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Agenda Item 4: Safety Oversight matters

**CENTRAL CARIBBEAN ACTIVITIES ON THE GLOBAL AVIATION SAFETY PLAN (GASP)
AND THE EXPANSION OF THE UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME
(USOAP)**

(Presented by the Secretariat)

SUMMARY

This Paper presents background information on the ICAO Global Aviation Safety Plan, as well as on the ICAO Universal Safety Oversight Audit Programme (USOAP), and the conclusions of this initial audit phase. It also includes information on further enhancement of the USOAP and its expansion to the ICAO Annexes 11, 13 and 14. This paper will also briefly address the ICAO Regional activities.

1. ICAO Global Aviation Safety Plan (GASP)

1.1 ICAO Assembly Resolution A32-15 realized that the public's perception of aviation safety is largely based on the number of aircraft accidents **rather than the accident rate**, and noted that the expected increase in the volume of international civil aviation would result in an increasing number of aircraft accident unless the accidents rate was reduced.

1.2 Therefore, although the current accident rate is relatively low, an increase in the number of accidents due to an increase in traffic volume is likely to undermine public confidence in civil aviation, which would in turn affect the growth of the industry. The Assembly stressed the need for reduction in the rate of fatal accidents in air transport operations, and recognized that improvements in the accident rate would require new approaches from all participants in the aviation industry, including ICAO, air operators and aircraft manufacturers.

1.3 For this reason the ICAO Global Aviation Safety Plan (GASP), will therefore identify and give priority to those tasks and programmes likely to produce the best safety dividends, and reduce the accident rate on global scale. The GASP database will carry out annual review of the causal factors for accidents including the ICAO Accident/Incident (ADREP) reporting system, and disseminate the results for the use in the accident prevention programmes. Through complementary programmes to the GASP regional initiatives have emerged like Pan American Safety Team (PAAST) headed by IATA, ICAO and the Flight Safety Foundation (FSF).

2. GASP activities in the CAR/SAM Regions

2.1 Due to the lack of structure, standardization and formal training, increase in traffic and complexity of the runways and taxiways layouts, the safety and efficiency on the airport surface movement have decreased. With this in mind, ICAO NACC Regional Office organized the ICAO NAM/CAR/SAM Runway Safety/Runways Incursion Conference, in cooperation with Mexico. The General Direction of Civil Aviation (DGAC), *Servicios a la Navegación en el Espacio Aéreo Mexicano* (SENEAM) and *Aeropuertos y Servicios Auxiliares* (ASA) of Mexico hosted this event during 22-25 October 2002.

2.2 As mentioned in para. 1.1.1 aviation safety is largely based on the number of aircraft accidents **rather than the accident rate**. It is deducted, that the expected increase in the volume of international civil aviation would result in an increasing number of aircraft accident unless the accidents rate is reduced. With this fact in mind ICAO, together with the Central American Agency for Aviation Safety (ACSA), organized a bilingual Accident Investigation and Prevention Seminar/Workshop, held in San José, Costa Rica from 10-13 February 2003.

2.3 National culture, among others, influences every aspect of the aviation system. Embedded within the national culture, organizational culture influences how members of a group interact among themselves and with other professional group. Because of pervasive influence of culture, aviation safety endeavors should take cultural issues into consideration. Therefore, ICAO with the cooperation of Asociación Sindical de Pilotos Aviadores de México (ASPA) held during 5-6 March, 2003 in Mexico City, Mexico a Regional Seminar on Cross-cultural Issues in Aviation Safety.

2.4 The DGAC of Jamaica hosted the Second ICAO Regional Seminar/Workshop about the Transportation and Handling of Dangerous Goods, from 2-5 June 2003. The event not only refreshed the participants knowledge of the ICAO Annex 18 – *The Safe Transport of Dangerous Goods by Air*, but it also extended the content of Annex 18 to on hand daily operational experiences and programmes of preventive and enforcement application of international Agencies, DGCA's of the States/Territories and Operators.

