



INTERNATIONAL CIVIL AVIATION ORGANIZATION

SIXTEENTH MEETING OF THE SAT (SAT 16)
(Recife, Brazil, 04 to 06 May 2010).

Agenda Item 3: *ATS contingency plan for the SAT airspace based on the existing EUR-SAM corridor contingency plan*

(Presented by South Africa)

SUMMARY

<i>The development of a comprehensive ATS contingency plan for the SAT airspace based on the existing EUR-SAM corridor contingency plan and in accordance with ICAO Annex 11 provisions</i>

1. INTRODUCTION

- 1.1 **As per Conclusion SAT15/06: "Contingency plan for the SAT Area" *South Africa develops a comprehensive ATS contingency plan for the SAT airspace based on the existing EUR-SAM corridor contingency plan and in accordance with ICAO Annex 11 provisions***

2 DISCUSSION**ATM CONTINGENCY PLAN FOR SOUTH ATLANTIC OCEANIC FIRS****1. OBJECTIVE**

- 1.1 This contingency plan contains arrangements to ensure the continued safety of air navigation in the event of partially or total disruption of air traffic services (ATS) and is related to ICAO Annex 11- *Air Traffic Services* Chapter 2, paragraph 2, 28. This contingency plan contains arrangements to ensure the continuation of interim air traffic flow through the South Atlantic Oceanic FIRs in the event of disruptions of air traffic services and related supporting services within the designated FIRs.

2. AIR TRAFFIC MANAGEMENT

ATS Responsibilities

- 2.1 Tactical ATC considerations during periods of overloading may require re-assignment of routes or portions thereof.
- 2.2 In the event that Air Traffic Services cannot be provided within the South Atlantic Oceanic FIRs, the respective CAA/Authority shall publish a NOTAM indicating the following:

- a. The time and date of the beginning 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.

3. SEPARATION

Separation will be applied in accordance with the Procedures for Air Traffic Navigation Services-Air Traffic Management (PANS-ATM, Doc 4444) and the Regional Supplementary Procedures (Doc7030).

4. LEVEL RESTRICTIONS

Where possible, aircraft on long-haul international flights shall be given priority with respect to cruising levels.

5. OTHER MEASURES

Other measures related to the closure of airspace and the implementation of contingency plans within the South Atlantic Oceanic FIRs is as follows:

- a. Suspension of all VFR operations;
- b. Delay and/or suspension of all general aviation IFR operations; and
- c. Delay and/or suspension of commercial IFR operations.

6. TRANSITION TO CONTINGENCY SCHEME

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

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.

Note: South Atlantic Oceanic FIRs should recognise 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.

7. TRANSFER OF CONTROL AND COORDINATION

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.

8. PILOT PROCEDURES

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.

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.

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. Notify, if possible, the appropriate ATS unit;
- c. 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
- d. Set transponder code to 7700, unless otherwise instructed by the appropriate ATS unit.

If any instructions received by radio from any source 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.

9. OVERFLIGHT APPROVAL

Aircraft operators should obtain over flight approval from States/Territories/International Organisations for flights operating through their jurisdiction of airspace, where required. In a contingency situation, flights may be re-routed at short notice and it may not be possible for operators to give the required advanced notice in a timely manner to obtain approval.

10. CONTINGENCY UNIT

10.1 The national contingency unit assigned the responsibility of monitoring developments that may dictate the enforcement of the contingency plan and co-ordination contingency arrangements is:

BRAZIL

Name of agency:	Department of Airspace Control - DECEA.
Telephone BRASÍLIA	55 61 3364-8404 55 61 3365-5215 55 61 9166-9716
REDDIG	3031 3032 3033 3041
AFTN:	SBBSSQZX
Telephone RECIFE	55 81 3462-2742 55 81 2129-8388 55 81 3462-4297

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

The national contingency unit 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

SPAIN

Name of agency:	Aeropuertos Españoles y Navegación Aérea (AENA)
Contact person:	Patricia Ruiz Martino (GCCC Operations Manager)
Telephone:	+34928577050
Mobile:	+34667197317
Fax:	+34-928 577 063
E-mail:	PRMartino@aena.es
AFTN:	GCCCCZGZX
SITA:	LPAFOYA

Name of Office:	Aeropuertos Españoles y Navegación Aérea (AENA)
Contact person:	Patricia Ruiz Martino (GCCC Operations Manager)
Telephone:	+34928577050
Mobile:	+34667197317
Fax:	+34-928 577 063
E-mail:	PRMartino@aena.es
AFTN:	GCCCCZGZX
SITA:	LPAFOYA

