SAM/IG/5
WP/07
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International Civil Aviation Organization
South American Regional Office

FIFTH WORKSHOP/MEETING OF THE SAM IMPLEMENTATION GROUP (SAM/IG/5)
REGIONAL PROJECT RLA/06/901

Lima, Peru, 10 to 14 May 2010

Agenda Item 2: Optimization of the ATS routes

Proposal for amendment to the Air Navigation Plan

(Presented by Julio Pereira, Brazil)

Summary

This working paper presents information on a proposal for amendment to the Air Navigation Plan model, with a view to the implementation of Version 01 of the ATS Routes Network.

References:

- Fourth Workshop/Meeting (SAM/IG/5) Report
- SAM ATSRO/1 Report

1 Background

1.1 The Third Meeting of the South American Region Implementation Group (SAM/IG/3) carried out in Lima, Peru, from 20 to 24 April 2009, taking into consideration the result of the 36th ICAO Assembly and ALLPIRG/5 Meeting, approved through Conclusion SAM/IG/3-1, that ICAO SAM States take pertinent actions to follow guidelines and comply with deadlines established in the ATS Routes Network Optimisation Programme to reach the efficient use of the airspace in the SAM Region, in order to achieve an inter-functional air traffic management system, at disposal of all users during all flight phases, which complies with all target safety levels, provide economically optimal operations, be sustainable with respect to environment and meet national aviation safety levels.

1.2 Based on the planning Criteria and in the analysis/diagnosis of the SAM ATS Routes Network, it was concluded that the SAM routes network optimisation should be carried out in phases, in order to achieve the corresponding operational benefits as early as possible. As of Phase 2, the concept of versions of the routes network would be incorporated, keeping in mind that the airspace structure is changing, depending on air traffic movement growth; the movement of air traffic demand from one region or airport to another airport; and the available technology, among other aspects. The use of versions in the routes network reflects the need for a periodical integrated revision, in order to ensure a better possible airspace structure always.

2 Analysis of the draft version 1 of SAM ATS Routes Network

2.1 The Meeting analysed the draft version 01 of the SAM ATS Routes Network, based on the tables developed by Regional Project RLA/06/901, with the main goal to identify those routes that should be eliminated, taking into account those that had air traffic movement lower than 30 monthly flights.

2.2 SAM/IG/5-WP/03 submits for consideration of SAM States and International Organisations the result obtained in the ATSRO/1 Workshop.

3 Proposal for amendment to the CAR/SAM Air Navigation Plan Model

3.1 Keeping in mind the data available, before receiving the analysis made by States and IATA, as per Conclusion ATSRO/1-1, **Appendix A** to this working paper presents a Proposal for amendment to the CAR/SAM Air Navigation Plan Model so that once the meeting has reviewed and updated the results of the SAM ATS Routes Network Optimisation Workshop and the results of the revisions made by States and IATA, proceed to prepare and route a proposal for amendment to the CAR/SAM Air Navigation Plan, Volume I, Basic (Doc 8733).

4 Suggested action

4.1 The meeting is invited to:

a) Take note of the information provided in this working paper;

b) Based on the result obtained in the analysis of proposals provided by SAM States and IATA, as per Conclusion ATSRO/1-1, prepare a draft proposal for amendment to the CAR/SAM ANP, using the model presented at **Appendix A** to this working paper, with a view to implement Version 01 of the routes network; and

c) Consider that all changes contained in the proposal for amendment must be incorporated in the respective aeronautical information publications of SAM States for its updating.

APPENDIX A

Proposal for amendment to the CAR/SAM ANP - Volume I - Basic
Serial N° SAM XX - ATM

a) **Plan**: CAR/SAM Air Navigation Plan – Volume I - Basic
(Document 8733)

b) **Proposal for amendment:**

1. **Add,** as described below, the following routes: **UXxxx; UXxxx...**
(Cf – Doc. 8733, Volume I, Basic, Part V - Appendix A – Table ATS-1).

