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# Ninth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/09)

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Agenda Item 10: Other Business

#### TRAINING PROCESS INTEGRATION. A NEW STRATEGY FOR THE TRAINING IMPROVEMENT EFFICIENCY

(Presented by Dominican Republic)

## **EXECUTIVE SUMMARY**

In this dynamic environment of multiple air navigation projects being implemented simultaneously, proper education and training is the key to strengthen the human factor capacity and reduce the possibilities of errors or inattentions as a result of the lack of awareness about the interrelation between certain operational concepts.

To achieve effective application of the new processes related to safety, environmental protection, efficiency of operations, airspace optimization, among others, it is instrumental to develop and implement a smart strategy to fluently link the training aspects and make them understandable and positively applicable by the aeronautical personnel. In that regard, the concept of TRAINING PROCESS INTEGRATION proposes to execute a thoughtful assessment of the specific trainings required by each area and develop a special curricula that clearly stablish the relation between the new concepts, not only in theory but also in application, so that implementation could be carried out smoothly and without hesitations.

Actions:	Under Section 3.4
Strategic	Safety
Objectives:	Air Navigation Capacity and Efficiency
	Security & Facilitation
	Environmental Protection
References:	<ul> <li>Doc 9941, Training Development Guide – Competency-</li> </ul>
	based Training Methodology DDC TRAINAIR ASCA

## 1. Introduction

1.1 When we talk about aviation training, the first thought that comes to our minds is the instruction of pilots, maintenance technicians and air traffic controllers, which represent irreplaceable figures in the current congested aviation system dynamics. Likewise, if we try to analyse the matter of training and its

most important related challenges, we will definitely think of the imperative need for sufficient and competent personnel required in the aviation sector to support the projected growth on air operations.

- 1.2 Despite the previous references are truthful, the final goal is weighing the importance of obtaining a suitable and timely aeronautical training in relation with the implementation processes of new technologies and procedures within the diverse subsystems that comprise the aviation structure.
- 1.3 The Management units have the important challenge of properly conducting the implementation processes and to comply with this end, they will have to promote the need of introducing changes, communicating the advantages they represent and integrating the working groups into the discussion and analysis of the processes, taking into account that the communication/information reaches all team members in order to create the proper synergy among the team.
- 1.4 The implementation processes carried out turning the back on the employees, based only in the application of new regulations or decisions made by top down approach, have proven to be highly inefficient within the technical aviation field, affecting sometimes not just the economical resources, but the life of the air transportation users as well.

## 2.0 Discussion

- 2.1 Stakeholders of the aviation sector must pay special attention to these situations that attempt against the proper development of aviation activities and discourage the involvement of personnel, creating a latent risk due to the lack of knowledge or disinterest on topics directly related to their functions.
- 2.2 Aviation safety is the most important topic addressed in modern aviation, with such relevance that the member states authorities of the International Civil Aviation Organization (ICAO) have locally adopted regulations that require specific training for specialized personnel on this matter working on the aviation sector organizations. Certainly, important educational material has been developed to deliver courses related to aviation safety according to different levels, as a result the significance and scope of the concept is widely known. However, when it becomes necessary to assume actions intended to protect aviation safety, a lot of people might understand that those activities are something additional to their functions or tasks and therefore, postpone or delay their execution.
- 2.3 To address that issue, our approach is that a Training Process Integration is required in the aviation system that allows to effectively link the different tasks and concepts so that the operational levels can apply the initiatives corresponding to each aspect, as part of their usual responsibilities, with full awareness of their origin and contribution they imply to air operations.
- 2.4 Similarly, in the case of flight crews, there are isolated processes that often involve the application of independent checklists, which could be linked and applied more cleverly. For the implementation of new technologies in flight deck, it is essential to take into account the opinion of the pilots who will subsequently be the users of these features. Modern air transport has had major incidents, some of which had turned into serious accidents, causing the death of many people; afterwards identifying the lack of expertise of pilots with respect to certain newly implemented technologies or procedures as contributing factors. It is in that sense, that it results axiomatic that an analysis and integration of the concepts of training processes related to technical preparation.

- 2.5 In the field of application of environmental protection policies, many improvement opportunities have been identified regarding the Training Process Integration concept. In the air traffic controller's facilities, safety is always prioritize, which is logical and correct; however, procedures that take into account safety aspects, as well as efficiency, organization and speed, could be improved. This requires terminal procedures design staff to interact with the technical operational staff of the ATM area, listen, evaluate and incorporate their singular issues, general perspective and the exceptional circumstances that could prevent the proper utilization of the new procedures.
- 2.6 Generally, organization's management originate and promote projects that pursue process improvement, proactivity in the use of technology, efficiency and customer satisfaction, all aligned with the intentions of the company to maintain its validity and profitability in the business. The guarantee of achieving these objectives lies on the application of strategies that connect their operational staff to the main goals of the organization making them able to identify the origin of changes and implementations, sharing their ideas and related situations, being listened and consequently generating an easy assimilation of the changes, understanding the advantages that these imply for the organization and consequently for themselves.
- 2.7 Today's aviation training faces difficult challenges in terms of quantity and quality of training, combined with the imperative need to have enough personnel ready, as soon as possible to handle the high volume of operations predicted for air transport. This fundamentally requires that the aeronautical training centers, knowing of the existing and projected shortage of personnel, seek to improve the efficiency of training and thus create suitable work environments, where each operator despite their hierarchy, recognizes the repercussions of their actions or inactions and manifests itself aligned with the main objectives of the aviation system in terms of being safe, ordered and expeditious.

#### 3.0 Conclusion

- 3.1 The concept of Training Process Integration, which we have identified as the most efficient response to link conceptual subjects applied to current aviation systems, such as safety, environmental protection and efficiency of operations, should be weighed and evaluated by the training departments of aviation organizations, according to the operational area they serve. This will require determining and formalizing processes that integrate diverse technical representatives of areas like: training, project development/implementation and operational, with the support of the human resource office. This group, acting as a commission may then analyse the different issues that are a priority for the organization and must be implemented through operational actions in a conscious and effective manner.
- 3.2 Analysis for implementation of specific job tasks and initiatives, considering the Training Process Integration, meaning the clarification and establishment of logical relation between different initiatives, describing the best way to apply them simultaneously and coherently for the best evolution of air operations is, in our opinion, the best way to prevent operational work teams from continuing to view particular trainings as independent subjects that have no relation, and avoiding the situation of leaving to their discretion the evaluation of priority at the time of applying the new guidelines.
- 3.3 Aviation is a system whose success is based on the harmonious relationship between all its subsystems components. Similarly, we must focus on ensuring that technological and procedural

improvements reach operators in an orderly and comprehensible manner so that their application achieves the desired results considering the strategic objectives of the organization as well as those of Aviation as a Global system.

# 3.4 We invite the meeting to:

- a) Analyse and discuss the information contained in this working paper;
- b) Request the usual support of ICAO GAT office to promote this and other training strategies oriented to integration and effectiveness.
- c) Support Training Centres in the development of a comprehensive strategy to face training challenges based in the Training Process Integration.
- d) Entrust the appropriate local authorities to assess the projects to be implemented in the short term to appropriately coordinate with the training departments for preparation of training, integrating this new approach.
- e) Incorporate any other action recommended.