PORTUGAL

Name of agency:	Aeroportos e Navegação Aérea (ASA)
Contact person:	Carlos Brito
Telephone:	+238 241 13 72/241 92 00
Mobile:	+238 993 49 34
Fax:	+238 241 33 36
E-mail:	calbrito@asa.cv ; klaybrito@hotmail.com
AFTN:	GVACFDPX
SITA:	NIL

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

Name of Office:	Department of Assessment and Quality Assurance (DAQA)
Contact person:	Carlos Brito
Telephone:	+238 241 13 72/241 92 00
Mobile:	+238 993 49 34
Fax:	+238 241 33 36
E-mail:	calbrito@asa.cv ; klaybrito@hotmail.com
AFTN:	GVACFDPX
SITA:	NIL

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

Contact person:	Franklin Hoyer: Regional Director
Name of Office:	Lima ICAO Regional Office
Telephone.	+ 511 611 8686
Telephone.	+51981373075
Residential Telephone:	
E-mail	fhoeyer@lima.icao.int

Contact person:	Oscar Quesada: Regional Sub Director
Name of Office:	Lima ICAO Regional Office
Telephone.	+ 511 611 8686
Telephone.	+51994072976
Residential Telephone:	
E-mail	oquejada@lima.icao.int

Contact person:	Celso Figueiredo: ATM RO
Name of Office:	Lima ICAO Regional Office
Telephone.	+ 511 611 8686
Telephone.	
Residential Telephone:	
E-mail	cfigueiredo@lima.icao.int

IATA (SOUTH AMERICA)

The South American unit assigned the responsibility of monitoring developments and co-ordination contingency arrangements with member airlines:

Name of agency:	IATA
Contact person:	Peter Cerdá
Telephone:	+1 305 266 7552
Mobile:	+1 305 582 1538
Fax:	+1 305 266 7718
E-mail:	cerdap@iata.org
SITA:	MIAELXB

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

Name of Office:	IATA
Contact person:	Peter Cerdá
Telephone:	+1 305 266 7552
Mobile:	+1 305 582 1538
Fax:	+1 305 266 7718
E-mail:	cerdap@iata.org
SITA:	MIAELXB

SOUTH AFRICA

Name of agency:	Air Traffic & Navigation Services (ATNS) PTY LTD.
Contact person:	Johnny Smit
Telephone:	+27 11 928 6526
Mobile:	+27 82 823 8450
Fax:	+27 11 395 1045
E-mail:	johnnys@atns.co.za
AFTN:	FAATMATS
SITA:	JNBXCYP

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

Name of Office:	Central Airspace management Unit (CAMU)
Contact person:	Sandile Maphanga
Telephone:	+27 11 928 6433
Mobile:	+27 82 085 3429
Fax:	+27 11 928 6420
E-mail:	sandilem@atns.co.za
AFTN:	FAJSCAMU
SITA:	JNBXCYP

10.3 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:	Seboeso Machobane Regional Officer Air Traffic Management
Name of Office:	ICAO ESAF Office, Nairobi
Telephone.	+254 20 762 2395
Telephone.	+254 20 762 2372
Residential Telephone:	+254 717 555 811
E-mail	seboeso.machobane@icao.unon.org

During a contingency situation, the respective National Contingency unit will liaise with the FIRs involved through the LIMA ICAO / ICAO ESAF Regional Office/s.

The ICAO ESAF/ LIMA ICAO Regional Office will:

- a. Closely monitor the situation and coordinate with all affected States/Territories/International Organisations and the IATA Regional Office, so as to ensure air navigation services are provided to international aircraft operations in the AFI region;
- b. Take note of any incidents reported and take appropriate action;
- c. Provide assistance as required on any issue with the Civil Aviation Administration involved in the contingency plan; and
- d. Keep the President of the Council of ICAO, the Secretary General, C/RAO.D/ANB and C/ATM continuously informed on developments, including activation of the contingency plan.

11. ATS CONTINGENCY PLAN – SOUTH ATLANTIC OCEANIC FIRS

11.1. Airspace Availability for Landing and Over Flights with partial disruption of services.

The establishment of contingency procedures including contingency routes with the following services available, for relevant NOTAM action see APPENDIX B:

Oceanic Service

In the possible event of the HF system becoming unserviceable, aircraft operating in SAT Oceanic airspace are required to maintain last assigned flight level until clearing the effected FIR area of responsibility, unless a level change has been approved through one of the following communication sources:-

Aircraft equipped with ADS/CPDLC operating within this airspace are requested to contact, if available, the effected FIR via ADS/CPDLC on the published address for FANS1 equipped aircraft or FANS/A equipped aircraft.

