



International Civil Aviation Organization

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

**Nineteenth Meeting of Directors of Civil Aviation of the Eastern Caribbean
(19th E/CAR DCA)**

Christ Church, Barbados, 6 to 9 December 2004

19th E/CAR DCA-WP/12

03/11/04

Agenda Item 3: Air Navigation Developments
3.3 Air Navigation Deficiencies

**ICAO CAR/SAM AIR NAVIGATION DEFICIENCIES DATABASE SPECIAL
IMPLEMENTATION PROJECT**

(Presented by the Secretariat)

SUMMARY

This paper presents a Special Implementation Project (SIP) approved by the ICAO Council for the enhancement of the ICAO CAR/SAM Air Navigation Deficiencies Database with the objective to provide secure on-line access to the deficiencies information to CAR/SAM States, Territories and selected International Organizations.

1. Introduction

1.1 The ICAO NACC and SAM Regional Offices have developed a database of the CAR/SAM air navigation deficiencies, using Microsoft Access software to facilitate the implementation of the uniform methodology for the identification, assessment and reporting of air navigation deficiencies by the Regional Offices and the GREPECAS Mechanism.

1.2 The database enables a more effective management of the reporting form of air navigation deficiencies in relation to data management, classification and presentation including States' Action Plans. The ICAO Council and Air Navigation Commission, when reviewing the GREPECAS/10 and 11 Meeting Reports remarked the benefit of using database technology for the follow-up of deficiencies. This was reiterated during the 11th Air Navigation Conference, held in Montreal from 22 September to 3 October 2003.

1.3 A concern expressed by States/Territories and International Organisations at several regional meetings which had not been resolved through the use of database software is that the correction of deficiencies is not incorporated in the database in a reasonable time-frame and is often not reflected upon the presentation of the deficiencies at the next opportunity, usually the next regional meeting in which the State participates.

1.4 It is clear that the established procedure for reporting the correction of deficiencies included in the reporting form requires notification by States or Users to the ICAO Regional Office informing that the correction has been completed. The ICAO Regional Offices then validates the reports and updates the database and the current information is presented in a working paper at the next sub regional meeting of States.

1.5 At several regional meetings, States have requested ICAO to enable on-line access to view the deficiencies information and to allow States to submit reports with updated corrective action information. Similarly, some International Organisations have requested access to the deficiencies information in between meetings to avoid follow-up of deficiencies which have already been corrected but of which they are not aware until the next regional meeting of States.

1.6 The GREPECAS/12 meeting, based on the ACG, expressed pre-approval on 15 December 2003 of Conclusion 3/2 of the Aerodromes and Ground Aids/Aerodrome Operational Planning Subgroup (AGA/AOP/SG/3), and adopted the following Conclusion:

**CONCLUSION 12/71 SPECIAL IMPLEMENTATION PROJECT TO FACILITATE AND
IMPROVE THE MANAGEMENT OF THE DEFICIENCIES
DATABASE**

That ICAO prepare and submit to the Council a proposal for a Special Implementation Project to develop a secure process for managing the ICAO air navigation deficiencies database for the CAR/SAM Regions on the Internet, permitting the controlled on-line introduction of updated information by States for their respective deficiencies and access to a frozen format of the information contained in the database by States, ACI, IATA and IFALPA.

1.7 In October 2003, as response to the numerous requests from States/Territories and International Organisations in the CAR/SAM Regions, a Special Implementation Project (SIP) proposal for the enhancement of the ICAO CAR/SAM Air Navigation Deficiencies Database was prepared. The SIP proposal was presented to the ICAO Council in C-WP/12189 dated 19 February 2004, which was reviewed in March 2004. The ICAO Council in the 8th meeting of its 171st Session approved the SIP.

1.8 The SIP has the objective to provide constant and secure on-line access to CAR/SAM States, Territories and selected International Organisations to consult the air navigation deficiencies information and to be able to submit on-line reports of updated information on its respective deficiencies. It has taken all the necessary measures to prevent unauthorised access to the public and representatives of the media, insurers and lawyers as well as to retain control of the validation management and publication of deficiencies information by the ICAO Regional Offices, which will be benefit to the States, Territories, International Organisations in the CAR/SAM Regions, the GREPECAS mechanism and ICAO to aim the diffusion, facilitation and follow-up of the deficiencies information contained in the CAR/SAM Air Navigation Deficiencies Database.

