listen out on the VHF emergency frequency 121.5MHz and should operate their transponders 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 discreet code assigned by ATC or select code #2000 if ATC has not assigned a code.

18.7.3 If an aircraft is intercepted by another aircraft, the pilot shall immediately:

- a) Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with international procedures;
- b) If possible, notify to ATS Unit;

- c) Set transponder code to 7700, unless otherwise instructed by the appropriate ATS unit;
- d) Attempt to establish radio communication with the intercepting aircraft by making a general call on the emergency frequency 121.5MHz and 243 MHz if equipped; and
- e) instructions are received by radio from any source that conflict with those given by the intercepting aircraft, the intercepted aircraft, shall request immediate clarification while continuing to comply with the instructions given by the intercepting aircraft.

19. SEARCH AND RESCUE IN CONTINGENCY PLAN

19.1.1 The ACCs involved in this contingency plan are required to assist any distressed aircraft of which they are aware and which flies over a contingency airspace.

19.1.2 The center that receives a distress message from an aircraft shall send the necessary messages (INCERFA, ALERFA or DETRESFA) to all authorities in the SAR service of the SAT states including the SAR authority of the center, which is in contingency situation.

19.1.3 Each SAR authority shall assist as necessary its neighbor as requested in their LoA.

20. PUBLIC HEALTH EMERGENCIES

20.1.1 In the event of public health emergency received from by the relevant SAT ACC from a pilot, such as the outbreak of a contagious on board disease or reported existence of on board pathogens presenting a risk of disease outbreak,

20.1.2 The relevant SAT ACC shall send a message as soon as possible and use the most expeditious means of communication, to The ATS unit serving the destination / departure, and to the aircraft operator or its designated representative.

20.1.3 To avoid misunderstanding that may result in inappropriate reaction from the stakeholders including air operators, information provided by the Health Sanitary Board (HSB) should be obtained in written form and relayed to air operators in written form. Where communication means do not enable relay of written text, the information shall be read verbatim.

21. OPERATION UNDER THE EFFECTS OF VOLCANIC ASH

21.1.1 If a volcanic ash cloud is reported or anticipated by an ATS Unit, the relevant ACC should take the following actions:

- a) Immediately transmit relevant information to the flight crews of potentially affected

aircraft to ensure that they are aware of the current position and expected position of the cloud and the flight levels concerned.

- b) Respond to requests for course or flight level changes wherever possible;
- c) Propose a route change to avoid or leave the reported or predicted areas of presence of the volcanic ash cloud when requested by the pilot or as the controller deems necessary, and
- d) Where possible, request a special flight reports when the flight route enters or anticipates the planned volcanic ash cloud and transmit the report to the appropriate agencies.

22. STATE SPECIFIC CONTINGENCY PLANS

22.1 Appendix A contains the following State Contingency Plans

- Angola - Luanda
- Argentina – Ezeiza, Comodoro Rivadavia
- Brazil – Recife, Atlántico
- Cape Verde - SAL
- French Guiana - Cayenne
- Ghana - Accra
- Johannesburg/Cape Town
- Roberts FIR Organization
- Senegal – Dakar (outstanding)
- South Africa – FAJO/Johannesburg/Cape Town
- Spain – Canarias
- Uruguay - Montevideo

23. EMERGENCY CONTACT DETAILS (States to provide missing information)

Paris, ICAO Regional office

In the event of an European State/Territories/International Organizations declaring contingency, the respective States/Territories/International Organizations will advise the Paris ICAO Regional office representative/s and Contingency Units within neighbouring FIR's as per Letter of Procedure:

Contact person	
Name of Office	

Telephone	
Telephone	
E-mail	

BRAZIL

Name of agency:	Department of Airspace Control - DECEA.
Telephone RECIFE	55 81 3462-2742 - 55 81 2129-8388 - 55 81 3462-4297
REDDIG	3860
AFTN:	SBREZQZX - SBREZRZX
Telephone ATLANTICO	55 81 3462-2742 - 55 81 2129-8388 - 55 81 3462-4297
REDDIG	3878 - 3879
AFTN:	SBAOZQZX

The national contingency unit that will normally liaise through the ICAO Regional Office of accreditation as follows:

Name of agency:	Department of Airspace Control - DECEA.
Contact person:	Air Navigation Management Centre (CGNA)
Telephone:	55 21 21 2101-6449, 55 21 21 2101-6409
REDDIG	3058
Fax:	55 21 21 2101-6504
E-mail:	genac@cgna.gov.br

ARGENTINA

Name of agency:	
Telephone	
REDDIG	
AFTN:	
Contact person:	
Telephone:	
REDDIG	
Fax:	
E-mail:	

URUGUAY

Name of agency:	
Telephone	
REDDIG	
AFTN:	
Contact person:	
Telephone:	
REDDIG	
Fax:	

E-mail:	
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SPAIN

Fax:	+34-928 577 063
E-mail:	EJOrtuno@enaire.es
AFTN:	GCCCYFPX
SITA:	

CAPE VERDE

Name of agency:	Aeroportos e Segurança Aérea (ASA)
Contact person:	Moisés Monteiro
Telephone:	+238 241 13 72/241 92 00
Mobile:	+238 992 78 34
Fax:	+238 241 33 36
E-mail:	mduarte@asa.cv
AFTN:	GVACFDPX
SITA:	NIL