2.5 Due to the again rising number of fatal crashes attributed to controlled flight into terrain (CFIT) which is indicating the urgent need for increased training, the ICAO NACC Regional Office together with the Regional PAAST group is planning a follow up ALAR/CFIT seminar/workshop tentatively to be presented in November 2003. Place and exact dates of the seminar will be announced.

2.6 Additionally, ICAO and the Federal Aviation Administration (FAA) are planning to present a workshop for Airport Certification for the Caribbean and South American Region to be presented in both English and Spanish. Place and exact dates of the event to be announced.

3. Status of the ICAO USOAP

3.1. A comprehensive report was presented to the 33rd Session of the Assembly. With the exception of a few States/Territories, which could not be audited due to security clearance or operational considerations, the mandate given by the Assembly in 1998 was successfully met. All Contracting States in the NACC Region were audited.

3.2 ICAO has begun the conduct of follow-up missions, with the objective of validating the implementation of action plans submitted by each audited State. These missions have proven to be useful in order to identify problems encountered by States/Territories in the implementation of their action plans and to determine the need for external assistance to resolve the safety concerns identified in the course of the audits. The follow up mission to the State is being scheduled only when the action plan is reported to be completed at 60%. As of July 2002, sixty five (65) follow-up missions had been conducted, nine (9) of them in the NAM/CAR Regions, as indicated below.

- United States 05-07 September 2001
- Jamaica 14-17 September 2001
- Cuba 07-11 December 2001
- Costa Rica 13-14 December 2001
- El Salvador 04-06 February 2002
- Guatemala 08-12 February 2002
- Bahamas 20- 22 November, 2002
- OECS 25-27 November 2002
- Dominican Republic 17-19 February 2003
- Nicaragua 13-15 August 2003
- Honduras Tentatively scheduled for the last quarter of 2003
- Trinidad and Tobago Tentatively scheduled for the last quarter of 2003

3.3 A correlation between USOAP findings and accident rates is found in the **Appendix**. It depicts the benefits of maintaining Universal, Regular and Mandatory Audits.

Expansion of the USOAP to include the ICAO Annexes 11, 13 and 14

3.4 The Assembly recognized the successful implementation of the Programme and adopted two Resolutions:

- Assembly Resolution A33-8: *Continuation and expansion of the ICAO Universal Safety Oversight Audit Programme*, provides, *inter alia*, for the continuation of the Programme and for its expansion to Annex 11- *Air Traffic Services* and Annex 14 *Aerodromes* as of 2004. It also calls for expansion, as soon as possible, to the core elements of Annex 13 *Aircraft Accident and Incident Investigation*.
- Assembly Resolution A33-9: *Resolving deficiencies identified by the Universal Safety Oversight Audit Programme and encouraging quality assurance for technical cooperation projects* calls, *inter alia*, for the provision of assistance to States/Territories to resolve deficiencies identified by the audits, for the establishment of a quality assurance function regarding safety oversight projects, and for the support of bilateral and multilateral agreements.

Preparatory work for the expansion of the USOAP Programme

3.5 In line with ICAO Assembly Resolution A33-8 the USOAP will be expanded to Annexes 11, 13 and 14, as of 2004. Preparatory work for the expansion of the Programme to these areas is scheduled to commence in early 2003 and will involve a large volume of work, including the development of the requisite auditing documentation, the training of auditors, the adaptation of Audit Findings and Differences Database (AFDD), and the amendments of existing USOAP publications (Safety Oversight Manual, Part-A; *The Establishment and Management of a State's Safety Oversight System*, Doc 9734; and Safety Oversight Audit Manual, Doc 9735), as well as an internal ISO documentation applicable to the Safety Oversight Audit Section (SOA). Experience gained during the initial audit cycle pertaining to Annex 1-Personnel Licensing, Annex 6-Operation of Aircraft and Annex 8- Airworthiness of Aircraft, will be used.

