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NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

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Agenda Item 3: Air Navigation Matters
3.6 Other Air Navigation issues

Aerodrome Issues in the E/CAR Area

(Presented by the Secretariat)

<p>SUMMARY</p> <p>This working paper presents the latest information regarding Aerodrome issues in the E/CAR Area.</p>
<p>REFERENCES</p> <ul style="list-style-type: none">• ICAO NACC Data Base on AGA Field Deficiencies• Annex 14 and the ICAO USOAP Audits• Information of ALACPA's Activities• CARSAMPA Committee Activities Information• Application of Amendments 8 y 9 to Annex 14, Vol. I

1. Introduction

1.1 This paper addresses the activities related to the corrective actions within the Aerodrome Deficiencies of the E/CAR Area, considering the updated experiences in the AGA field and the new comprehensive systems approach for audits within the ICAO Universal Safety Oversight Audit Programme (USOAP) as well as the lack of an effective implementation of the eight critical elements contained therein. Furthermore, the progress and activities of the CAR/SAM Regional Bird Hazard Prevention Committee (CARSAMPAF), the Latin American and Caribbean Airfield Pavements Association (ALACPA), the adoption of Amendments 8 and 9 if Annex 14 and Avian Influenza.

2. Discussion

2.1 Annex 14 and the ICAO USOAP Audits

2.1.1 The AGA experience in the application of the USOAP by the systematic evaluation of the following eight critical elements: 1. *Primary aviation legislation*, 2. *Specific operating regulations*, 3. *State aviation system and safety oversight functions*, 4. *Technical personnel qualification and training*, 5. *Technical guidance, tools and the provision of safety critical information*, 6. *Licensing, certification, authorization approval obligations*, 7. *Surveillance obligations* and 8. *Resolution of safety concerns*.

2.1.2 Analysis of the critical elements of Aerodrome and Ground Aids, Table 1 shows a pattern of the most common deficiencies found.

Table 1 Critical Elements

Critical Elements	1	2	3	4	5	6	7	8
Deficiencies								
The following are not mentioned in the Aviation Basic Law: Lack of attributions for publishing regulations relation to aerodrome certification, obstacle restriction and removal, land-use and environmental control.	X							
Local regulations to comply with Annex 14 have not been developed.		X						
Lack of certification of aerodromes, safety and standards Unit.			X					
Personnel responsible for aerodrome certification, safety and standards, is not qualified and trained according to Annex 14.				X				
Staff assigned to aerodrome certification and safety activities; does not have technical guidelines and regulations for their corresponding duties and responsibilities.					X			
Staff assigned as AGA Inspector does not have the corresponding license.						X		
AGA personnel do not have all the necessary elements to perform an accurate assessment, follow up and oversight of safety standards by airport operators.							X	
The SMS Standards have been in force since 27 November 2005. However, they have not been fully and effectively implemented by States and Territories.								X

2.2 ALACPA's Activities Information

2.2.1 The Latin American and Caribbean Airport Pavement Association (ALACPA) developed, during the 2005-2006 period, the activities described as follows:

- An English version of the document "Handbook of Airport Infrastructure Maintenance Management".
- Coordination of activities in which members of several countries are collaborating, such as: Airport Pavements Maintenance Study, based on the new FAA Advisory Circular (AC5380-6A), professional background questionnaire, involving technical personnel performing airside pavement planning, design, construction, evaluation and maintenance functions in English and Spanish speaking State and Territories and development of the ALACPA Website.

2.3 CARSAMPAF Committee Activities Information

2.3.1 *Activities*

The main objectives and goals of the General Programmes of the CARSAMPAF Regional Committee for the period under study (December 2004 to June 2006) are the following: foster the creation new of the National Bird Hazard Committees and Airport Committees in CAR/SAM States/Territories; increase the number of records and reports of strikes between aircraft and wildlife; CARSAMPAF web page (<http://www.geocities.com/peligroaviario2000/COMITERREGIONAL.html>); exchange of experiences and knowledge, Third International Conference on Bird/Wildlife Hazard Prevention, held in Rio de Janeiro (29 November to 2 December 2005), was an excellent opportunity to share experiences and technical knowledge, a total of 281 participants attended (20 States and 4 International Organisations) and Organisational arrangements for the Fourth International Conference of CARSAMPAF in Panama (4 and 7 November 2006).

