



International Civil Aviation Organization

North American, Central American and Caribbean Office (NACC)

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(E/CAR/DCA/22)**

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Agenda Item 4:

Aviation Safety Matters

**4.5 Caribbean Aviation Safety and Security Oversight System
(CASSOS)**

CASSOS INFORMATION PAPER

(Presented by CASSOS)

1. The Civil Aviation Authorities of Barbados, Belize, Guyana, Haiti, Jamaica, OECs (Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines), Suriname, and Trinidad and Tobago, Member States of the Caribbean Community, signed an agreement in late 2001, formalizing their participation in and support for a cooperative approach to aviation safety oversight. The Agreement provided for the establishment of an “Association of Civil Aviation Authorities of the Caribbean” (ACAAC) under the umbrella of the Caribbean Community (CARICOM) Secretariat and to form its operating arm, the Regional Aviation Safety Oversight System (RASOS). Each RASOS member authorities was mandated to implement the provisions of all ICAO Annexes. It was the RASOS mandate to assist them with specific regard to Annexes 1, 6, and 8 of the Chicago Convention and involved aiding, facilitating, harmonizing and sharing resources for the provision of aviation safety oversight services in thirteen small nations in the Caribbean region. Although all participating authorities belong to States that are members of CARICOM, membership in the CARICOM was never a pre-requisite for membership in the ACAAC.

2. RASOS Member States developed a formal agreement signed by Heads of State in 2008 to widen the regional organization's mandate to include all ICAO Annexes. This marked a major step forward in elevating the RASOS status by establishing it as a new entity, and renaming RASOS as the Caribbean Aviation Safety and Security Oversight System (CASSOS) and having it designated as an Institution of the Community by the Conference of Heads of Government pursuant to Article 21 of the *Revised Treaty of Chaguaramas Establishing the Caribbean Community Including the CARICOM Single Market and Economy*. The agreement subsumed RASOS into CASSOS and the ACAAC no longer exists. CASSOS has full juridical personality, and its Board of Directors report to the Ministers who constitute the CARICOM Council for Trade and Economic Development (COTED).

3. Originally, the Members of ACAAC implemented the Regional Aviation Safety Oversight System (RASOS), to share resources and reduce the cost of providing the required airworthiness and flight operations oversight services to individual member States. The RASOS concentrated on the optimization of the use of the region's technical resources. Its focus was to strengthen the civil aviation authorities, promote the upgrading and harmonization of regulations, standards, procedural guidance material, inspector training and to enhance the ability of the individual States to fully discharge their safety oversight responsibilities. The sub-regional approach chosen is consistent with the global strategy promoted by ICAO to address safety oversight problems of contracting States. RASOS office core operations were funded by equal annual member CAA contributions and it was self sufficient during its existence and by its frugality was able to commence CASSOS with no additional expenditures.

4. Assistance from the FAA between the years 2003-2008 provided numerous training courses for RASOS Member CAA's inspectors and other technical staff. ICAO courses were delivered in the region with regard to aerodrome certification and dangerous goods and PEL. Transport Canada assisted with some compliance/enforcement training, and medical examiner training. The FAA provided extensive in-country assistance by providing technical experts in an effort that was aimed at advising and assisting Members to achieve IASA category one and compliance with Annexes 1, 6 & 8. This assistance included mentoring of inspectors and technical advice provided during re-certification of air operators. Other ongoing FAA technical assistance pursuant to Technical Assistance Agreements was aimed at full implementation in the first half of 2008 of a common and ICAO compliant computer based written knowledge testing system. A regionally developed, harmonized, common license format and production system has been installed in all member authorities and could be made be available commercially to any other authorities that are interested in such a system. Transport Canada continues to assist with training of civil aviation medical examiners and cabin safety inspectors and is offering ongoing training support in SMS and aviation compliance and enforcement. Common qualifications and training standards for inspectors have been enunciated to facilitate resource sharing, that is, the trans national use of inspectors, and procedures for designation and delegation of authority and for requesting, tasking and deploying trans national inspectors have been developed and approved. A Policy and Procedures Manual was developed to guide the management and operation of RASOS and in its latest version will now be used to guide and direct CASSOS activities. Inspector guidance material is shared freely between Members and is well harmonized already. It is anticipated that development of unitary common guidance material will follow the development of common "regional" civil aviation regulations while at present, all regulations are based on adaptations of the ICAO MCAR and are virtually identical. Other initiatives include harmonized enforcement procedures and inspection procedures.