Development of the audit documentation

3.6 The preparatory work will focus initially on development of relevant auditing documentation, including the pre-audit questionnaires, audit protocols, auditors' training courses and related guidance material. The pre-audit questionnaire will be an essential auditing tool, designated to solicit relevant information required for audit scheduling and planning purposes. In the same way, this questionnaire will provide a user- friendly format for the States/Territories to ascertain the status of implementation of Standards and Recommended Practices (SARPs) in their national framework and to identify any differences which may exist between their national regulations and relevant Annex provisions. The pre-audit questionnaire will be comprised of three parts:

- a) Part I: questions on organizational establishment of the relevant entities responsible for the control and supervision of audit areas in the State;
- b) Part II: questions on level of aviation activities in relation to the audit areas in the State; and
- c) Part III: tables setting forth each Annex provision whereby States/Territories will be asked to identify their level of compliance with the SARPs and to provide the national legislative reference, where applicable.

3.7 The pre audit questionnaire will be dispatched to all Contracting States in hard copy and electronic format (Web based) in the second quarter of 2003. It is expected that States/Territories will respond to Parts I and II within six weeks to enable ICAO to conduct a thorough review for use in planning and scheduling audits. All information provided by States/Territories will be subject to verification during the actual audit.

3.8 As was the case during the initial preparation of the Programme, audit protocols will be developed for each audit area, setting forth standard and transparent auditing procedures and providing both the auditors and the State with step by step guide of the aspects to be audited and the questions to be answered. The audit protocol will verify the status of implementation in each particular area by indicating whether, at a minimum, the State confirms with, or adheres to the requirements of the Chicago Convention, relevant SARPs, relevant provisions in the Procedure for Air Navigation Service-Air Traffic Management (Doc 4444, PANS-ATM) or guidance material.

3.9 Phase one is expected to start early February 2003 and be completed by the end of September 2003. Successful implementation of phase one requires input from section and officers other than Safety Oversight Audit Section, such as the Languages and Publication Branch (LPB), and effective coordination will be essential to ensure its success.

3.10 Phase two will consist of testing the training material and in the provision of training to potential auditors at Headquarters as well as at regional offices. A total of six training sessions are planned, two of them to be conducted at Headquarters and four training courses to be held in selected regional offices. Training will start in early October 2003 and be completed by January 2004. The training of experts from States/Territories and Regional Offices will ultimately lower the cost of missions, as the majority of auditors would come from the region in which audits are to be conducted, thus reducing the overall cost of the management of the Programme.

3.11 Administrative actions such as the development of Memorandum of Understanding (MOU) applicable to the conduct of audits in the area of expansion, the recruitment of required personnel, and the development of an audit schedule will be conducted during the first two phases. Phase three, the conduct of actual audits will commence in February 2004.

Conduct of Audits

3.12 Conducting the Audits in the area of expansion will require the availability of considerable number of adequately qualified and experienced experts. Recruiting all of them as ICAO staff would not be economically feasible, nor would it be cost-effective. To overcome this problem, the Secretariat is proposing the organizational set up described in the following paragraphs.

Organization chart of the Audits

3.13 The Safety Oversight Audit section (SOA) at Headquarters will maintain management staff and a limited number of experts, Standards and Procedures Officers (SPO) and Analysts. SOAs' main function would concentrate on:

- development of audit protocol;
- standardization of audit procedures;
- development and conduct of the safety oversight related training courses;
- development of the oversight related guidance material; and on
- monitoring and ensuring the quality of the audit process and reports

3.14 SOA will maintain the overall responsibility for the planning and scheduling of audit activities and for other related activities such as:

- conduct of safety oversight auditor training courses and safety oversight;
- management system seminar and workshops, and
- communication and coordination with Contracting States, ICAO Bureau and Regional Offices

3.15 The majority of the auditors will come from Contracting States as short term seconded auditors. To this end, SOA plans to train an adequate number of experts in all ICAO Regions who will be able to conduct audits under the leadership of an ICAO staff member. The ICAO staff member, who would act as a Team leader, would be adequately trained and qualified auditor who may be a staff of SOA or another ICAO HQ Section, seconded to SOA for the purpose of conducting a particular safety oversight audit mission.

