



International Civil Aviation Organization

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

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Agenda Item 3: Specific Air Navigation Activities and Developments
3.5 Air Traffic Management (ATM)

GUIDELINES FOR AN ATM REGIONAL CONTINGENCY PLAN

(Presented by the Secretariat)

SUMMARY
This Working Paper presents guidelines to develop an ATM Regional Contingency Plan for the CAR regions.
References: • Annex 11 • Doc. 4444, PANS- ATM • Report of the GREPECAS/10 Meeting • Report of the NACC/DCA/1 Meeting

1. Introduction

1.1 The CAR Region developed an ATS contingency planning for the Y2K event bringing the regional and even the global efforts into the preparation by States 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 review their national ATS contingency plans prepared and coordinated for the Y2K problem and agree upon the most appropriate measures to adapt them to any event that might affect, either partially or totally the provision of ATS and supporting services; and that the ICAO Regional Offices contribute in achieving this purpose.

1.2 In this regard, the States/Territories/ International Organizations should prepare and convert their Y2K national contingency plans into an updated Regional Contingency Plan for the CAR Region, considering the airspace under their responsibility.

1.3 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.*

1.4 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 partially or total potential disruption of air traffic services (ATS) and/or related supporting services for international civil aircraft operations.

1.5 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 in-flight contingencies

1.6 As follow-up to the aforementioned, the ICAO NACC Regional Office has sent letters to States/Territories/International Organization requesting the status of implementation of their ATS Contingency Plans.

2. Discussion

2.1 The States are responsible to take action in developing an ATM Contingency Plan that ensures to the international civil aviation that they continue to operate and that major international air routes remain open in the event of partially or total disruption of ATS. Annex 11, Attachment D refers to material relating to contingency planning, which includes information on responsibility, preparatory action, coordination, development, promulgation, application, etc.

2.2 A Regional Contingency Plan should be developed in advance by the Civil Aviation Authorities of the States concerned and reviewed by the ICAO NACC Regional Office.

2.3 Also, it is necessary that 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 plans, prior to the publication of the NOTAM on the contingency measures, especially the parts that would affect international air operations such as the particulars of the NOTAM that would be published concerning the closure of airspace, etc. The change of traffic flows is something that States may need time to prepare and that can be done in advance.

2.4 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.

2.5 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.

3. Conclusion

3.1 The States 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 should develop, promulgate and implement appropriate contingency plans in consultation with other States and airspace users and with 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 in preserving 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 and International Organizations the appropriate regional contingency measures in order to ensure ATM operational safety in the event of partially 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:

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CONCLUSION 28/xx

ATM CONTINGENCY PLAN FOR THE CAR REGION

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

- a) develop their ATS contingency plans and supporting services for their airspace (CTA/UTA/FIR) and aerodromes of jurisdiction;
- b) submit to the ICAO NACC Regional Office a copy of their ATS Contingency Plan not later than **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.

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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 2.2.8. 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 over-loading 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 to the Chicago Convention, paragraph 3.8 and Appendix 2, Sections 2 and 3.

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Pilots need 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 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 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:

The National Contingency Unit will liaise through the ICAO NACC Regional Office.

The ICAO NACC Office will:

- a) closely monitor the situation and coordinate with all affected States 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 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

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, 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 Victor Hernandez	Tel.: (5255) 5250 3211 Fax: (5255) 5203 2757 AFTN: MMMXICOX	rybarra@mexico.icao.int vhernandez@mexico.icao.int icao_nacc@mexico.icao.int