ESPACIO AÉREO SUPERIOR / UPPER AIRSPACE **UX xxx**		
Punto Significativo Significant Point	**Latitud Latitude**	**Longitud Longitude**
XXXXX	xx° xx’ xx’’S	0xx° xx’ xx’’ W
XXXXX	xx° xx’ xx’’ S	0xx° xxx’ xx’’ W
XXXXX	xx° xx’ xx’’ S	0xx° xx’ xx’’ W

2. **Realign,** as described, the following routes: **UXxxx, UXxxx, ...**
(Cf – Doc. 8733, Volume I, Basic, Part V – Appendix A - Table ATS-1)

ESPACIO AÉREO SUPERIOR / UPPER AIRSPACE UX xxx		
Punto Significativo Significant Point	**Latitud Latitude**	**Longitud Longitude**
~~**XXXXX**~~	~~xx° xx’ xx’’S~~	~~0xx° xx’ xx’’ W~~
~~XXXXX~~	~~xx° xx’ xx’’ S~~	~~0xx° xxx’ xx’’ W~~
XXXXX	xx° xx’ xx’’S	0xx° xx’ xx’’ W
XXXXX	xx° xx’ xx’’ S	0xx° xxx’ xx’’ W
~~XXXXX~~	~~xx° xx’ xx’’S~~	~~0xx° xx’ xx’’ W~~

3. **Delete,** as described below, the requirement of routes **UXxxx** in all its extension.
(Cf – Doc. 8733, Volume I, Basic, Part V – Appendix A - Table ATS-1)

ESPACIO AÉREO SUPERIOR / UPPER AIRSPACE UX xxx		
Punto Significativo Significant Point	**Latitud Latitude**	**Longitud Longitude**
~~XXXXX~~	~~xx° xx' xx''S~~	~~0xx° xx' xx'' W~~
~~XXXXX~~	~~xx° xx' xx'' S~~	~~0xx° xxx' xx'' W~~
~~XXXXX~~	~~xx° xx' xx''S~~	~~0xx° xx' xx'' W~~
~~XXXXX~~	~~xx° xx' xx'' S~~	~~0xx° xxx' xx'' W~~
~~XXXXX~~	~~xx° xx' xx''S~~	~~0xx° xx' xx'' W~~

c) **Originated by**: (States, Territories, International Organizations).

d) **Originators' reasons for the amendment:**

1) Within the framework of ATM evolution, as approved by the Third Regional Air Navigation Meeting (CAR/SAM/3 RAN) for CAR/SAM Regions, States and International Organizations originating this proposal, according to users, have considered that these routes shall improve air navigation in the SAM Regions.

2) During the..(*SAM/IG meeting*).., the implementation of routes **UXxxx; UXxxx; ...**was agreed to. Realign routes **UXxxx, UXxxx,....** Eliminate the requirement of route **UXxxx** … in all its extension.

3) All of them are part of the CAR/SAM ANP ATS routes network, Volume I, Basic. The implementation of the new routes and changes made to the aforementioned trajectories, shall enable a reduction of distance and flight time, with the consequent fuel saving and operational costs.

e) **Proposed date for implementation**

At least three AIRAC cycles after the proposal has been approved by ICAO Council, in accordance with specific implementation programmes established to this effect in coordination with the States/Territories/International Organizations.

f) **Proposal circulated to the following States/Territories and Organizations**:

Anguilla (UK)
Antigua and Barbuda
Argentina*****
Aruba (Netherlands)
Bahamas
Barbados
Belize
Bermuda (UK)
Bolivia*****
Brazil*****
British Virgin Islands (UK)
Canada
Cayman Islands (UK)
Chile*
Colombia*****
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador*
El Salvador
France
French Antilles (France)
French Guiana (France)
Germany
Grenada
Guatemala
Guyana*
Haiti
Honduras
Italy
Jamaica
Mexico
Montserrat
Netherlands Antilles (Netherlands)
Netherlands
Nicaragua
Panama
Paraguay*
Peru*
Puerto Rico (USA)
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Spain
Suriname*
Trinidad and Tobago
Turks and Caicos Islands (UK)
United Kingdom
United States
Uruguay*
Venezuela*
Virgin Islands (USA)

International Organizations
COCESNA
IATA*
IFALPA

g) **Secretariat's comments**:

1) The Third Meeting of the South American Region Implementation Group (SAM/IG/3) carried out in Lima, from 20 to 24 April 2009 under the auspices of Regional Project RLA/06/901, taking into the result of the 36th General Assembly of ICAO and the ALLPIRG / 5 Meeting through Conclusion SAM/IG/3-1, it was approved that ICAO SAM States take the pertinent actions to follow-up guidelines and comply with established deadlines in the ATS Routes Network Optimization Programme for the South American Region which will enable a wider use of such routes, thus larger number of airspace users of the mentioned airspace.

2) The trajectories have been configured keeping in mind the need for fuel saving and the economy of operations. The main goal of this optimization programme is to maximize the efficient use of the airspace, in order to achieve an inter-functional air traffic management system, at disposal of all users during all flight phases, complying with safety levels agreed, providing economically optimum operations, being sustainable with regard to the environment and meeting national aviation security requirements.

3) This amendment has been carried out attending the Strategic Objectives: C-Environment Protection and D-Efficiency.