11.2 Airspace Available But No Services at All; Possible Actions By Airspace Users.

- a) Avoidance of airspace;
- b) Flight level allocation scheme through FIR;
- c) Co-ordination with adjacent FIRs;
- d) NOTAM action (See Appendix B).

12 BASIC PRINCIPLES

12.1.1 The present plan is based on the following principles:

12.1.1 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.

12.1.2 Air Traffic Services are assumed to be limited or not available within the FIRs mentioned.

12.1.3 A flight level allocation scheme is applied so that over points of crossing or converging traffic, vertical separation will always be provided.

13 SYSTEM OF CONTINGENCY ATS ROUTES

13.1 A system of contingency ATS routes within the South Atlantic (EUROSAM CORRIDOR) is established as follows:

13.1.1 Aircraft routing from Brazil (Atlantico Oceanic FIR) to Europe (via Dakar Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

JOBER – UN741 FL 280 or FL360.

13.1.2 Aircraft going from Europe (via Dakar Oceanic FIR) to Brazil (Atlantico Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

UN741 - JOBER FL 290 or FL330.

13.1.3 Aircraft routing from Brazil (Atlantico Oceanic FIR) to Europe (via Dakar Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

INTOL – UN873 FL 280 or FL360.

Note: UN873 to be a Uni-directional route East bound only during contingency situations.

13.1.4 Aircraft going from Europe (via Dakar Oceanic FIR) to Brazil (Atlantico Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

UN857 – NEURA FL330.

Note: UN857 to be a Uni-directional route West bound only during contingency situations.

13.1.5 Aircraft routing from Brazil (Atlantico Oceanic FIR) to Europe (via Dakar Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

REGIS – UL206, FL310.

13.1.6 Aircraft going from Europe (via Dakar Oceanic FIR) to Brazil (Atlantico Oceanic FIR) will be guided through the ATS route network of the FIR, according to the following:

UL206 - REGIS FL320.

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

(Random route through the AORRA) cross EUROSAM CORRIDOR maintaining FL380.

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

(Random route through the AORRA) cross EUROSAM CORRIDOR maintaining FL350.

13.1 Within the Johannesburg Oceanic FIR, a system of contingency ATS routes is established as follows:

13.1.9 Aircraft routing from Luanda FIC Oceanic FIR to Johannesburg Oceanic FIR will be guided through the ATS route network of the FIR, according to the following:

TERBA – BOSNI – ILDER – IMPOK – GEVIN – UBVER – UVGOD - IMLUT- CTV
FL 270 or FL350.

13.1.10 Aircraft going from Johannesburg Oceanic FIR to Luanda FIC Oceanic FIR will be guided through the ATS route network of the FIR, according to the following:

CTV – IMLUT – UVGOD – UBVER – GEVIN – IMPOK – ILDER – BOSNI - TERBA,
FL 280 or FL380.

13.1.11 Aircraft routing from Brasília FIR to Johannesburg FIR will be guided through the ATS route network of the FIR, according to the following:

CIDER (Random route through the AORRA), enter Cape Town FIR at ITGIV – ANTEM
–CTV - UZ2, FL290 or FL390.

13.1.12 Aircraft going from Johannesburg FIR to Brasília FIR will be guided through the ATS route network of the FIR, according to the following:

UQ10 - CTV – ANTEM (Random route through the AORRA), ITGIV – CIDER FL 280
or FL360.

13.1.13 Aircraft going from Ezeiza FIR to Cape Town FIR will be guided through the ATS route network of the FIR, according to the following:

MUNES - (Random route through the AORRA) – ITLIK - ANTEM, FL270 or FL370.

13.1.14 Aircraft going from Cape Town FIR to Ezeiza FIR will be guided through the ATS route network, according to the following:

ANTEM - ITLIK - (Random route through the AORRA) - MUNES, FL320.

13.1.16 Aircraft routing from Windhoek FIR to Cape Town FIR will be guided through the ATS route network of the FIR, according to the following:

WHV – KTV – KEBAT - AGV - NVV – WY - CTV, FL290.

13.1.17 Aircraft routing from Cape Town FIR to Windhoek FIR will be guided through the ATS route network of the FIR, according to the following:

CTV- WY- NVV- AGV- KEBAT- KTV -WHV, FL300.

