



Agenda Item 2: Air navigation issues.
2.1 Review of the Summary of Discussions of the Fourth C/CAR Working Group Meeting.

GUIDELINES FOR A REGIONAL ATM CONTINGENCY PLAN

(Presented by the Secretariat)

SUMMARY
This Working Paper presents guidelines to develop a Regional ATM Contingency Plan for the CAR region.
References:
<ul style="list-style-type: none">• Annex 11• Doc 4444, PANS- ATM• Report of the GREPECAS/10 Meeting (Las Palmas, Canary Islands, Spain, 23-27 October 2002)• Report of the NACC/DCA/1 Meeting (Grand Cayman, Cayman Islands, 8-11 October 2002)• Report of the Fourth Central Caribbean Working Group Meeting (C/CAR WG/4) (Santo Domingo, Dominican Republic, 9 to 13 February 2004)

1. Introduction

1.1 Annex 11 introduces standards of applicability since 27 November 2003 for States/Territories/International Organizations to develop and promulgate contingency plans for their implementation so as to ensure the continued safety of air navigation in the event of partial or total potential disruption of air traffic services (ATS) and/or related supporting services for international civil aircraft operations. Attachment D has the material relating to contingency planning, which includes information on responsibility, preparatory action, coordination, development, promulgation, application, etc.

1.2 Likewise, Doc 4444, PANS-ATM, Chapter 15 provides contingency procedures to be observed by ATC units within their respective CTA/UTA/FIR, such as communication failure, air-ground communications failure; ground radio failure; blocked frequency; unauthorized use of ATC frequency; ATS Surveillance failure; emergency separation; automated warnings (STCA, MSAW, GPWS) ACAS; and other special procedures for in-flight contingencies.

1.3 The CAR Region developed an ATS contingency plan for the Y2K event bringing the regional and even the global efforts into the preparation by States/Territories/International Organizations of national contingency plans to support air navigation services for users. In this respect, the GREPECAS/10 Meeting through Conclusion 10/8 requested that States/Territories/International Organizations prepare their national ATS contingency plans based in the coordination made for the Y2K and agree the most appropriate measures for any event that might affect the provision of ATS and supporting services under their airspace of responsibility. The ICAO NACC Regional Office contributed to achieve this purpose.

1.4 The NACC/DCA/1 meeting, based on the work made by E/CAR/IWG/26 meeting, agreed to support the development of Contingency Plan and formulated the following conclusion:

CONCLUSION 1/19 AGREEMENT ON ATS CONTINGENCY PLANS AND SUPPORTING SERVICES FOR THE CAR REGION

That, States/Territories/International Organizations in the CAR Region (CAR):

- a) update not later than **27 November 2003** their ATS contingency plans and supporting services for their Flight Information Regions (FIRs), and develop, where possible, bilateral and/or multilateral agreements with States/Territories/International Organizations responsible for neighbouring airspace using the model presented in Appendix C to this Report;*
- b) consider the ATS Contingency Plans for the Flight Information Regions (FIRs) mentioned in a) above as duly coordinated basic elements of the ATS Contingency Planning in the CAR Region;*
- c) send a copy of their ATS Contingency Plan to the ICAO NACC Regional Office; and*
- d) support, whenever possible, neighbouring States/Territories/International Organizations when ATS Contingency Plans are to be implemented, in case of disruption or potential disruption of air traffic services or related supporting services for international civil aircraft operations.*

1.5 Conclusion 4/3 of the 4th Meeting of the C/CAR WG, in its item c) makes reference to the Contingency Plans. It would be convenient to replace this item by the Draft Conclusion presented for the Meeting's consideration in paragraph 4.1 to this Working Paper.

2. Discussion

2.1 The States are responsible to ensure to the international civil aviation that their ATS continue operating and that major international air routes remain open in the event of partial or total disruption of ATS through the development of a regional ATM Contingency Plan. For preparatory measures, time is essential to coordinate contingency plans if hazards to air navigation are to be reasonably prevented. Regional contingency plans are established upon agreements for the anticipated or real interruption of air traffic services or related support services.

