International Civil Aviation Organization
South American Regional Office
Meeting of Air Navigation and Flight Safety Directors of the SAM Region
(Lima, Peru, 2 to 4 October 2017)

Agenda Item 2: Declaration of Bogota: Follow-up to the implementation of safety priorities

FOLLOW-UP TO AERODROME CERTIFICATION GOALS

(Presented by the Secretariat)

SUMMARY

This working paper presents the status of implementation of the aerodrome certification goal, the challenges encountered, and the proposed measures for achieving aerodrome certification in the SAM Region:

- Adoption of the set of Latin American Aeronautical Regulations on Aerodromes (AGA LARs) or their harmonisation with State Regulations on Aerodromes.
- Training of regional aerodrome inspectors based on the Aerodrome Inspector Manual (MIAGA).
- Initial aerodrome certification based on the PANS Aerodromes.
- Review of GREPECAS Project SAM F1, aligned with the aerodrome certification objectives of the region.

References:

- ICAO Annex 14 - Aerodromes, Vol. I – Aerodrome design and operations, 7th edition, July 2016
- ICAO Doc 9981, PANS Aerodromes – First edition, 2015
- Fourth meeting of the Programmes and Projects Review Meeting (PPRC/4)
- ICAO Global aviation safety plan (GASP) (Doc 10004, 2014-2016)
- Eighth and ninth meeting of the SRVSOP Aerodrome Panel.

ICAO strategic objectives:	*A – Safety* *C – Environmental protection and sustainable development of air transport*

1. Introduction

1.1 Aerodrome Certification has been an ICAO standard since 2001 (Annex 14, Vol. I – *Aerodrome design and operations)*, including the implementation of a safety management system (SMS).

1.2 In 2015, ICAO published the first edition of the *Procedures for air navigation services – Aerodromes* (PANS-Aerodromes). The PANS-Aerodromes specify the procedures to be applied by aerodrome regulatory authorities and operators for initial aerodrome certification and continuous aerodrome safety oversight and for aerodrome compatibility studies, especially when full compliance with the SARPs of Annex 14, Volume I, is not possible.

1.3 Regarding the goals of the **Declaration of Bogota**, the number of international airports in the SAM Region listed in the ICAO CAR/SAM Air Navigation Plan that have been certified increased from twenty-one (21) as reported at the AN&FS/3 meeting, to twenty-five (25) as of September 2017. Likewise, it should be noted that the number of aerodromes dropped from 105, as reported at the AN&FS/3 meeting, to 104.

2. Discussion

2.1 Aerodrome certification challenges

2.1.1 Aerodrome certification has not been an easy task for States. Although the Region has been making progress in the implementation of Annex 14 requirements, effective implementation of the aerodrome certification requirement has not been achieved yet.

2.1.2 With the new approach of the USOAP CMA audit process, which moved from a findings-based methodology to protocol questions based on the 8 critical elements of a safety system, it is apparent from the latest USOAP activities that if States are not able to certify all their international aerodromes, they face a big challenge for maintaining an appropriate safety oversight system in the AGA area.

2.1.3 Initial aerodrome certification provides a baseline for conducting continuous oversight. Therefore, the way in which the State can ensure compliance with the requirements of most of the PQs related to the critical implementation elements (CE6, CE7 and CE8) is by certifying all its aerodromes. The most recent USOAP activities showed that some States had the wrong perception that it was enough to certify a single aerodrome in order to pass most protocol questions.

2.1.4 Upon analysing aerodrome certification issues, ICAO, in the **Report on USOAP CMA results between 2013 and 2015** (available at https://www.icao.int/safety/CMAForum/Documents/USOAP_REPORT_2013-2016.pdf), indicated that 60% of States had not implemented the aerodrome certification requirement, and that the main challenge had been ensuring that aerodrome operators, following the audit, conduct the safety analysis of the non-conformities identified, in order to:

a. classify the identified deficiency, based on its impact on safety and using a risk management mechanism;
b. define the mitigation measures to be taken in order to reduce the risk to an acceptable level, is necessary;
c. grant associated exemptions, if so required; and
d. issue the aerodrome certificate with the required operating constraints or conditions.

