



WORKING PAPER

ASSEMBLY — 40TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 25: ICAO Civil Aviation Training and Capacity Building

**INTEGRATION OF TRAINING PROCESSES — A NEW STRATEGY FOR MAKING
TRAINING MORE EFFECTIVE**

(Presented by the Dominican Republic)

EXECUTIVE SUMMARY

In the dynamic context of the numerous air navigation projects that are being carried out at the same time, appropriate basic and ongoing training are key elements in strengthening the human factor and reducing the potential impact of error and carelessness that can result from a lack of awareness about the interrelationship between certain operational concepts. In order to ensure the effective implementation of the new processes relating to safety, environmental protection, operational efficiency, and airspace optimization, inter alia, it is essential to develop and implement a smart strategy that makes it possible to flexibly link training content and make it understandable to and positively applied by aviation personnel. In this sense, the concept of integration of training processes envisages the conduct of a serious assessment of the specific training that is needed in each area and the development of a curriculum that clearly establishes the relationship between the new concepts not only from the theoretical point of view, but also in terms of implementation, so that the concept can be applied smoothly and without limitations.

Action: The Assembly is invited to:

- a) analyse and discuss the content of this working paper;
- b) request the usual support of the Global Aviation Training (GAT) Office of the International Civil Aviation Organization (ICAO) to promote this and other strategies aimed at achieving integration and effectiveness;
- c) support training centres in developing comprehensive strategies to meet training challenges by assisting them to integrate training processes;
- d) empower local authorities to evaluate projects to be implemented in the short-term with the aim of coordinating appropriately with training departments in preparing training that incorporates this vision; and
- e) include any other action that is recommended.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives: a) Safety; b) Capacity and Efficiency; c) Security and Facilitation; and d) Environmental Protection
<i>Financial implications:</i>	N/A
<i>References:</i>	<i>Training Development Guide, Competency-based Training Methodology (Doc 9941)</i>

¹ Spanish version provided by the Dominican Republic.

1. INTRODUCTION

1.1 When one speaks of aviation training, the first thing that comes to mind is the training of pilots, maintenance personnel and air traffic controllers, all of whom are essential players in the workings of today's overburdened air traffic system. Similarly, if we aim to tackle the question of training and its major challenges, we must inevitably consider the great need for the aviation sector to train growing numbers of aviation personnel to meet the projected demand in the area of air operations.

1.2 Although previous clarifications have been on target, perhaps now, when we think about aeronautical training, we should weigh the importance of having training that is appropriate and timely with respect to the use of new technologies and procedures involved in the different subsystems of the aeronautical sector.

1.3 Management bodies face the major challenge of steering implementation processes and, in so doing, must promote the application of the changes and benefits entailed and include work teams in the discussion and analysis of the details of the process, ensuring that communications reach all members of the teams and creating the necessary synergy.

1.4 Implementation processes carried out while employees are kept in the dark, supported solely by the application of rules or decisions from senior management, have shown themselves to be highly inefficient in the technical areas of aviation, at times affecting not only economic resources, but also the lives of passengers.

2. DISCUSSION

2.1 Organizations in the aviation sector need to pay special attention to situations that undermine the proper development of air activities and cause the personnel involved to become discouraged, thereby creating hidden dangers associated with a lack of knowledge or lack of interest in matters that are directly within their sphere of responsibility.

2.2 Safety is the most important question for modern aviation systems. This is clearly so, to such an extent that the authorities of the Member States of ICAO have adopted domestic regulations requiring organizations in the sector to provide training for personnel who specialize in safety. Of course, important training materials have been developed for courses on safety at all levels, and the concept is broadly known. However, when it comes time to take action to protect safety, many consider that this is something additional to their functions and that it can, therefore, wait.

2.3 Our position is that there is a need to integrate processes into the aviation system so that it is possible more effectively to link the different tasks and concepts in a way that enables those at the operational level to apply the initiatives relevant to each aspect as part of their normal duties, in full awareness of the origin of those initiatives and the contribution they make to air operations.

2.4 In the case of aircraft crews, similarly, there are isolated procedures often involving the use of independent checklists, which could very well be linked and used more intelligently. For the implementation of new technologies in the cabin, it is essential that the views of pilots should be taken into account, since they will be the users of such innovations. Modern air transport has experienced major incidents, some of which have resulted in accidents that have caused many deaths, where the contributing factor was identified as a lack of proficiency in the use of recently introduced technologies and procedures. It is axiomatic therefore that there is a need for analysis and integration of those concepts relating to technical training.

2.5 In the sphere of environmental protection policies, opportunities for improving the integration of concepts can also be identified. In many cases, operational personnel lose sight of the objectives of these policies in maintenance and operational support. Naturally, air traffic controllers always give priority to safety. However, procedures could easily be developed that take into account both safety aspects and aspects of efficiency, organization and speed. This necessitates interaction between those who design procedures and air traffic management (ATM) technical personnel, taking into account the latter's viewpoints and any exceptional circumstances that could hinder the proper use of the new procedures.

2.6 Management often initiates projects aimed at improving processes, the proactive use of technology, efficiency and client satisfaction, all of which is in line with the undertaking's aim of maintaining its viability and profitability. The guarantee of success in achieving these objectives lies in the pursuit of strategies that associate operational personnel with the organization's main objectives and make it possible for personnel to identify the origin of the changes and measures, to share their views and related situations; hearing the personnel out results in a smooth assimilation of the changes and an understanding of the advantages that the changes entail for the organization and for themselves.

2.7 Aeronautical training is today facing difficult challenges in terms of the quantity and quality of training, which is compounded by the pressing need to get personnel ready as soon as possible to handle the projected level of air transport operations. Basically, given the existing and projected personnel shortages, this requires aviation training centres to improve the efficiency of their training and thereby create appropriate working environments, in which each operator recognizes the consequences of his or her actions and failures to act, and aligns with the main aviation objectives with respect to safety, order and speed.

3. CONCLUSION

3.1 Integration of concepts, which we have identified as the most effective response to the linking of conceptual issues relating to current aviation systems, should be studied and evaluated by training units in aviation training organizations according to the operational area in which they provide services. This will require the formalization of processes to bring together the various technical teams in the areas of training, implementation and operations in the context of a committee, where these teams can consider the different issues which are priorities for the organization and which should be acted upon operationally in a conscious and effective manner.

3.2 An analysis focusing on the implementation of initiatives relating to specific job functions, applying the integration of training processes, entails the clarification and determination of the relationship between the different initiatives, describing the best way to pursue those initiatives simultaneously and coherently for the optimum development of aviation operations. This, in our view, is the best way to avoid a situation in which operational work teams continue to view specific trainings as independent units that are unrelated to any others and in which it is left to the discretion of such work teams to determine the priorities when acting upon new instructions.

3.3 Aviation is a system whose success depends upon the harmonious relationship between all its constituent sub-systems. Accordingly, we need to focus on ensuring that the best technologies and procedures reach operational personnel in an orderly and coherent manner so that the application of those technologies and procedures achieves its intended purpose, in the light of the Strategic Objectives of the Organization and of aviation as a global system.