14 PROCEDURES TO BE FOLLOWED BY ATS UNITS

- 14.1 Within the South Atlantic, filed flight plan messages shall continue to be transmitted through the AFTN and processed as per normal procedure.
- 14.2 The adjacent FIRs, shall be responsible for:
- a) Transmitting of flight plans and estimate messages, to the extent practicable, through the AFTN:
 - I. A current flight plan message, at least one (1) hour before the aircraft's estimated time of arrival over the relevant entry point of the next Oceanic FIR.
 - II. An estimated message for the relevant entry point of a next Oceanic FIR, at least thirty (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 authorising 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) 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 FIRs and an estimated time of arrival at destination, on the contingency air traffic route used.
 - f) The adjacent FIRs shall be responsible for informing aircraft inbound of contingency measures within the respective Oceanic FIR's. Neighbouring FIR's shall in turn advise the intentions of the affected flight.

15 PROCEDURES TO BE FOLLOWED BY AIRCRAFT

- 15.1 All aircraft transiting through the Cape Town, Johannesburg and Johannesburg Oceanic FIR's shall strictly comply with the following:
- a) To operate along or as close as possible to the centreline of the assigned contingency air traffic route;

- b) Pilots shall adhere to the IATA Inflight Broadcast Procedures (IFBP) and maintain a continuous listening watch on the VHF frequency 126.9 MHz as well as the published VHF and / or HF frequencies as per SA-AIP (Reference ENR 2.1). 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 route. In the event of an emergency, traffic shall transmit blind on these published frequencies at the commencement and completion of any manoeuvre.
- c) Except in cases of emergencies and for flight safety reasons, aircraft operating within South African airspace shall maintain the last assigned Flight Level until clearing the South African area of responsibility, unless a level change have been approved through one of the means as prescribed in paragraph 7.1 (b).
- d) An aircraft experiencing an emergency or for flight safety reasons, that are unable to maintain an assigned flight level, shall climb or descend well to the right of the centreline of the contingency air traffic route being flown. Aircraft shall transmit on the IBFP VHF frequency 126.9 MHz as well as on the published frequencies at the commencement and completion of any manoeuvre. All transmissions shall comprise of the following: aircraft callsign, the aircraft position, the flight levels being vacated and crossed, etc.).
- e) Aircraft shall maintain an assigned flight level at least ten (10) minutes before entering the neighbouring FIR.
- f) Aircraft intending to enter the Cape Town, Johannesburg or Johannesburg Oceanic FIRs shall include in the last position report with the adjacent FIR the estimated time of arrival over the relevant entry point of the Cape Town, Johannesburg or Johannesburg Oceanic FIRs and an estimated time of arrival at destination (for flights terminating within South Africa), on the contingency air traffic route used
- g) Pilots shall contact the adjacent FIR at least ten (10) minutes before the estimated time of arrival over the relevant entry point of the adjacent FIR.
- h) To display navigation and anti-collision lights at all times during the transit of Cape Town, Johannesburg and Johannesburg Oceanic FIR's.
- i) Pilots shall maintain own longitudinal separation of twenty (20) minutes from the preceding aircraft at the same cruising level.

Appendix A

NOTAM Action

1. NOTAM Action.

In the event of degradation of air traffic services, the adjacent FIRs and the ICAO Regional Office shall be advised by the most expeditious method available and supported by the relevant NOTAM action. The required collective addresses to be utilised are contained in paragraph two of this Appendix. The following examples of the NOTAM pro-forma shall be used and addressed accordingly:

1.1 Avoidance of Airspace

(NOTAM) ... Due to disruption of ATS within (COUNTRY-----), all ACFT are advised to avoid the (COUNTRY -----) Oceanic FIRs.

1.2 Airspace Available With Limited ATS

a) (NOTAM) ... Due to anticipated disruption of ATS in the (COUNTRY -----) Oceanic FIRs all ACFT are advised that there will be limited ATS. Pilots may experience DLA and may consider avoiding ----- airspace.

b) (NOTAM) ... Traffic not wishing to adhere to the published contingency plan shall avoid the (COUNTRY -----) Oceanic FIRs.

1.3 Airspace Available But Nil Services

(NOTAM) ... Due to disruption of ATS in the (COUNTRY -----) Oceanic FIRs, ACFT wishing to enter (COUNTRY -----) airspace shall strictly adhere to following contingency flight level allocation scheme and adhere to the procedures below:

Due to reduced availability of Air Traffic Services in (COUNTRY -----) Oceanic FIRs a contingency plan is established pursuant to the ICAO Air Traffic Services Planning Manual (Doc. 9426, Part II, Section I, Chapter I, paragraph 1.3).

