



GSI 12 REPORT

(Presented by COCESNA/ACSA)

SUMMARY

This working paper details the development aspects of the GSI-12 task, and details the progress and recommended alternatives to move forward with compliance of the sub tasks included.

Within RASG-PA, COCESNA was entrusted with carrying out the task on GSI-12, recognizing the need to present and support the aeronautical community through the use of technological tools so that air operators and authorities can interact in an atmosphere of greater security. GSI-12 identifies and takes advantage of the existing technological tool known as FOQA which has been developed to provide Civil Aviation Authorities with safety data that when analyzed by the operator provides the authority with the mitigation actions to be taken concerning the “risks” that the FOQA system has detected.

The actions proposed to be shared with the authority after the risk analysis trends shown by the FOQA data analysis are set out in this working paper as alternatives or recommendations.

Proceeding forward with the task on GSI-12 has presented difficulties, but even with these difficulties we have been able to determine more precisely the safety steps needed that go beyond the use of technological tools that can contribute to safety. COCESNA/ACSA notes that prior to implementing a “data” (trends) sharing program, we should have a project that generates the operator’s confidence in sharing the data with regulatory authorities and at the same time look for a legislative tool that protects the information provided by the operator.

Finally COCESNA/ACSA will continue working on the development of GSI-12 in its technical aspects (those related to the managing of data trends information obtained from the FOQA System) and suggest the development of a system that generates confidence.

1. BACK GROUND

1.1. During the first Planning Committee meeting which included the objective of creating the Regional Aviation Safety Group – Pan-American (RASG-PA), that took place in Mexico city on August 2008 (P-RASG-PA1-NE/02), a follow up was provided on the results obtained from the workshop in Bogotá on the Global Aviation Safety Road Map (GASR) it was noted that GSI-12 was placed at a maturity level of 2. Three actions were recommended.

- i. **First** – Centered to the access of knowledge, of assessment and of successful experiences obtained from the use of available technology to enhance safety.
- ii. **Second** – facilitate the access to available material and look for financing to obtaining new technological tools to enhance safety.
- iii. **Third** – This recommendation be oriented toward the development of a regional plan to implement the new technologies available.

1.2. In consideration of these recommendations, COCESNA/ACSA proposed a pilot “trends information sharing program” with at least one operator from the Central American region who has implemented the utilization of these technological tools to enhance safety. COCESNA/ACSA proposed the use of the FOQA program to be used as a voluntary safety report program. This data sharing should be done in a periodic manner with the purpose of analyzing trends in air operations with the result being a better use of those resources for mitigating operational safety risks.

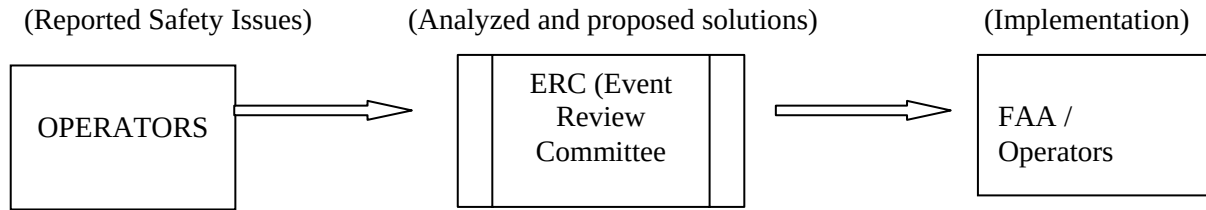
2. EXPERIENCES FROM OTHER STATES/ORGANIZATIONS

2.1. It is appropriate to note in this working paper the experiences and good results obtained from other states and organizations through the analysis of the FOQA program, which as an example we enclose the 2008 Annual C-FOQA Statistical Summary Report from Flight Safety Foundation. This analysis presents an important analogy that could be used as an example but not as a model. We include this recommendation later in this working paper.

2.2. It’s important to note that in the United States there are more than 15 air operators who are utilizing the FOQA programs that have the FAA approval for its implementation, it is important to note this fact in view that it allows be aware that the use of this system is more and more frequent, which confirms that work is being carried out on a program that proves its efficiency in the prevention field.