2. Project Description

2.1 The process and infrastructure of the project schematically illustrated in **Appendices A** and **B** respectively were developed by a Systems Analyst/IT specialist through the following activities:

- Database analysis
- Web Server implementation and security policies
- Database manager installation (MySQL)
- Database Application, indexing and printing development
- Physical Database migration
- Automate Database transference
- Testing and documentation

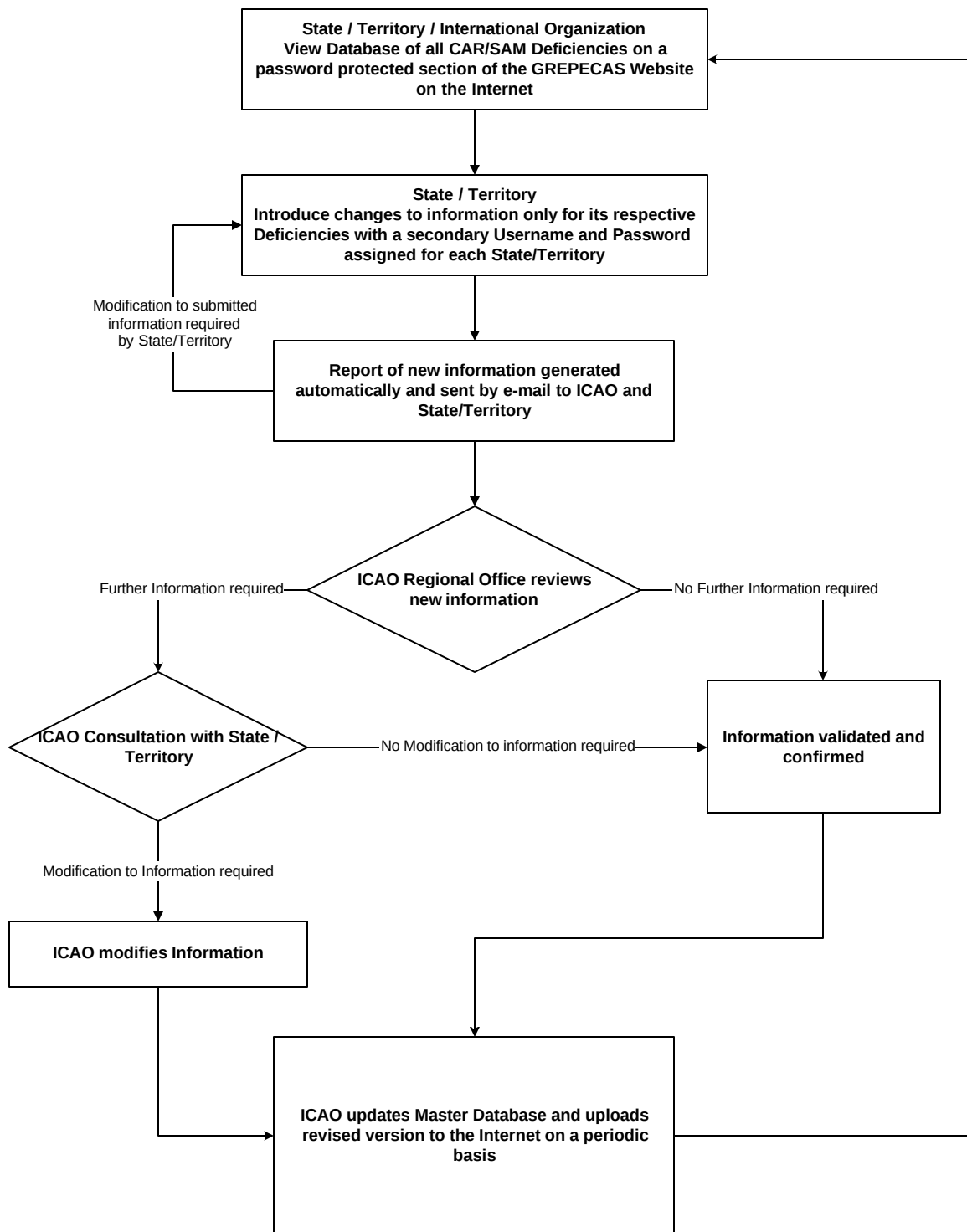
3. Project Programme

3.1 The project including preparatory activities commenced in August 2004, finished in September 2004 and will be available, by Official Communication to those concerned, in English and Spanish versions in the NACC Office web page.

3.2 The States, Territories and selected International Organisations will be able to access to the ICAO CAR/SAM Air Navigation Deficiencies Database in the CAR/SAM Regions through a particular password at the following electronic address: www.mexico.icao.int/bases. The access instructions are depicted in the **Appendix C** to this Working Paper.

