International Civil Aviation Organization
Regional Aviation Safety Group - Pan America (RASG-PA)

WORKING PAPER

Eighth Regional Aviation Safety Group — Pan America Annual Plenary Meeting (RASG-PA/8)
Medellin, Colombia, 25 June 2015

Agenda Item 5:   **Safety Initiatives**
                       5.3   Other Safety Initiatives

SUSTAINING COMPLIANCE; TOOLS AND ASSISTANCE FOR
EFFECTIVE SAFETY OVERSIGHT

(Presented by the United States)

EXECUTIVE SUMMARY
The demand for commercial aviation over the next several decades will reach unprecedented levels; forecasted data from the International Air Transportation Association in October 2014 predicts that passenger numbers will rise to 7.3 billion people by 2034. With this demand comes the expectation that the States responsible for oversight of these operations will be able to supply the highest levels of safety necessary for such operations to flourish. For the international aviation system to manage such growth, all States must be able to perform efficient and effective safety oversight of their own national operations.
The intent of this Working Paper is to emphasize the importance of the eight critical elements of safety oversight in the future of the aviation system, to identify the common deficiencies found in their implementation and sustainment around the world, and to note the tools and assistance available to States so that they may improve and enhance their safety oversight system.

Action:	Recommended actions are included in Paragraph 7.
Strategic Objective:	• Safety

1.   Introduction

1.1   The eight critical elements of safety oversight are the foundation for a State to effectively implement and conduct safety oversight. Only after becoming compliant with the minimum requirements of the eight critical elements will a State have the experience and ability to adequately fulfil their safety oversight obligations under the Convention on International Civil Aviation.

1.2   The ICAO Global Aviation Safety Plan (GASP), as approved by the 38th Assembly, emphasizes that States with less than a sixty percent effective implementation of ICAO standards should focus their attention and resources on implementation of a safety oversight system.

1.3   The intent of this Working Paper is to emphasize the importance of the eight critical elements of safety oversight in the future of the aviation system, to identify the common deficiencies found in their implementation and sustainment around the world, and to note the tools and assistance available to States so that they may improve and enhance their safety oversight system.

2.   Identifying Safety Issues

2.1   The eight critical elements are essentially the safety defence tools of a safety oversight system and are required for the effective implementation of safety-related policy and associated procedures. States are expected to implement safety oversight critical elements in a way that assumes the shared responsibility of the State and the aviation community. The effective implementation of critical elements by a CAA indicates the capability for safety oversight.

2.2   Both the ICAO Universal Safety Oversight Audit Programme (USOAP) and the U.S. International Aviation Safety Assessment Program (IASA) utilize the eight critical elements as the threshold for determining how well a State is able to effectively meet their minimum obligations for safety oversight. These programs have had tremendous success in assisting States to identify where deficiencies exist in their implementation (or lack thereof) with required ICAO standards.

2.3   The U.S. IASA program is utilized to determine whether a foreign Civil Aviation Authority has the capability to conduct the necessary safety oversight of its national air carriers, and therefore if those air carriers are able operate to the United States, and/or to code-share with U.S. air carriers. An IASA assessment is necessary to initiate such operations, the results of which result in a category rating of 1 (signifying satisfactory compliance to ICAO Standards) or a 2 (signifying non-compliance to ICAO Standards). Ratings are publically disclosed on the FAA website; however the assessment findings are kept confidential. States with a category 1 rating are continuously monitored and repeat assessments may be conducted should safety issues arise. States with a category 2 rating may request a reassessment, after taking the appropriate steps to comply with ICAO standards.

3.   Trends in Sustainability

3.1   Effective safety oversight can only be achieved when all eight critical elements are implemented and integrated into a State's system. Often times, the most common issues identified which prohibit effective implementation include the following:

a) *Sustaining Compliance over time*. The most difficult aspect of performing effective safety oversight is in maintaining it. Sustained performance requires constant management and attention, from within all levels of the CAA and the national government. Regulations and laws must be able to adapt to the changing state of the operation environment and to comply with new international safety standards, resources must be available to provide for the continued training and qualification of technical personnel, records must be kept current, and safety must remain the focus of the entire organization.

b) *Lack of technical qualified personnel*. Many States struggle with retaining a cadre of qualified and capable technical personnel. In many cases, those with specific expertise may leave the CAA for a higher paying position in the industry.

c) *Type rated operations inspectors*. Effective oversight of an operation requires the CAA to ensure that they have inspectors with the specific expertise and experience for all aircraft types under their jurisdiction. In many cases, it may be difficult for the State to maintain such a varied work force.

d) *Lack of Political Will*. The will to drive a higher level of safety must come from the highest levels of the national government. Only with such commitment will a State have access to the critical resources needed to sustain compliance to each of the critical elements.

e) *Lack of certification and documentation*. Processes and procedures lay the groundwork for a State to provide the information necessary to conduct their functions in a standardized, consistent, and transparent manner. Lacking such direction leaves the State vulnerable to shortcuts and corrupt business practices, and overall diminished confidence in their safety oversight capabilities.

f) *Lack of clear and implementable regulations*. Regulations are the cornerstone of an oversight system, without a clear and implementable set of regulations a State will be unable to perform even the most basic oversight of their industry.