Likewise, the FAA. The FAA in Advisory Circular AC-120-66B provides guidance for establishing an air transportation Aviation Safety Action Program (ASAP), as shown in the next diagram.

ASAP FAA PROGRAM



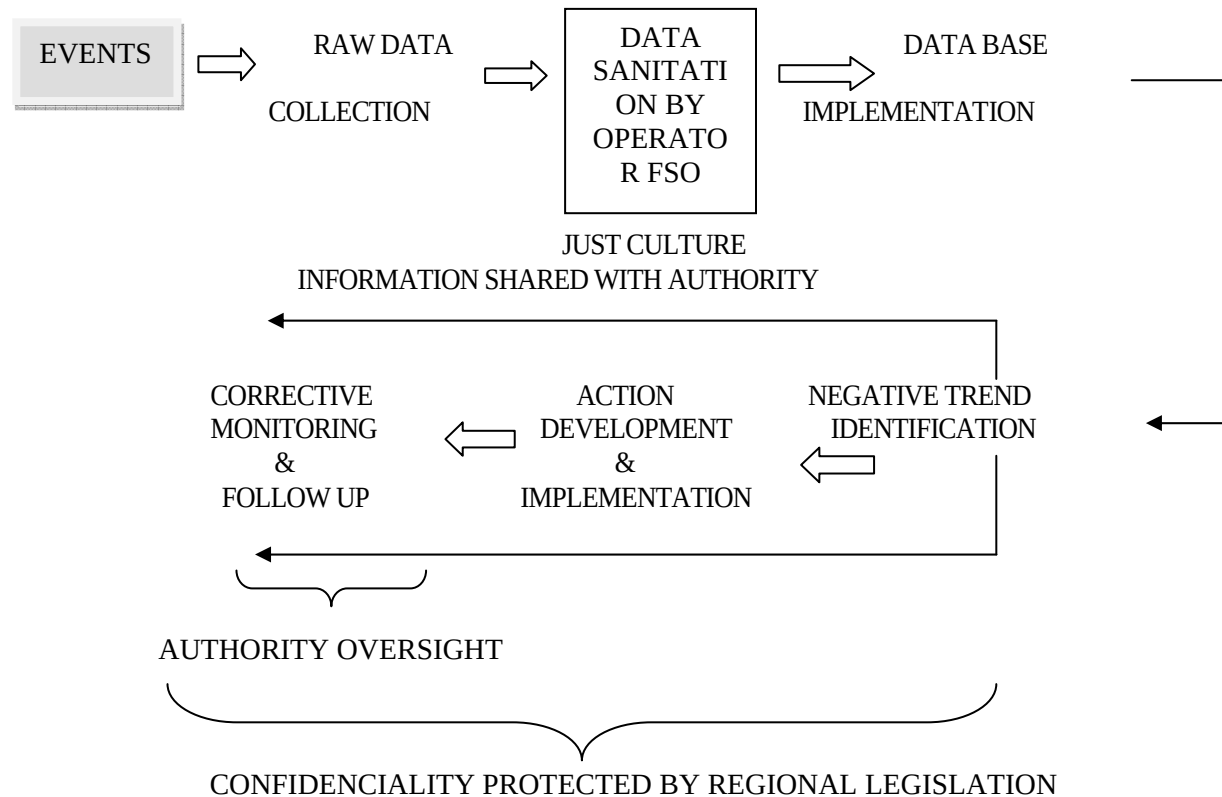
ERC include the FAA, the Certificate Holder and may include a third party such as employees, and labor organizations

2.3 The Flight Safety Foundation analysis as background included in the report, shows that graphics analyzing conditions trends identified by FOQA in flight stages are clearly identified, this background will be recommended by COCESNA/ACSA as an example in this working paper.

3. DEVELOPMENT

3.1 The next diagram shows the voluntary system report that COCESNA/ACSA is proposing in this working paper.

PROPOSED PROGRAM



To develop this program it is necessary to work closely with the operator selected from this region who is already using the FOQA system, in this regard an open discussion was originated in the same aspect of the form to share the trends information got from the FOQA system. Information will be provided on the intent of this pilot plan as well as that this information will not be used as a punishment tool.