3.16 The role of the Regional Offices would be to assist States/Territories in their respective areas of responsibility with the implementation of the recommendations resulting from the audit findings. In this regard, the regional office staff would also be trained by SOA in audit processes and procedures so that the relevant experts will be able to assist States/Territories in resolving identified differences and implementing the ICAO recommendations. Adequately trained and qualified Regional Office staff may also be asked to lead an audit or serve as a member of an audit team, should the need arise.

3.17 Regarding the order of conducting the audits, it is to be recalled that the Council established some basic criteria when the Programme was initially launched. The guidance provided was found useful by the secretariat. It is therefore proposed that the same guidance be also applied this time, together with additional criteria resulting from the experience gained during the initial audit cycle pertaining to Annexes 1, 6 and 8. These criteria are:

- a) expressed urgency to audit a particular State;
- b) request of Contracting States to be audited;
- c) level of reported compliance of Annex SARPs found in Part III of the pre-audit questionnaire;
- d) whether an organizational structure to provide oversight has been established in the State;
- e) whether a safety management system has been established in the State;
- f) level of aviation activity;
- g) aircraft accident and incident rate;
- h) historical trend of the audited level of compliance with Annex SARPs related to other Annexes already audited; and
- i) regional balance

3.18 Universality is being one of the core principles of USOAP, therefore, all Contracting States/Territories will be audited during the initial audit phase. Based on the responses provided by the States/Territories in the pre-audit questionnaire, time, number of team members and the duration of specific audits will be tailored to the specific requirements of the prevailing audit.

4. Conclusion

4.1 It is very important and mandatory that States/Territories fully cooperate with aviation safety and with all the programmes covered by the GASP, as well as with the upcoming audits related to Annex 11 *Air Traffic Services*; Annex 13 *Aircraft Accident and Incident Investigation*, and Annex 14, *Aerodromes*.

For all the aforementioned, the Meeting is invited to adopt the following Draft Conclusion:

DRAFT CONCLUSION 6/X: - PREPARATORY WORK FOR THE COMPLIANCE OF THE ICAO GLOBAL AVIATION SAFETY PLAN (GASP), AND FOR THE EXPANSION OF THE ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP) IN THE CENTRAL CARIBBEAN

The Directors of Civil Aviation of the C/CAR States/Territories agree to carry out the following preparatory activities in order to comply with the GASP, and to expand USOAP activities to ICAO Annexes 11, 13 and 14:

- a) to review and adopt preparatory measures for the compliance and implementation of the GASP, its complementary programmes, and for the ICAO USOAP expansion to ICAO Annexes 11, 13 and 14 and related SARPs;
- b) to ensure the participation of safety personnel in seminars, workshops and other events that are being planned in the Region, regarding this issue;
- c) take note of the importance of the timely submission of the Audit Questionnaires to SOA (Safety Oversight Audit Section), as well as the quality of the information submitted; and
- d) based on the deficiencies and differences between ICAO Annexes and national regulations noted during the audits, to elaborate Action Plans to remedy the detected safety problems.

5. Actions suggested

5.1 The Directors of Civil Aviation are invited to:

- a) take note of the information regarding the USOAP, all the programmes covered by the GASP, as well as all the regional activities related to the aviation safety;
- b) agree with the Draft Conclusion 6/x mentioned in para. 4.1 of this Working Paper; and
- c) agree other actions to be considered necessary to improve safety oversight.

Critical Elements of a Safety Oversight System - Lack of Effective Implementation (%)