2.2 Results of the second survey on difficulties preventing aerodrome certification (Conclusion AN&FS/3-02).

2.2.1 The AN&FS/3 meeting adopted the following conclusion:

CONCLUSION AN&FS/3-02: CONDUCT A NEW SURVEY ON DIFFICULTIES PREVENTING AERODROME CERTIFICATION

Request the Secretariat to prepare and circulate to States a new survey, covering all aspects, in order to identify the main difficulties that prevent aerodrome certification.

2.2.2 The Secretariat prepared and circulated a new survey to the States, which was responded by 12 States. The results of this survey are summarised in **Appendix A**.

2.2.3 The new survey was designed based on the existing situation in the States, the answers to the previous survey, and the findings of the report on the USOAP CMA results in the AGA area (2016). Based on these assumptions, it was deemed advisable to emphasise the need to specify the usage of the exemption mechanism, which is essential for the certification of aerodromes that do not comply with the SARPs because they were built prior to the issuance of the design requirements of Annex 14, Vol. I.

2.2.4 The survey gave mixed results, since although most States had a regulatory framework and procedures for granting exemptions only 3 of the surveyed States had granted exemptions. In general, usage of the exemption mechanism in the AGA area in the SAM Region is low since, according to the experts, it is felt that it could open the door for operators to request exemptions for non-compliance matters that should not be resolved through this mechanism. This indicates the possibility of improving the procedures for an inspector to accept a safety analysis from an operator and recommend the granting of an exemption.

2.2.5 The survey also asked about the main challenges faced by the CAA for aerodrome certification, identifying opportunities for supporting States regarding the availability of regulations, procedures and training. Most responded that lack of personnel/time/workload was the main reason for failure to certify.

2.2.6 According to these results, there is an opportunity for analysing the resources available to administrations and establishing the workload and priorities of aerodrome inspector tasks. Aerodrome certification should be seen as one of the main tasks of aerodrome inspectors, since it sets the foundations for continuous oversight and addresses a large number of AGA requirements that are audited in the States.

2.3 States' share in the attainment of aerodrome certification goals

2.3.1 The last AN&FS meeting took note that the regional goal of 20% of international aerodromes certified was too broad and did not reflect the specific contribution of each State to the attainment of this goal. This was shown by the fact that a State with several certified international aerodromes accounted for a significant share of achievement of the regional goal, while other States had not made any effort in this regard.

2.3.2 The status of contribution by States to the achievement of aerodrome certification goals is shown in **Appendix B** to this working paper.

2.3.3 In summary, the analysis shows that, with respect to last year, only four (4) new airports were certified, two (2) of which were located in a State that already had certified aerodromes, and the remaining two (2) were located in States submitting their first certified aerodrome. Therefore, there is an opportunity for the remaining States/Territories (7) that have not yet contributed to the achievement of the certification goal to establish a strategy to contribute to the objectives.

2.3.4 This strategy is normally represented in the form of an *Aerodrome Certification Plan*, with a high-level (DGCA) commitment to allocate the resources required for its completion.

2.4 **Regional aerodrome certification strategy**

2.4.1 The regional aerodrome certification strategy presented at the AN/FS3 meeting is being implemented, mainly focused on encouraging States to fulfil the commitment adopted in the SRVSOP accession agreement concerning harmonisation or adoption of the set of Latin American Aeronautical Regulation on Aerodromes (AGA LARs).

2.4.2 A harmonised environment generates a series of benefits and economies of scale, since it allows for better resource management in terms of training, access to professionals duly qualified in regulatory issues, experience, documentation, *inter alia*. These professionals could be used by States with limited resources to cover the specialties required in their certification processes, and which, for various reasons, including the size and number of aerodromes, might not have them available.

2.4.3 In addition to the implementation strategy and a robust regulatory framework (AGA LARs) to facilitate certification, the Secretariat, upon analysing the results of the surveys and the progress made in certification by the States, feels the need to better support and assist States in these processes. Accordingly, it considers that the States should submit their international aerodrome certification plans to the SAM Regional Office, taking into account their share in the regional total. **Attachment C** shows a sample format for this plan**.**

3. **Suggested action**

3.1 The Meeting is invited to:

a) take note of the information contained in this working paper; and

b) analyse and approve the following draft conclusion:

CONCLUSION AN&FS/4-XX: ***Aerodrome certification plan***

SAM States will present to the ICAO SAM Regional Office, by 8 December 2017, a 3-year plan (to December 2020) for the certification of their international aerodromes, taking into consideration their share in the regional total.