The airline is obliged to the FDM (Flight Data Monitoring), through the use of a complex system to assure the proper and continuous use of data obtained.

As we know, the Regulating Authority has within its obligations the surveillance of their State air operators, watch that the system is being used and that adequate corrective actions are being taken and implemented by the operator to find risks or latent dangers.

The authority don't have the technological tools nor the technical personnel adequately qualified to obtain and analyze by themselves data from the FOQA, and the aforementioned would not have sense as they are increasing the workload for the authority, as for the contrary, by all means its trying to diminish the workload and keep an adequate budget.

Also, the regulatory authority must have a mechanism to accept the FDA system proposed by the operator, including for example that the personnel in charge of it be adequately qualified and that includes an adequate process for corrective actions.

Between the regulatory authority and the operator must agree on a mechanism to classify which events must be reported to the authority and which not, as well as the follow-up of the analysis results and of the corrective actions. Also they must agree on the reclassification of event due to, for example, that an event initially qualified as minor, due to its continuous repetition evolves to a major classification (critic).

The airline is the responsible to assure the continuous analysis of the data and once the analysis of them have been done, all those events that are not classified as critical don't need to be reported to the authority unless they show a negative trend. All those events that show a negative trend must be reported to the authority only as statistical data, including the amount of corrective actions taken, similar to the rules applied to an incident report.

The operator was informed that the trends information obtained by the FOQA system would be kept confidential. This matter was discussed in detail with the operator with the objective to generate necessary confidence and assurance that the CAA, and COCESNA/ACSA, would use the data provided only for the purpose to enhance safety.

From these concepts, tasks that are described below are planned, including the development of an agreement that guarantee the process.

It is necessary to note here the importance to search for mechanisms that will guarantee to operators, that the trends information will be kept strictly confidential. This generates a new task that is discussed ahead in this working paper. It is also important to take note that this task should be completed before we can continue with the GSI-12

The COCESNA/ACSA team will be focus on searching for mechanisms to convince the operator to actively participation in collecting and sharing the data obtained from its FOQA system. In that sense the following activities will be conducted:

As a result of the first meeting held with the operator on February 27th, 2009 the following task were agreed to be conducted:

- i. The operator will analyze in detail the information provided by COCESNA/ACSA.
- ii. The operator will determine what information they will be able to share with the regulatory authority.
- iii. The operator will request the manufacturer recommendations about the data to be share with the authority.

The development of this task has been slow paced as a result of the difficulties noted in this document. Nevertheless we can note some of the achievements accomplished with regards to what was agreed upon during the first meeting.

3.2. The operator should analyze the documentation provided by COCESNA/ACSA and determine the viability of sharing information and determine what information should be share with COCESNA/ACSA.

3.3. The operator should request from the manufacture his opinion on sharing data and his experience on this matter.

3.4. The operator should provide information related with the TCAS resolution advisory.

3.5. The CAA of Costa Rica should participate with the specialist on SMS.

3.6 Also AIRBUS as well as ALTA were invited, and at present we count with their active participation. AIRBUS and ALTA have joined the working group to contribute in the development of this task, and we are sure that they will help to achieve the credibility that the process require and speed its working.

3.7. At this moment we are working on a memorandum of understanding to establish the procedures and rules to follow so the operator will be comfortable sharing the trends information from the data analysis of the FOQA system, with COCESNA/ACSA and the CAA.

3.8. A follow up meeting was proposed for May 25th but was cancelled by the operator. At this moment we are insistently working on a new meeting for the corresponding follow-up.

3.9. We are consistently requesting the participation of the mayor operator's safety specialists who are working with the FOQA Program.

3.10. The operator has already agreed to provide the data to the TCAS resolution advisory.

3.11 We are establishing contact with another operator for this region, who may be interested in participating in this program. We have sent an invitation to participate to this new operator.

4. **DIFICULTIES ENCOUNTERED**

A series of difficulties are been identified during the process of implementing this task on GSI-12. Some of them are listed as follow:

- i. Clear rules need to be established
- ii. The operator has resisted sharing the information requested
- iii. Lack of interest to participate
- iv. The operator is lacking confidence about the data destination
- v. Difficulty in making clear distinctions on the positions of the operator and the regulatory authority regarding their roles in this program
- vi. Increase in work load for the operator

We have noted that operators in this area are not taking full advantage of the technology they possess (FOQA, LOSA) to gain better management of operational safety.