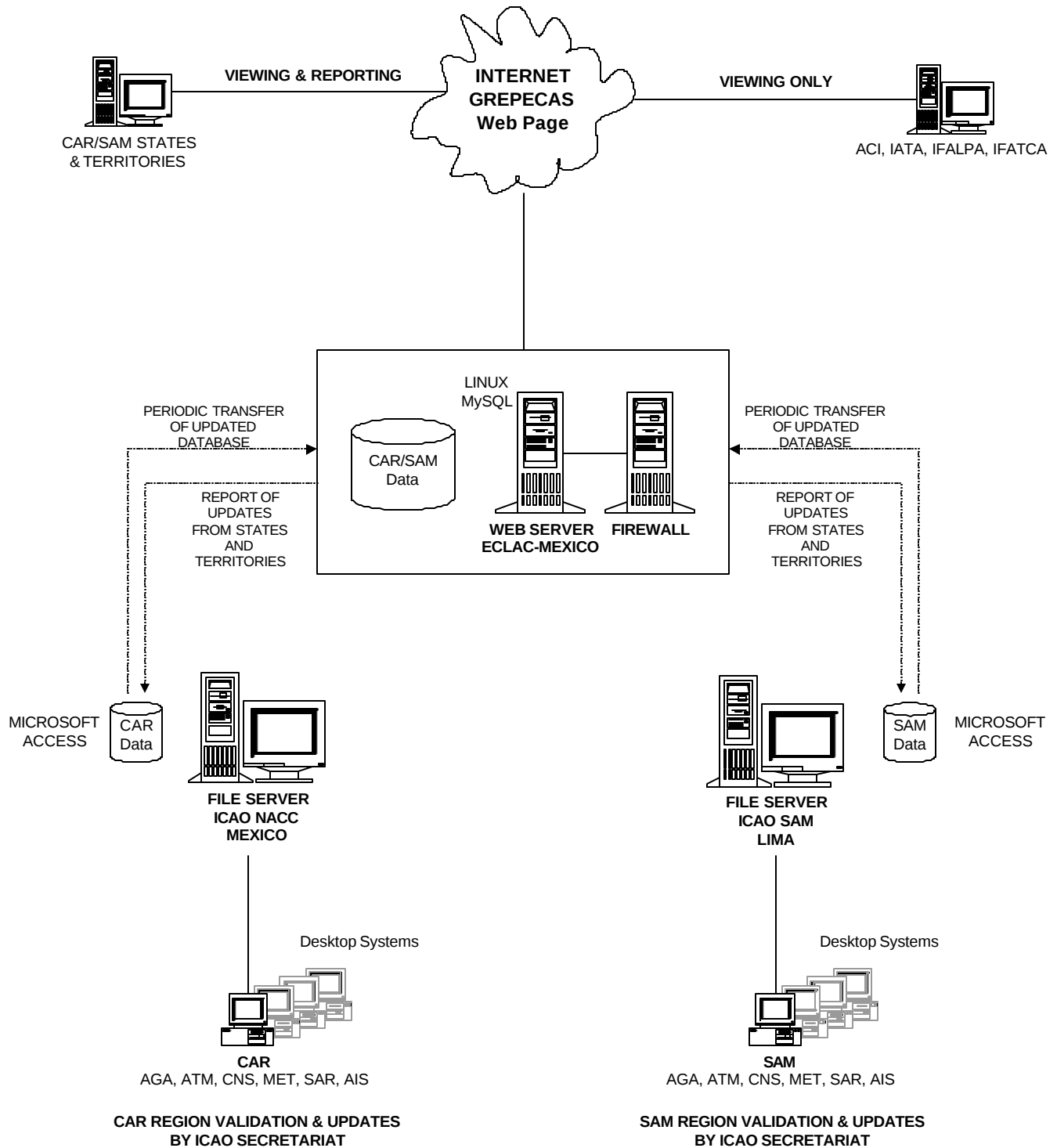
4. Action by the Meeting

4.1 The Meeting is requested to take note the content of this paper and take action as appropriate.

APPENDIX A**PROCESS**

APPENDIX B

INFRASTRUCTURE



APPENDIX C

SPECIAL IMPLEMENTATION PROJECT PUBLICATION OF THE CAR/SAM AIR NAVIGATION DEFICIENCIES VIA INTERNET

With the purpose of providing on-line access to the Air Navigation Deficiencies Database and that States/Territories in the CAR/SAM Regions have an appropriate way to identify, assess and report changes, an application to publish the Database through the Internet has been implemented in such a way that a timely follow-up can be given by using this technology.

This application has been finished and is available for the States/Territories of the CAR/SAM Regions through the link “GREPECAS AIR NAVIGATION DEFICIENCIES DATABASE (GANDD)” available in the following address: www.icao.int/nacc

When accessing this link a header will open where some selection buttons will appear for filtering the search of some deficiencies in particular (it is recommended to use a resolution screen of 1024 x 768 pixels even though it is also possible to work with 800x600 pixels).

Access to this site is restricted with the use of a username and a password which will be requested at the moment of accessing the corresponding link.