4.   Seeking Assistance

4.1   Developing and sustaining a functioning safety oversight system is a significant undertaking, requiring an overall safety culture committed to continuously sustain compliance at the highest levels of management. To do so effectively, States must be prepared to dedicate sufficient resources to aid in identifying and acting upon deficiencies or vulnerabilities that exist in their system. There are a number of international organizations, nationally sponsored programs, and commercial entities that offer a variety of technical assistance to assist States in safety oversight.

4.2   The U.S. Federal Aviation Administration (FAA) provides technical assistance on an ad hoc basis, and also provides guidance for States seeking more long term technical support. The FAA defines technical assistance as assistance to another civil aviation authority (CAA) or foreign industry related to aviation safety functions, which may include domestic or in-country technical training, seminars, and workshops.

4.3   Typically, the FAA will provide specific technical assistance to a State following the outcomes of an IASA assessment or a Technical Review, so as to have a baseline for determining the areas wherein such assistance is needed. A technical review is a system assessment identical to that of the IASA assessment; they are conducted by an IASA qualified technical team applying the same criteria, however they are authorized under a formal agreement for cost reimbursement, and there is no category determination or public disclosure of the outcome.

4.4   States may also utilize the assistance of other Civil Aviation Authorities, international organizations or commercial entities to identify and correct deficiencies in their safety oversight system. The ICAO Technical Cooperation Bureau (TCB) offers technical services to those States seeking to become compliant.

4.5   Due to the significant investment and resource expenditure required to successfully engage in a technical assistance program, States should ensure that the provider has the necessary qualifications and capability to perform the necessary assistance, and that the scope is well defined and documented before commencing work. The FAA has developed a guidance document, FAA Advisory Circular 129-5, to assist States in working with a technical assistance provider, whether that is with the FAA or another entity. Further information can be found at: http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_129-5.pdf.

5.   Utilizing Oversight Tools

5.1   An effective and sustainable aviation system is first and foremost dependent on the strength and viability of the State's primary aviation legislation. This foundation empowers the State with the capability and authority to implement and enforce a compliant and durable oversight structure. As described in ICAO Doc 9734, critical element one describes how a State can develop and maintain a national aviation law suited to the scope and complexity of their system.

5.2   Once a State has enacted a viable aviation law, a commensurate and comprehensive regulatory framework must be established and implemented. As described in ICAO Doc 9734, critical element two outlines the requirements for compliant national regulations emanating from the primary aviation legislation.

5.3   To further provide guidance and assistance to States in the development of compliant civil aviation legislation and regulations, the FAA has developed a series of templates, which are updated on a regular basis to remain in compliance with ICAO standards. The Civil Aviation Safety Act is a template for model legislation, and the Model Civil Aviation Regulations (MCARs) are a series of regulations and associated guidance material for oversight of the different components of a State's aviation system. These templates are publically available for use by all civil aviation authorities, as a basis to bridge and customize to their own national requirements. They are available in English, French, and Spanish in Microsoft Word format, at the following web address; http://www.faa.gov/about/initiatives/iasa/mcar/. These templates are intended to assist, and

5.4   In order to implement and consistently enforce national laws and regulations, a comprehensive training program must be established so that the State can ensure their work force is prepared and qualified to perform their intended function. In accordance with ICAO critical element four, States must develop a national training program that is commensurate with the scope and complexity of their aviation oversight system.

5.5   The FAA has developed a series of Government Safety Inspector (GSI) courses, which provide a baseline foundation for States to grow their own national training program. These courses are compliant with ICAO Standards in the areas of Operations, Airworthiness, and Personnel Licensing. The FAA offers these courses on a periodic basis at the FAA Academy in Oklahoma City, Oklahoma, and also may be offered globally on an ad hoc basis. The FAA has also recently entered into training agreements with two States to offer courses at their facilities; both at the Singapore Aviation Academy, and the Superior Academy of Aeronautical Sciences in the Dominican Republic.

6.   Conclusion

6.1   As the demand for commercial aviation continues to grow comes the expectation that the States responsible for oversight of these operations will be able to supply the highest levels of safety necessary for such operations to flourish. Therefore, the United States recommends RASG-PA members work collaboratively to achieve sustainable safety oversight across the entire region.

7.   Recommended Action

7.1   The Meeting is invited to:

a)   consider the information noted in this working paper,

b)   work collaboratively with States and industry to determine where further assistance may be needed within the RASG-PA Member States; and

c)   direct the RASG-PA Aviation Safety Training Team (ASTT) to take on this role in providing guidance to RASG-PA Member States seeking assistance in effective and sustained compliance to safety oversight obligations.

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