2.3.2 *Bird/Wildlife hazard data base*

There are no files with duly organised and structured automated data containing information on aerodrome operators who have bird strike hazard committees and/or are affected by wildlife, nor professionals working on either topic, nor information on wildlife species involved in aircraft strikes.

2.4 *Application of Amendments 8 and 9 to Annex 14, Vol. I*

2.4.1 *Amendment 8* updates the existing provisions of Annex 14, Volume I for new larger aeroplanes (NLA) with regard to the size of the obstacle free zone (OFZ), based on improved navigation capabilities which facilitate the introduction of NLA operations at existing aerodromes. The amendment harmonizes the safety management requirements in Annex 14, Volume I with those of Annex 6 – *Operation of Aircraft* and Annex 11 – *Air Traffic Services*. It responds to the need to complement the prevailing approach to the management of safety based upon regulatory compliance with a performance-based approach. Such an approach builds upon a data-driven prioritization of resources towards safety concerns that hold the greatest risk potential and activities likely to produce the biggest return on resources invested. The amendment harmonizes the approach to safety management among ATM providers, aircraft operators, maintenance organizations and aerodrome operators. ***This amendment was adopted and became effective on 23 November 2006.*** *Amendment 9* was proposed by the Air Navigation Commission in order to include a note that clarifies the interpretation of Annex 14, Vol. I, Chapter 3, Paragraph 3.9, Taxiways, Standard 3.9.4. regarding existing taxiways. The following has been incorporated: *Note 3.- This provision applies to the design of taxiways first commissioned on or after 20 November 2008. This amendment was approved by the Council on 15 June 2006.*

2.5 *Implementation of SMS in States and Territories*

2.5.1 The ICAO NACC Office, to support development of regional professionals and technicians of Civil Aviation Administrations, is organizing SMS Courses in accordance with ICAO requirements. The programme includes delivering four courses in 2007, one of which will be held in the NACC Office for English speaking States and Territories from 26 February to 2 March (see IP 03).

2.5.2 *Status of Implementation of Annex 14 Aerodromes Vol. I, Aerodrome Design and Operations, Specifications on Aerodrome Certification and Safety Management System*

2.5.2.1 Regarding the abovementioned the ICAO NACC Regional Office sent States several messages Ref: **EMX788**, **EMX1037** and **EMX1148** dated 9 August, 6 October and 8 November 2006 respectively in order to complete the questionnaire on the Status of implementation of *Annex 14 Aerodromes Vol. I – Aerodrome Design and Operations*, specifications on Aerodrome Certification and Safety Management System. Since the office has not received any response from any of the E/CAR States, the date to receive the required information has been extended to **15 December 2006**.

2.5.2.2 The information provided will be used for the preparation of a Working Paper that will be presented during the next session of the Assembly. The goal is to develop planning improvements for the future work programme in the follow-up to the implementation requirements.

2.6 *Technical Publications*

2.6.1 With respect to this subject, following is a list of ICAO publications that are critical for the work of professionals and technicians in the AGA field: Doc 9870 AN/463 Manual for Preventing Runway Incursions, 1st Edition 2006; Doc 9157 AN/901 Aerodrome Design Manual, Part 6 - Frangibility, 1st Edition 2006; Doc 9157 AN/901 Aerodrome Design Manual, Part 1 – Runways, 3rd Edition 2006; Doc 8991 AT/722/3 Manual on Air Traffic Forecasting, 3rd Edition 2006; Doc 9859 AN/460 Safety Management Manual, (SMM) 1st. Edition 2006; Doc 9157 AN/901 Part 2 Taxiways, Aprons and Holding Bays, 4th Edition 2005

2.7 *Avian Influenza*

2.7.1 ICAO is working in cooperation with other organizations to identify preventive and reactive measures in the event an emergency is declared. However, a proactive plan from inside the aeronautical management system, at the global, regional and national level should be undertaken as from now.

- *Background*

2.7.2 This strain of influenza is normally found in wild birds, but has the potential to infect farm and domestic birds (as well as pigs and horses). Spreading to and between humans is considered to become common in the future, due to a mutation in the strain of the virus. Therefore, there is a danger of a worldwide spread of the disease. In this regard, the World Health Organization (WHO) has done much work to put into place a “Global Influenza Preparedness Plan” with the intention of containing the disease and mitigating its effect on the global population.