The purpose of this NOTAM is to make airspace users and adjacent FIRs aware of the intended procedures and route network. The contingency plan shall enter into force on *(date/ time)*.

2. AFTN Addresses

2.1 The following AFTN addresses shall be used when informing the affected neighbouring and regional FIRs:

- a) FAZZCONT This collective address contains those addresses for the neighbouring affected FIRs.
- b) FAZZAOPS This collective address contains those addresses for the local airline operators.
- c) FAZZFOPS This collective address contains those addresses for the foreign international operators.

Appendix B

IATA In-flight Broadcast Procedure (IFBP) (SAT Region)

1. Listening Watch

- 1.1 In the event of a total interruption, while the Contingency Plan is not activated, aircraft overflying the contingent FIR shall apply the procedures stipulated for air / ground communications failure, set forth in Annex 2 to International Civil Aviation Convention, including the differences published in GEN 1-7, as well as to keep permanent listening watch on the frequency of the flying specific sector and air/air coordination frequency (123.45 MHz) for Broadcast Procedures of Flight Information.
- 1.2 A listening watch should be maintained on the designated frequency (123.45 MHz and 126.9 MHz in AFI), ten (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 where the IATA In-flight Broadcast Procedure (IFBP) are applicable, should commence the listening watch as soon as appropriate and the listening watch should be maintained until leaving the airspace.

2. Time of Broadcast

- 2.1 A broadcast should be made in English:
 - a) Ten (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, or as soon as appropriate;
 - b) Five (5) minutes prior to crossing a reporting point;
 - c) Five (5) minutes prior to crossing or joining an ATS route;
 - d) At twenty (20) minute intervals between distant reporting points;
 - e) Two (2) to five (5) minutes, where possible, before a change in flight level;
 - f) At the time of a change in flight level; and
 - g) At any time considered necessary by the pilot.

3. Operating Procedures

3.1 Changes of Cruising Level

- 3.1.1 Cruising level change should not be made within the designated airspace unless considered necessary by pilots to avoid traffic conflicts, for weather avoidance, or for other valid operational reasons;
- 3.1.2 When cruising level changes are unavoidable, all available aircraft lighting, which would improve the visual detection of the aircraft, should be displayed while changing levels.

3.2 Collision Avoidance

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

- a) Unless an alternative manoeuvre appears more appropriate, descend immediately 1000ft if above FL290 or 500 ft if at or below FL290;
- b) Display all available aircraft lighting, which would improve the visual detection of the aircraft;
- c) As soon as possible reply to the broadcast advising of the action being taken;
- d) Notify the action taken on the appropriate ATS frequency; and
- g) As soon as the situation has been rectified, resume normal flight level, notifying the action on the appropriate ATS frequency.

3.3 Normal Position Reporting Procedures

3.3.1 Normal position reporting procedures should be continued at all times, regardless of any action taken to initiate or acknowledge a traffic information broadcast.

3.4 Operation of Transponders

3.4.1 Pilots should ensure that transponder procedures as contained in ICAO PANS OPS Doc 8168 are complied with and in the absence of other directions from ATC, operate the transponder on Mode A and C Code 2000¹.

¹ *Pilots are advised to ensure operation of transponders even when outside radar coverage in order to enable TCAS equipped aircraft to identify conflicting traffic.*

3.5 Use of TCAS

3.5.1 TCAS equipped aircraft should have TA/RA mode selected at maximum range.

4. Enforcement

4.1 All airlines operating in the AFI region are requested to:

- a) Ensure that their aircrews are fully briefed on these procedures; and
- b) Ensure that their charts and flight documentation are fully amended to reflect the foregoing.

4.2 Any operator reported to IATA as not applying the procedure shall be contacted immediately, informed of the procedure and requested to comply with the prescribed IATA procedures.

4.3 **Distribution**

4.3.1 To assist in ensuring widest possible applicability, this procedure is distributed to all known operators in the AFI Region, as well as the following agencies/ organisations:

ATLAS	KSS (Chart Department)	IBAA	Jeppesen
IAOPA	IAC		

A. EXAMPLE OF A BROADCAST

- a) “ALL STATIONS” given only once to attract attention;
- b) “THIS IS AZ ... “ (Callsign);
- c) “FL ...”;
- d) “NORTH-EAST BOUND LAGOS-ROME VIA UA400”;
- e) “POSITION ... AT ...(UTC)”;
- f) “ESTIMATED POSITION ... AT ...(UTC)”;
- g) “AZ ...” (Callsign);
- h) “FL ...”;
- i) “NORTH-EAST BOUND” (Direction of flight through the area).