5. In 2009 four of the original seven RASOS Member CAAs continue to meet the IASA Category One standards. CASSOS, in a manner similar to that used by the European Aviation Safety Agency (EASA), performs reviews of its Members using experienced inspectors from the region and checklists derived from IASA and ICAO USOAP checklists. Reports developed for the Member authorities are reviewed and the results are used to determine, prioritize and respond to region-wide needs. The reviews assist with harmonization activities and have also assisted members to prepare for IASA and ICAO audits some Members find them useful to develop compliance action plans. There remains an ongoing need for on-site mentoring and training of technical personnel and for technical assistance in all Member CAAs, particularly as the CASSOS mandate has been significantly widened and new expectations arise resulting from changes to the Annexes and technology.

6. Using needs assessment methodology the regional body has identified the need for professional training and recurrent qualification training of airport operators' personnel. It has from its own resources and assisted by a member of the FAA airport standards staff, delivered a three day seminar on aerodrome manual preparation to some 33 aerodrome specialists from the region.

7. The RASOS web site contains public information and members' only sections. The inspectors' section contains downloadable inspection forms, some common guidance material, flight test forms and other data required by the region's technical staff. The site also hosts a safety newsletter, links to Member CAA sites, links contact to RASOS and provides a secure 128 bit encrypted e-mail service for the Directors, RASOS staff and all technical safety inspectors in the RASOS group and other selected officials who have been working with RASOS. It is a very strong tool for communication, information and data sharing and for providing a public identity for the organization as well as serving as a virtual office for RASOS personnel. The website is being updated and changed to reflect CASSOS operations and that should be completed by the end of 2009.

8. CASSOS has adopted the European Center for Civil Aviation Incident Reporting System (ECCAIRS) for incident and accident reporting and, in a regional project, CASSOS Members use a common, harmonized regional inspection planning, tracking and reporting system. While this system respects national security, confidentiality and sovereignty as required, it provides a valuable tool for analysis and tracking of trends and allows development of appropriate safety and regulatory interventions. CASSOS will share inspection data as in the European Safety Audit of Foreign Aircraft (SAFA) system. Seminars in ALAR CFIT accident reduction have been delivered and this will continue under CASSOS with a much widened safety promotion mandate. The regional organization has assisted members with accident and incident investigation and it is envisaged that this will grow into a truly regional service as the benefits of a centralized investigating office are beyond question. The foregoing summarizes the major efforts of the past seven years toward safety oversight harmonization within the CARICOM CSME framework.

9. All of the above initiatives have been aimed at building a strong regional regulatory and Safety Management System to enhance civil aviation safety in Member states and throughout the region and are continuing under CASSOS. Funding at this moment in time is limited to provision of two technical experts and one administration person. Future development and strengthening of the regional safety oversight capability may require increasing member contributions or new sources of funding or assistance.

10. The direct beneficiaries of the regional CASSOS institution activities are the participating States of CARICOM and will include any other States or Territories in the region that might become part of the regional aviation safety oversight mechanism during the next few years. Other direct beneficiaries of CASSOS activities are the owners and operators of aircraft and all who use the aviation industry infrastructure and services in the CASSOS States. One must not overlook the indirect beneficiaries of the air transport, aviation services and infrastructure that very clearly includes the tourism and other business sectors of the national economies. External benefits flow to the States from the improved aviation safety environment resulting from the upgraded aviation infrastructure and the increased surveillance and enforcement of the safety standards established by ICAO.

11. CASSOS has matured from its fairly humble beginnings as RASOS and resulting from seven years of hard work by all persons involved it has almost eight years of successful operating experience in coordinated, cooperative, harmonized, self-sufficient group efforts aimed at providing safety oversight services to the high economic value air transportation system in all participating States as well as to other States whose airlines operate into the region. This high level of achievement will continue as CASSOS continues its growth into a truly regional institution.

12. The immediate benefits of regional cooperation are evident from the constantly improving track record of results of the ICAO and FAA safety oversight audits of member CAAs. Benefits are also accruing to members from the mutual technical cooperation, mutual technical assistance, attainment of greater numbers of trained and qualified technical inspectors, and the valuable technical expertise contributions made by all Members in their efforts to achieve and sustain compliance with international aviation safety oversight standards at affordable costs. A strong regional safety oversight partnership has been forged. Future activities are aimed at establishing a permanent Headquarters, undertaking new regional projects such as a single upper airspace control system, introduction of new ATM surveillance technology and air navigation technology, and managing safety initiatives and interventions to keep the aviation system loss rates as low as possible.

13. CASSOS participates directly with the ICAO Regional Aviation Safety Group – Pan America (RASG-PA) and a CASSOS DGCA is the current chairman of the RASG-PA. The current status of CASSOS members activities in relation to the RASG-PA Recommendations as they pertain to regional oversight organizations is described in the following paragraphs.