In accordance with the username used, the deficiencies corresponding to that State will initially appear, however, it is also possible to see the global information by using the corresponding filters.

Filters can be created by selecting the Region, Area, State and corrected fields.

Once the combination of these is selected, press the button “Search” and the table or tables containing the requested information will show as follows:

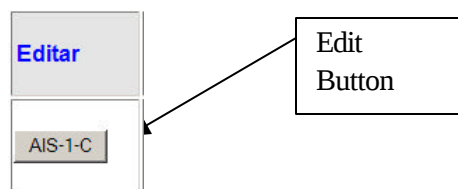
Records found for region CAR in the area AGA in Costa Rica

Identification			Deficiencies			Corrective Action			
Edit	Requirements	States/ Facilities	Description	Date First Reported	Remarks	Description	Executing Body	Date of Comple - tion	P
AGA-44-C	Visual Aids (Annex 14, Vol. I, Chap. 5 and ANP, Table AOP 1)	Costa Rica, ALAJUELA, Juan Santamaría Intl	Non standard TVVY markings and non standard signs	1996	IFALPA Meeting November 2000	Replaced by deficiency AGA 232 C	Costa Rica	2002	A
AGA-86-C	Bird Strike Hazards (Annex 14, Vol. I, Chap. 9.5)	Costa Rica, ALAJUELA, Juan Santamaría Intl	Bird strikes reported, sanitary landfills located in the vicinity of airport	2000	ASB/4 Review	Undertake bird hazard assessment to identify mitigation measures	Costa Rica	2002	U
AGA-76-C	Pavement Surface Conditions (Annex 14, Vol. I, Chap. 9.4)	Costa Rica, ALAJUELA, Juan Santamaría Intl	Excessive rubber deposit on runway surface resulting in poor friction characteristics - Ref. Annex 14, Vol. I, Section 9.4.10	2000	IATA Report December 2000	Remove rubber from runway surface	Costa Rica	2002	U

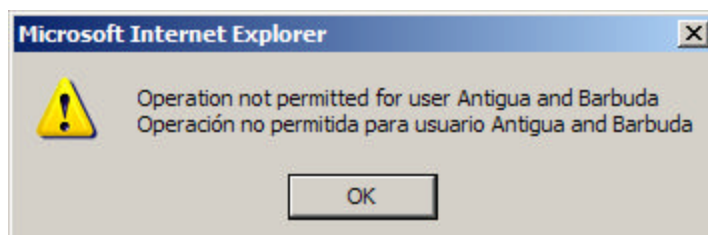
Initially the information will be presented in English, if the information is required in Spanish, press the button of language shown in the upper left corner of the page.

The information shown is the present information captured in the databases of each one of the CAR/SAM Regional Offices.

The intention of showing the databases through the Internet is for Contracting States/Territories to see the information at any moment and request its change and/or update. For this purpose a capture form has been created that could be displayed for each deficiency by pressing the buttons of the column “Edit”.



Only those users whose name and password correspond to the deficiency edited will be the ones authorized for its edition, on the contrary a message similar to the following will be shown:



- C3 -

In case the edition is authorized, a form with the information of the selected deficiency will appear as shown below:

Id	Area	Region	Subregion	Requirement	State	Corrected
90	AGA	CAR	ECAR	ANNEX	Antigua and Bar	2000

Requirements	
Runway Strip (Annex 14, Vol. I, Chap. 3.3, 3.3.4, 6 & 15)	
States/Facilities	Antigua and Barbuda, ST. JOHNS, V. C. Bird Intl
Description	
Runway strip width is insufficient and contains objects in the following areas: West and east runway ends – concrete pits East runway end – fence, road & sea West runway end north side – fence, road, terrain, vegetation & buildings North side – apron, parallel taxiway and closed runway used for parking aircraft Central portion south side – fence & terrain	
Date First Reported	07/2001
Remarks	
ICAO Visit July 2001	
Description/Corrective Action	
Remove or modify objects located in the runway strip and widen the runway strip. Reduce the runway declared distances by approximately 100 m. Action Plan: Development of new apron planned.	
Executing Body	Antigua and Barbuda Ministry of Aviation
Completion_date	2003/2005
Priority A	
Submit	

Submit
Button

The request for changing and/or updating the information should be captured directly on such form in the fields allowed, either in Spanish or English, and once done press the Button “Submit”.

The same procedure should be followed for each Registry willing to be modified.

The modified information of each registry will be sent via e-mail to the Regional Office concerned, NACC or SAM, according to the selected State, however, the database will not reflect immediately the requested changes. Those changes will be previously validated by the Regional Officer in each area before being updated in the database.

Updates to the databases published in the Web will be made periodically, at least 45 days or less which will be decided by each area officer.

-END-