2.2 The change of traffic flows is something that States/Territories/International Organizations may need time to prepare and that can be done in advance. Therefore, all parties involved, particularly States concerned and IATA regional office, should participate in the development of the contingency plans and be prepared to implement the related measures, prior to its publication in the respective NOTAM, especially the parts that would affect international air operations such as the particular closure of airspace, etc.

2.3 There may be information that needs to be acquired and included in an Appendix, such as a map, other re-routings for flight planning purposes by users and radar services to be provided by adjacent ATS units while aircraft are being rerouted.

2.4 Meanwhile, after coordination and agreement among all parties concerned the ATM Regional Contingency Plan might be submitted for possible approval by the President of the Council of ICAO. The recent experiences on activation of this type of Contingency Plans took place in the CAR Region, where the ICAO NACC Regional Office coordinated the contingency plans for Port au Prince FIR and Santo Domingo FIR.

2.5 Considering the aforementioned, the ICAO NACC Regional Office has sent letters requesting to States/Territories/International Organizations of the CAR Region their ATS National Contingency Plans. Also the NACC Office has developed and coordinated with ICAO Headquarters guidelines for ATM Regional Contingency Plans in coordination with the Civil Aviation Authorities of the States concerned as pointed out in the **Appendix** to this Working Paper.

3. Conclusion

3.1 The States/Territories/International Organizations are responsible for providing air traffic services in particular portions of airspace and also responsible in the event of disruption or potential disruption of ATS, for instituting measures to ensure safety of international civil aviation operations and, where possible, for making provisions for alternative facilities and services. To that end, States/Territories/International Organizations should develop, promulgate and implement appropriate contingency plans in consultation with other States/Territories/International Organizations and airspace users and with the ICAO NACC Regional Office, in accordance with the guidelines of the Appendix to this Working Paper, whenever the effects of the service disruption are likely to affect the services in adjacent airspace.

3.2 The regional guidelines for an ATM Regional Contingency Plan have been developed in recognition of the fact that circumstances before and during events causing disruptions of services to international civil aviation vary, and the contingency measures, including access to designated aerodromes for humanitarian reasons, in response to specific events and circumstances must be adapted to those circumstances. The purpose of the guidelines is to assist for the safe and orderly flow of international air traffic in the event of disruptions of air traffic services and related supporting services and to preserve the availability of major world air routes within the air transportation system in such circumstances.

3.3 The role and experience of ICAO in the field of contingency planning permits the ICAO NACC Regional Office to initiate and coordinate with States/Territories/International Organizations the appropriate regional contingency measures in order to ensure ATM safety in the event of partial or total disruption of air navigation services.

3.4 In view of all the above, it is necessary that the Meeting recommends to the States/Territories/International Organizations to develop an ATM Regional Contingency Plan. In this regard, the Meeting should bear in mind the paragraphs above.

4 Suggested action

4.1 The Meeting is invited to approve the following:

DRAFT

CONCLUSION 7/xx

**DEVELOPMENT OF ATM CONTINGENCY PLANS FOR THE
CAR REGION**

That, C/CAR States/Territories/International Organizations that have not yet done so:

- a) develop their ATM contingency plans and supporting services for their airspace (CTA/UTA/FIR) and aerodromes under their jurisdiction;
- b) submit to the ICAO NACC Regional Office a copy of their ATM Contingency Plan by **30 November 2004**; and
- c) carry out bilateral and/or multilateral agreements with States/Territories/International Organizations responsible for neighbouring airspace, in coordination with the ICAO NACC Regional Office, to develop an ATM Regional Contingency Plan using the guidelines presented in the Appendix to this Working Paper.

APPENDIX

ATM REGIONAL CONTINGENCY PLAN FOR CTA/UTA/FIR

OBJECTIVE: 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. The contingency plan should be designed to provide alternative routes, using existing airways in most cases, which will allow aircraft operators to fly through or avoid airspace within the (XXX) CTA/UTA/FIR.

AIR TRAFFIC MANAGEMENT

ATS Responsibilities

Tactical ATC considerations during periods of overloading may require re-assignment of routes or portions thereof.

Alternative routes should be designed to maximize the use of existing ATS route structures and communication, navigation and surveillance services.