- *Air Transport*

2.7.3 Air transport is likely to be implicated as one of the main methods by which the disease will be spread internationally, and it is therefore important that ICAO and the aviation industry act in concert with the WHO to reduce the extent of spread. The WHO has indicated that we are currently in a “Pandemic Alert Period”, equivalent to Phase 3 (out of 6) in the WHO Pandemic Preparedness Plan. This phase does not recommend any air travel restrictions that significantly affect the traveling public but phases 4-6 do. **Appendix A** to this Working Paper presents Actions Recommended by the WHO to be considered by ICAO, States and Territories, IATA and ACI.

2.7.4 Considering Assembly Resolution A35-12, *Protection Of The Health Of Passengers And Crews And Prevention Of The Spread Of Communicable Disease Through International Travel*, requested the Council, inter alia, to review existing Standards and Recommended Practices (SARPs) related to passenger and crew health and to develop new SARPs, where appropriate, and, as a matter of priority, to develop SARPs addressing contingency plans to prevent the spread of communicable diseases by air transport.

3. Suggested Action.

The Meeting is invited to take note of this working paper and to take any action it deems appropriate in order to encourage regional cooperation. Delegates are invited to exhort their AGA specialists to pay attention to the AGA matters, and to actively participate in those issues related to the AGA/AOP/SG, CARSAMPAF and ALACPA.

APPENDIX A

Avian Influenza – ICAO Response (DRAFT)

Problem statement

The risk of a global pandemic of avian influenza requires ICAO to take action to harmonize the response, on a global basis, of the aviation industry

Background

Avian influenza ('bird flu') is a strain of influenza normally found in wild birds, but having the potential to infect farm and domestic birds (as well as pigs and horses). Transfer of the virus from wild birds has occurred in the last few years and in parts of Asia, especially south east Asia, where there is a tradition of humans living in close proximity to farm birds, humans have also been infected. However, if spread between humans should become common in the future, due to a mutation in the strain of the virus, there is a danger of a worldwide spread of the disease, a 'pandemic', with much loss of life. When this might occur, or how severe it will be should it do so, is unknown. For a virus that can spread easily from human to human, it is unlikely that a pandemic can be prevented, but the World Health Organization (WHO) has done much work to put into place a 'Global Influenza Preparedness Plan' with the intention of containing the disease and mitigating its effect on the global population.

Air travel is likely to be implicated as one of the main methods by which the disease is likely to be spread internationally, and it is therefore important that ICAO and the aviation industry act in concert with the WHO to reduce the extent of spread. At present the WHO has indicated that we are currently in a 'Pandemic Alert Period', equivalent to Phase 3 (out of 6) in the WHO Pandemic Preparedness Plan. This phase does not recommend any air travel restrictions that significantly affect the travelling public but phases 4 – 6 do so contingency planning needs to be in place in advance of the next phases.

The first part of this paper outlines the high level actions that are required promptly, whereas the second part (Appendix) describes in more detail some of the issues and how they might be addressed. The medium term goal (end 2006) is to produce a web- based ICAO influenza preparedness planning manual for aviation.

Resources required (costs to be added)

- Travel and Subsistence for C/MED to attend WHO planning meetings and relevant scientific conferences
- Time spent by Secretariat staff on a task not envisaged in the business plan
- Preparedness planning conference in 2006 (south east Asia)
- Possible requirement for task team meeting early 2006 (Montreal)
- Possible requirement to employ an aviation medicine consultant to continue routine work of MED section