The national contingency unit that will normally liaise through the ICAO Regional Office of accreditation as follows:

Name of Office:	Aeroportos e Segurança Aérea (ASA)
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Contact person:	Moisés Monteiro
Telephone:	+238 241 13 72/241 92 00
Mobile:	+238 992 78 34
Fax:	+238 241 33 36
E-mail:	mduarte@asa.cv
AFTN:	GVACFDPX
SITA:	NIL

ROBERTS FIR

Name of agency:	Roberts Flight Information Region
Contact person:	Alimamy D. Conteh
Telephone:	+231 6 887160
E-mail:	calimamydixon@yahoo.com; adconteh@hotmail.com
AFTN:	GLRBYNYX; GLRBZQZX
SITA:	NIL

Lima, ICAO Regional office

In the event of a South American State/Territories/International Organizations declaring contingency, the respective States/Territories/International Organizations will advise the Lima ICAO Regional office representative/s and Contingency Units within neighboring FIR's as per Letter of Procedure:

Contact person	Fabio Rabbani: Regional Director
Name of Office	Lima ICAO Regional Office

Telephone	+ 511 611 8686
Telephone	+51 981 373075
E-mail	frabbani@icao.int
Contact person:	Oscar Quesada: Regional Sub Director
Name of Office:	Lima ICAO Regional Office
Telephone.	+ 511 611 8686
Mobile.	+51 994 072976
E-mail	oquesada@icao.int

Contact person:	Fernando Hermoza : ATM RO
Name of Office:	Lima ICAO Regional Office
Telephone.	+ 511 611 8686
Telephone.	+511 611 8678
Mobile	+51 980 321618
E-mail	fhermoza@icao.int

DAKAR OCEANIC

Name of agency:	Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar (A.S.E.C.N.A)
Contact person:	Diaga BASSE
Telephone:	+221 33 820 85 61

Mobile:	+221. 77 442 95 04/76 388 60 61
Fax:	+221 33 820 06 56
E-mail:	bassedia@asecna.org
AFTN:	G000ZIZX
SITA:	G00YFDPA

DAKAR, ICAO Regional office

In the event of an African State/Territories/International Organizations declaring contingency, the respective States/Territories/International Organizations will advise the Dakar ICAO Regional office representative/s and Contingency Units within neighboring FIR's as per letter of procedure:

Contact person:	Albert TAYLOR Regional Officer-ATM Air Traffic Management
Name of Office:	ICAO WCAF Office, Dakar
Telephone.	+(221) 33 869 24 24/13
Fax	+(221) 33 820 32 59
E-mail	Ataylor@icao.int

SOUTH AFRICA

Name of agency:	Air Traffic & Navigation Services (ATNS) PTY LTD.
Contact person:	Martin Cooper
Telephone:	+27 11 928 6578
Mobile:	+27 79 500 8871

Fax:	+27 11 928 6412
E-mail:	martinc@atns.co.za
AFTN:	FAATMATS
SITA:	JNBXCYP

Central Airspace Management Unit

The national contingency unit that will normally liaise through the ICAO Regional Office of accreditation as follows:

Name of Office:	Central Airspace Management Unit (CAMU)
Contact person:	<i>D Lalla</i>
Telephone:	+27 11 928 6433
Mobile:	+27 82 553 4026
Fax:	+27 11 928 6420
E-mail:	dhipakl@atns.co.za
AFTN:	FAJSCAMU
SITA:	JNBXCYP

In the event of the Republic of South Africa declaring contingency, the CAMU will advise the following ICAO Regional office representative and Contingency Units within neighbouring FIR's as per Letter of Procedure.

Contact person:	Regional Officer Air Traffic Management
Name of Office:	ICAO ESAF Office, Nairobi
Telephone	+254 20 762 2395, +254 20 762 2372
Residential Telephone	+254 717 555 811

E-mail	TBA
Contact person:	Albert TAYLOR
Name of Office:	ICAO WACAF Office, Dakar
Telephone.	+(221) 33 869 24 24/13
Fax	+(221) 33 820 32 59
E-mail	Ataylor@icao.int

During a contingency situation, the respective National Contingency units shall liaise with the Flight Information Regions involved through the LIMA ICAO / WACAF ICAO / ESAF ICAO Regional Office/s.

IATA (SOUTH AMERICA)

The South American unit assigned with the responsibility of monitoring developments and coordination contingency arrangements with member airlines is:

Name of agency:	IATA
Contact person:	Marco Vidal
Telephone:	+1 7865363476
Mobile:	+1 305 399 2053
Fax:	+1 305 266 7718
E-mail:	vidalmarco@iata.org
SITA:	MIAELXB

IATA (AFRICA)

The African unit assigned with the responsibility of monitoring developments and coordination contingency arrangements with member airlines is:

Name of agency:	IATA
Contact person:	
Telephone:	
Mobile:	
Fax:	
E-mail:	
SITA:	

IATA (EUROPE)

The European unit assigned with the responsibility of monitoring developments and coordination contingency arrangements with member airlines is:

Name of agency:	IATA
Contact person:	
Telephone:	
Mobile:	
Fax:	
E-mail:	
SITA:	