In the event that ATS cannot be provided within the (XXX) CTA/UTA/FIR, the Civil Aviation Authority shall publish the corresponding NOTAM indicating the following:

- a) Time and date of the beginning of the contingency measures;
- b) Airspace available for landing and overflying traffic and airspace to be avoided;
- c) Details of the facilities and services available or not available and any limits on ATS provision (e.g., ACC, APP, TWR and FIS), including an expected date of restoration of services if available;
- d) Information on the provisions made for alternative services;
- e) ATS contingency routes;
- f) Procedures to be followed by neighbouring ATS units;
- g) Procedures to be followed by pilots; and
- h) Any other details with respect to the disruption and actions being taken that aircraft operators may find useful.

In the event that the CAA is unable to issue the NOTAM, the (alternate) CTA/UTA/FIR will take action to issue the NOTAM of closure airspace upon notification by corresponding CAA or the ICAO NACC Regional Office.

Separation

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).

Level Restrictions

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

Other measures

Other measures related to the closure of airspace and the implementation of the contingency scheme with the (XXX) CTA/UTA/FIR may be taken as follows:

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

TRANSITION TO CONTINGENCY SCHEME

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 the contingency scheme as well as what may be promulgated by a State via NOTAM or AIP.

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.

ATS providers should recognize that when closures of airspace or airports are promulgated, individual airlines might have different company requirements as to their alternative routings. ATC should be alert to respond to any request by aircraft and react commensurate with safety.

TRANSFER OF CONTROL AND COORDINATION

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. ATS providers should also review current coordination requirements in light of contingency operations or short notice of airspace closure.

PILOTS AND OPERATOR 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 guard the VHF emergency frequency 121.5 MHz and should operate their transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where secondary surveillance radar (SSR) is used for ATS purposes. Transponders should be set on a discrete code assigned by ATC or select code 2000 if ATC has not assigned a code.

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 121.5 MHz and 243 MHz if equipped; and
- d) Set transponder to code 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.

OVERFLIGHT APPROVAL

Aircraft operators should obtain overflight approval from States/Territories/International Organizations for flights operating through their jurisdiction of airspace, where required. In a contingency situation, flights may be rerouted at short notice and it may not be possible for operators to give the required advanced notice in a timely manner to obtain approval. States/Territories/International Organizations responsible for the airspace in which contingency routes are established should consider making special arrangements to expedite flight approvals in these contingency situations.

CONTINGENCY UNIT

The ATM national contingency unit assigned the responsibility of monitoring developments that may dictate the enforcement of the contingency plan and coordination of contingency arrangements is:

Name of Agency:

Contact Person:

Telephone:

Fax:

Email:

During a contingency situation, the National Contingency Unit will liaise with the involved FIRs through the ICAO NACC Regional Office.

The ICAO NACC Office will:

- a) closely monitor the situation and coordinate with all affected States/Territories/International Organizations and the IATA Regional Office, so as to ensure air navigation services are provided to international aircraft operations in the CAR Region;
- b) take note of any incidents reported and take appropriate action;
- c) provide assistance as required on any issue with the Civil Aviation Administrations 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.

REROUTING SCHEME

In the event of closure the (XXX) CTA/UTA/FIR, aircraft operators should file their flight plans using the alternative contingency routes listed in the scheme below in order to ensure avoidance in that airspace (CTA/UTA/FIR).

Present ATS ROUTE	CONTINGENCY ROUTINGS	FIRs INVOLVED
In lieu of:	(ATS unit) provides ATC on the following routings: CR1: CR2: CR3:	XXX: In coordination with XXX
In lieu of:	(ATS unit) provides ATC on the following routing: CR4:	XXX: In coordination with XXX

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All aircraft should establish and maintain contact on published VHF or HF frequencies with the (XXX) ATS unit (APP/ACC/FIC) responsible for the airspace being traversed.

List of points of contact of all concerned States/Territories/International Organizations, IATA and ICAO NACC Office.

State /International Organization	Point of contact	Telephone/Fax	E-mail
		Tel. Fax.	
		Tel. Fax.	
		Tel. Fax.	
IATA		Tel. Fax:	
ICAO	Raymond Ybarra Víctor Hernández	Tel.: (5255) 5250 3211 Fax: (5255) 5203 2757 AFTN: MMMXICOX	rybarra@mexico.icao.int vhernandez@mexico.icao.int icao_nacc@mexico.icao.int

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