Recommended actions

Action by ICAO

- Co-ordinate aviation industry response involving:
 - Airports; air traffic control; airlines; legal aspects
- Set up ICAO co-ordinated international task team, to include representatives from ICAO, the WHO, Foreign Affairs Organization (FAO), International Air Transport Association (IATA), and Airports Council International (ACI). It is recommended that the team also include an experienced official from the region most likely to be adversely affected (south east Asia), and who has experience of dealing with the outbreak of Severe Acute Respiratory Syndrome (SARS) in that area in 2003.
- The ICAO team should include representatives from FAL, AGA, ATM, LEB, Flight Safety Section (OPS) and EPO, chaired by C/MED. ICT support would ensure that web based information was quickly and reliably made available.
- The task team would provide advice to States as to how to respond to the threat, in two phases:
 - Initial advice, to be produced quickly (end November) without extensive consultation (based on guidance in the Appendix to this paper)
 - Maturing advice, formulated in slower time after wider consultation to result in the publication of an ICAO influenza preparedness planning manual for aviation. It is envisaged the initial advice will be modified during this period
- The team must be prepared to react at short notice to a changing situation as the threat escalates
- Team members must brief a deputy so that there is continuity if a team member is affected by illness during any pandemic
- Team members must be able to work from home or at another workplace to reduce response times and enable it to function if they, or their own workplace, become quarantined
- The team should consider the best way for ICAO and other organizations to provide information to the media in the event of an escalating threat
- ICAO should set up a web site providing general public advice concerning the avian influenza threat. This is not envisaged as a large site, but would utilise links to the WHO web site (for general health advice) and to IATA (airline advice) and ACI (airport advice). Information provided should be coordinated, to provide a consistent message
- ICAO should set up a secure web site providing contact information for State officials in charge of the national aviation response. It could also be used for disseminating/sharing other information
- ICAO should encourage States to develop an influenza preparedness plan for aviation.
- ICAO should organise an aviation specific influenza preparedness planning conference, to include inputs from the WHO, States, IATA, ACI and ICAO to enable direct interchange of views concerning how to contain the threat and to develop the influenza preparedness plan for aviation.
- ICAO should issue a press statement after the WHO conference on 7-9 November outlining the action ICAO is taking

Action requested of States

- Appoint a State official who has responsibility for developing a national influenza preparedness plan for aviation, with sufficient authority to co-ordinate the input of several different service providers (The appointment of such an individual is the single most important action for States to undertake). He/she would be responsible for such aspects as:
 - Developing a national influenza preparedness plan for aviation
 - Developing a national command, co-ordination and communication system to support the plan
 - Setting up a national task team to co-ordinate the input of stakeholders
 - Designating an emergency response room (control centre) for the activation and implementation of the preparedness plan
 - Changing the level of the national response (up or down) in the light of a change in notification of phase from the WHO
 - Drawing up a list, with contacts, of participating agencies
 - Publishing aspects of the influenza preparedness plan relevant to the public on a government web site.
- Keeping this up-to-date as the situation changes
 - Being prepared to provide information at short notice to the public and the media
 - Being prepared for an escalation of the threat above Phase 3
 - Following advice from the WHO and ICAO and preventing unilateral action that is not in accord with such advice

Action requested of WHO

- Designate an authoritative official to be the WHO representative on the ICAO co-ordinated international task team and who can respond to aviation specific enquiries from the task team.
- Include aviation specific advice (or web-links/references to where it can be found) in its global influenza preparedness plan

Action requested of IATA

- Designate an official to be the IATA representative on the ICAO co-ordinated international task team
- Provide specific advice to airlines as to how to develop an influenza preparedness plan (emergency response plan)
- Respond to enquiries concerning airline operations affected by avian influenza

Action requested of ACI

- Designate an official to be the ACI representative on the ICAO co-ordinated international task team
- Provide specific advice to airports as to how to prepare an influenza preparedness plan (emergency response plan)
- Respond to enquiries concerning airport operations affected by avian influenza

Action requested of FAO

- Designate an official to be the FAO representative on the ICAO co-ordinated international task team and who can respond to aviation specific enquiries from the task team.

Appendix

The following have been summarised primarily from the ICAO SARS contingency plan, the current WHO global influenza preparedness plan and IATA guidelines.

The WHO has categorized the current situation (31 October) as 'Pandemic Alert, Phase 3'. As far as the aviation industry is concerned the primary action at this stage is to prepare for phases 4 – 6 and, for the affected areas, to provide information on local outbreaks to arriving passengers. Once the WHO has announced phase 4 (or higher) is in effect, the following points will need to be promptly addressed:

- Health alert notices (WHO format) to be provided for travellers to/from affected regions
 - Advise deferral of non-essential international travel to affected areas
 - Note: It is considered that the enforcement of travel restrictions to/from affected areas is impractical in most countries, but is likely to occur voluntarily. Could be considered as an emergency measure (WHO to advise)
 - Advise self-reporting of relevant symptoms in travellers from affected areas (Quarantine may be indicated)
 - Tracing of passenger contacts (those seated within three rows of a diagnosed case) to advise them to self report relevant symptoms
 - Exit screening for passengers leaving affected areas
 - Health declaration/questionnaire (WHO to advise content). Could be done verbally, preferably before, but no later than check-in
 - Thermal scanning or ear temperature measurement (WHO to advise parameters). Other reliable methods could be used.
- Operating personnel need to be trained in the use of equipment (which must be calibrated and maintained in accordance with manufacturer recommendations) and in their interpretation of results. Should be undertaken as early as possible, before passengers and crew enter secure airside area.
- Passengers with a temperature above a particular figure (WHO to advise parameters) or who answer the screening questions in the affirmative, to be isolated and evaluated (secondary screening) by a designated health care provider (not necessarily a doctor).
 - Passengers thought to have a risk at secondary screening of being infected with avian influenza to be quarantined and assessed in accordance with national policy; if not the passenger continues his/her journey
 - Unwell passengers not thought to have avian influenza, should be assessed in the normal way (submission of a MEDIF form to the airline's medical service)
 - Attempt at visual detection of symptoms not recommended

- Entry screening not recommended due to lack of proven benefit but:
 - Consider for purpose of promoting public confidence, or if exit screening suboptimal.
 - If undertaken, the same requirements are followed as for departing passengers
- For passengers developing influenza symptoms on board who have departed from or transited through an affected area:
 - Self-report to cabin crew
 - Separate from other passengers if possible
 - Pilot-in-command (PIC) to inform destination authority and provide necessary information to the authorities after landing e.g. number of passengers, number affected, time of onset of symptoms
 - Destination authority to inform authority at embarkation and at any transit point
 - PIC to be advised on parking position and disembarkation procedures. Parking will normally be away from the jet bridge and passengers will not be permitted to disembark before medical clearance to do so is received.
 - Potentially infected passengers on arrival to be screened and assessed as per exit procedure (secondary screening) as soon as possible after disembarkation. This should be before passengers are divided into transit and arriving passengers and always before immigration clearance. Steps should be taken to prevent passengers arriving from affected areas entering any common arrival or transit areas before screening has taken place.
 - In the eventuality that a sick passenger has to be removed from the aircraft before being medically assessed, removal to a designated isolation area should await the arrival of the medical practitioner. In this situation all infection control measures are to be employed including personal protective equipment for persons in close contact with the passenger. Persons using the equipment are to be trained in its proper use
 - All passengers on the affected flight are provided with information about avian influenza symptoms, self-reporting and the appropriate public health contact numbers if available.
 - A sick passenger should be removed directly from the aircraft, without passing through arrival areas used by other passengers. Only if direct removal is impossible should other procedures be employed. In all cases, contact with other passengers and airport staff must be minimized.
 - Airport management and designated public health authorities are immediately alerted.
 - Passengers and crew from this flight are segregated until contact information is obtained and passengers and crew have been advised of the precautionary measures necessary
 - Procedures are in place for immigration and customs clearance of ill passengers taken directly from the arriving aircraft.
 - The necessary infection control measures are implemented by the airport authorities.

Note i: *Personal protective equipment is worn by all persons in close contact with the suspect case. This equipment includes disposable surgical gloves, eye protection (close fitting goggles or face shield), facemask or respirator, disposable outer garment. In all cases a facemask is provided to the ill person. (To be reviewed – may not be needed in all cases)*

Note ii: *Receiving hospital and ambulance service are designated.*

Note iii: *All disposable materials possibly in contact with the suspect case including protective equipment worn by caregivers to be disposed of as bio hazardous waste.*

Note iv: *All hard surfaces in contact with or possibly contaminated by the suspect case are to be properly disinfected. Soft surfaces, such as seat cushions, should be disinfected or replaced*

- Consider the effect of many airport and airline staff being unable to work due to infection by avian influenza
- Undertake daily temperature screening for airport workers at the beginning of their work shift.
- Advise by posted information or other means of the obligation of airport workers not to report to work if they are unwell from influenza-like symptoms.

References:

http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf

http://www.icao.int/cgi/goto_m_med.pl?icao/en/trivia/AvMedSARS.htm

http://www.iata.org/whatwedo/health_safety.htm