14. State regulations and guidance material related to the implementation of State Safety Programmes have not yet been implemented in: the OECS, Guyana, Trinidad and Tobago, Jamaica, Haiti, Suriname and Barbados. Several of the States will have had representatives in attendance at the SSP Workshop in Curacao in early December 2009. None of the CASSOS States has yet developed a SSP. Following the Curacao workshop this development activity is expected to accelerate. Trinidad reported that it will have completed the development of the SSP by the end of 2010. While all CASSOS Members intend to implement SSP over the next two years it is clear that formal training of personnel in SSP will be necessary in all CASSOS Members organizations before SSP is implemented. A CASSOS working team drafted "model" regulations as a guide for CASSOS Members SMS in airports and service providers in 2007, but has not developed guidance material or standards to accompany the "model" regulations. CASSOS has developed a regional SMS Manual and a Regional Risk Management Manual for use by Members. State regulations and guidance material related to the implementation of Safety Management Systems are in varying stages as is the status of implementation of SMS in the CASSOS States. All require SMS for air operators, and most require it for airports, in most it is still in the process of being developed for CNS/ATM service providers. CASSOS has not sponsored any SSP training, however, it has facilitated and coordinated several SMS courses in the region that have been attended by regulators and industry and has delivered one aerodrome manual writing seminar that explained in one segment how SMS is developed for airports. As already noted, CASSOS has developed a regional SMS Manual and a regional Risk Management manual for use by its Members, and CASSOS has facilitated and coordinated training for regulators in the set up and use of ECCAIRS. However, while there are encouraging developments in ECCAIRS implementation in some Member organizations, ECCAIRS is not fully implemented in all Member CAAs at this time.

15. A summary of safety occurrences in the CASSOS Members States follows:

SUMMARY OF OCCURRENCES IN CASSOS STATES FROM NOV 2008-NOV 2009

a.	Fatal accidents	5
b.	Non fatal accidents	8
c.	Serious incidents	32
d.	Serious loss of separation	9
e.	Runway incursions	3
f.	Weather related incidents	2
g.	Bird strikes	23
h.	Dangerous goods incidents	4
i.	Acts of unlawful interference	2

The above occurrences were described to CASSOS in response to a questionnaire returned by some of the Members and there is reason to believe that there may be some under reporting of weather related incidents and bird strikes. Illegal activity was involved in one of the fatal accidents, one involved a light helicopter and one was to a UN support military aircraft in Haiti. Serious incidents were not broken down other than to identify serious loss of separation which would translate into 30% of the serious incidents. This is an area where CASSOS will investigate what sort of ATC safety interventions may assist to prevent this category of occurrence. One of the fatal accidents involved a US registered aircraft and crew in Guyana and is believed to have been a weather related CFIT accident, however, the crash site has still not been located. No large aircraft were involved in accidents. Bird strike is an area where some preventative interventions may result in improvement of safety and it is noted that the ICAO Bird and Wildlife Control seminar was held in a CASSOS State, Grenada, later this month at a location where a serious bird strike just occurred to a passenger jet. One of the unlawful interference occurrences resulted in wide press coverage as it was an attempted armed hijacking of a Canadian passenger aircraft in Jamaica and the perpetrator, having been found fit for trial, was awarded a sentence of 83 years for the illegal use of firearm offences while the civil aviation unlawful interference offences still are subject to pending court action.

16. The Meeting is invited to:

- a) note the information contained in this information paper and in particular to recognize the CASSOS as a regional organization aimed at enhancing the level of aviation safety of civil aviation in the region as well as facilitating other mutually accepted initiatives for the good of the Caribbean region and the Caribbean Community.
- b) note the substantial progress already achieved by the CASSOS in improving safety oversight in its Member States.
- c) note the step forward for CASSOS being designated as a formal institution of the Caribbean Community in mid 2008.
- d) extend all possible support to the CASSOS in cooperating in and building wider technical support and resource partnerships to further its work.
- e) consider that CASSOS associate membership is not limited to CARICOM Members.
- f) consider that as a CARICOM Institution the CASSOS will be much more effective than RASOS as it will have the political and diplomatic status to deal with regional and external agencies on all aviation issues on its own.
- g) consider that under the Revised Treaty of Chaguaramas, CASSOS will be a primary source of expertise for all matters dealing with technical aspects of aviation within the Community.
- h) recognize and support CASSOS as it actively enhances and expands its aviation safety activities and programs and its goals of assisting in the development of the highest and most modern standards and services supporting air transport operations and aviation safety in the region and facilitating aviation growth in the region.

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