5. RECOMMENDATIONS

5.1. The difficulties previously mentioned in this Working Paper persuades us to find mechanisms to generate confidence on the part of the operator, and for that reason, we recommend the following actions:

- i. To collaborate on a MOU between the operator, COCESNA/ACSA, and CAA that guarantees the confidentiality of the information.
- ii. To include in that MOU between the Operator, ACSA/AAC that it guarantee that
- iii. the information will not be used to punish the Operator.
- iv. Find the possibility to issue rules that give guarantees to the operators that voluntarily give information related with security.
- v. Search normative mechanisms that give credit to operators that voluntarily issue data related to security to encourage the operators to voluntarily report safety issues.
- vi. That the agreement have the classification mechanisms of events, and indicate which should be reported and which should not be reported to the authority.

5.2. Try to contact another operator from the region to try to have them involved in the program.

5.3. Contact others CAA's of the region who are involved in the program to inspect less frequent the operators participating in the voluntary report program. This may provide an incentive to motivate operators because they will see that their corrective actions are accepted by the regulatory authority and as a result there is not a need for the heavy surveillance that is normally given to operators who don't participate in this kind of program.

5.4. Invite Flight Safety Foundation to participate as a member, consultant or advisor of the GSI-12 work team with the purpose of obtaining FSF expertise on this matter as shown on the Statistical Summary Report enclosed to this working paper.

5.5. As a mean to provide a new technological alternative COCESNA/ACSA is proposing the utilization of a software tool (SIAR Sistema Informático de Aeronáutica Regional) that is actually in use within the CAA's of the Central American area. Through this system the operators could share the data with the purpose of resolving and follow-up no-conformities generated in the different inspections carried out by the regulatory authority, in a more efficient manner, the safety issues that are more common in the area.

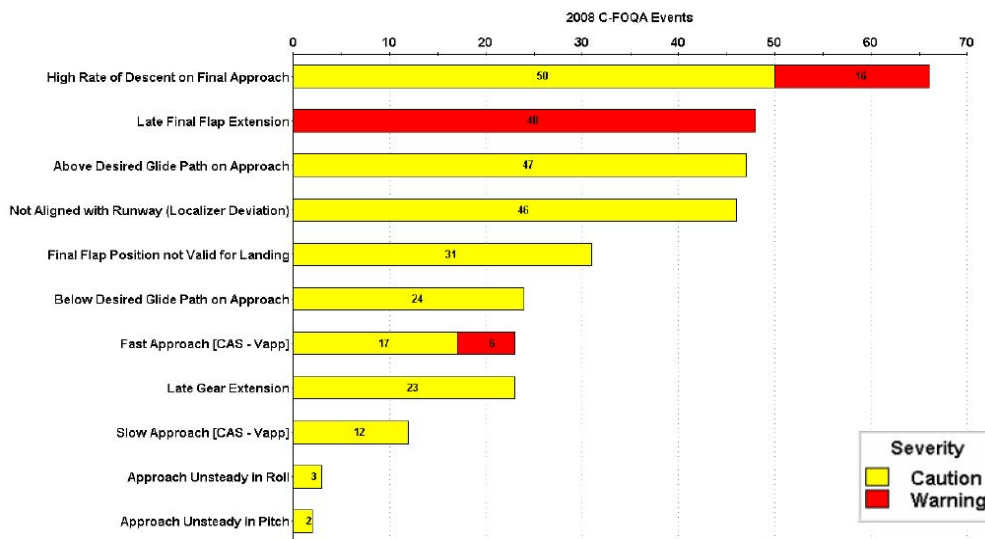
6. SUGGESTED ACTIONS

6.1 Take note of the information presented in this working paper.

6.2 Issue agreement related with the proposed recommendations.

7. ANNEXES

The following figure show and example of how the data resulted from the FOQA program can be utilized and also shows the tendencies of the most common safety issues.



Following the statistical data report collected in 2008 and presented by the Flight Safety Foundation.