- END -

APPENDIX A

Summary of the aerodrome certification survey conducted from 21 February to 23 March 2017

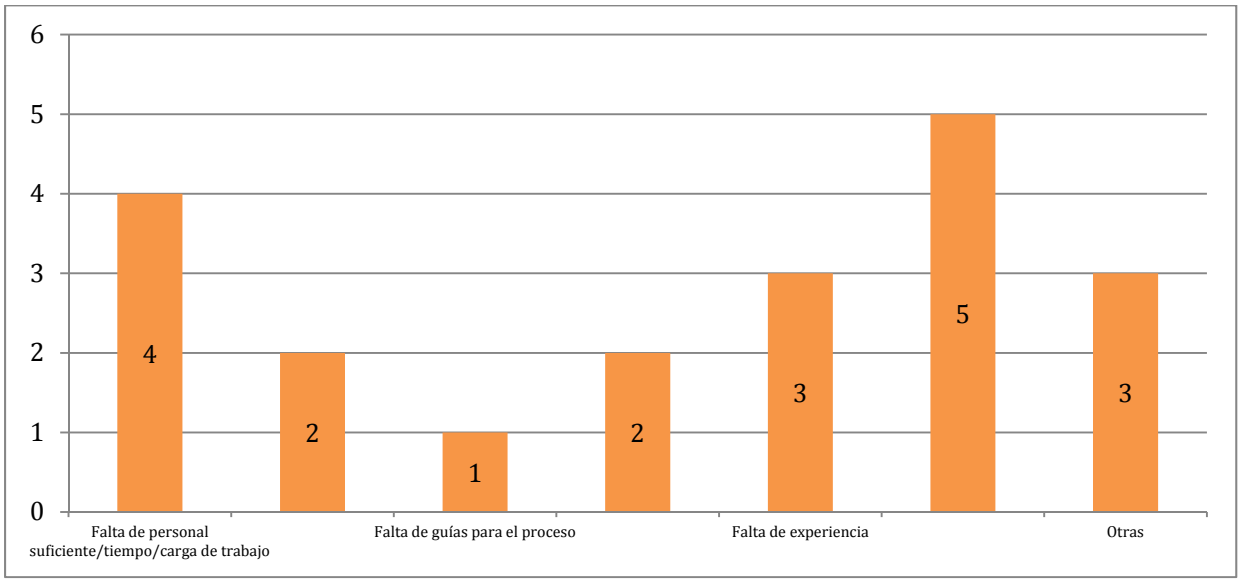
Country	Responded to survey
Argentina	YES
Bolivia	YES
Brazil	YES
Chile	YES
Colombia	YES
Ecuador	YES
French Guiana	YES
Guyana	YES
Panama	YES
Paraguay	NO
Peru	YES
Suriname	NO
Uruguay	YES
Venezuela	YES

Exemption mechanism

	Yes	**No**
Does the State have a regulatory framework for allows for exemptions?	11	1
Does the industry (airport operators) have guidance material on how to submit their safety analysis to request an exemption?	9	3
Do CAA aerodrome inspectors have a detailed procedure for accepting, reviewing, and recommending the approval of a safety analysis for the granting of an exemption?	10	2
Has your State granted any exemption in the aerodromes area?	**3**	**9**

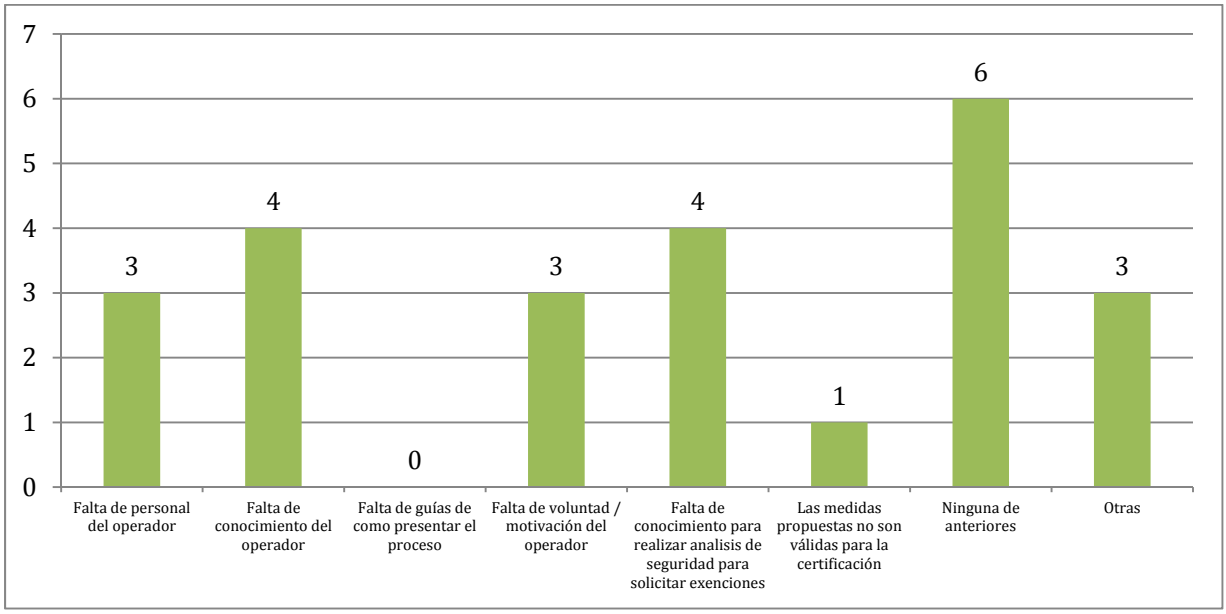
Obstacles to certification within the CAA

Taking into account only CAA internal factors, what circumstances have prevented aerodrome certification in your State?



Obstacles for certification outside the CAA

Taking into account only CAA external factors, what circumstances have prevented aerodrome certification in your State?



APPENDIX B

List of certified aerodromes as of 15 September 2017

Country	No. of aerodromes according to CAR/SAM ANP Vol. II	Share in the regional percentage	Certified aerodromes 2013	Certified aerodromes 2016	Certified aerodromes 2017*	In process (2017)*	Contribution to the Declaration goal
Argentina	16	15.4%	0	0	0		0.0%
Bolivia	3	2.9%	3	3	3		2.9%
Brazil	29	27.9%	1	**13**	15		14.4%
Chile	8	7.7%	0	0	1	2	1.0%
Colombia	11	10.6%	0	0	0	3	0.0%
Ecuador	4	3.8%	1	**2**	2		1.9%
French Guiana	1	1.0%	0	0	0		0.0%
Guyana	2	1.9%	2	2	2		1.9%
Panama	6	5.8%	0	0	0		0.0%
Paraguay	2	1.9%	0	0	0		0.0%
Peru	8	7.7%	1	1	1	1	1.0%
Suriname	1	1.0%	0	0	0		0.0%
Uruguay	2	1.9%	0	0	0	1	0.0%
Venezuela	11	10.6%	0	0	1		1.0%
Total	**104**	**100%**	**8**	**21**	**25**		**24.0%**

**Note: The table shows the aerodromes that the State has formally reported to the Regional Office as certified.*

APPENDIX C

2017-2020 Certification Plan Report Format
SAM States

State:	Choose an item.
Point of contact:	Click here to enter text.
Position:	Click here to enter text.
e-mail:	Click here to enter text.
Date:	Click here to enter a date.

Aerodromes* *(*Note: only international aerodromes listed in the e-ANP Vol. II)*		Phase as of October 2017	Planned for certification by December:					Remarks
			2017	2018	2019	2020	+2020	
1.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
2.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
3.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
4.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
5.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
6.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
7.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
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9.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
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13.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
14.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
15.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
16.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
17.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
18.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
19.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
20.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
21.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
22.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
23.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
24.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
25.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
26.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
27.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
28.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
29.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.
30.	*Insert ICAO 4-letter code*	Choose an item.	☐	☐	☐	☐	☐	Click here to enter text.

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