International Civil Aviation Organization *03*/03/11
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
Sixteenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/16)
Punta Cana, Dominica Republic, 28 March – 1 April 2011

Agenda Item 3: Performance framework for Regional Air Navigation Planning and Implementation

3.1 Global, inter-regional and intra-regional activities concerning air navigation systems in the CAR/SAM Regions

THE PROCESS OF AIR TRAFFIC CONTROLLERS SPECIALIZATION FOR THE USE OF ATS SURVEILLANCE

(Note presented by Brazil)

SUMMARY

This working paper presents the process of air traffic controller's specialization in Brazil to obtain the Rating Certificate for the use of ATS surveillance, including the strategies and the results that enabled the reduction of time for the training of the Air Traffic Controllers (ATCO).

References:

- Annex 1 to the International Civil Aviation Convention
- Institute of Airspace Control (ICEA) Course Catalogue

1. INTRODUCTION

1.1 The significant air traffic growth in recent years with a consequent increase in demand for air traffic services led to an increase in the need for the training and specialization of air traffic controllers in Brazil. Furthermore such increase also demanded that the training and specialization of the ATCO were conducted under a new structure, that answered to the requirements resulted from the growing demand for Air Traffic Services as well as a significant reduction on the time necessary for the training and specialization of such professionals, from their admission on the training courses to the Rating Certificate (CHT) and professional License acquisition.

1.2 This working paper presents the results obtained by Brazil that led to a significant reduction of time for air traffic controllers training and specialization, in compliance with Brazil's policy of continuous improvements in quality of services provided.

2. Air Traffic Controllers Specialization for the use of ATS Surveillance

2.1 Until the beginning of 2007, about 160 air traffic controllers were graduated every year in Brazil. After this training phase, the ATCO were able to be enrolled in a radar specialization course at ICEA. The capacity of simulator training with 10 operational positions, completely granted the existing demand, by allowing not only the formation of 4 courses, with 40 professionals each course, but also the refresher operational activities of the main Brazilian ATC units.

2.2 In January 2007, aiming to meet the growing demand of air traffic and the consequent need to increase the number of sectors within the main ATC units, Brazil doubled the training of air traffic controllers, from about 160 to 320 professionals per year. Furthermore, we observed the need for an increase in the activities of real-time simulation in order to assess preliminary feasibility of implementation of new concepts and technology, as, for example, the Performance Based Navigation (PBN).

2.3 The increasing in the ATCO graduation resulted in the need of a new model for the training of air traffic controllers in order to meet the new amount of professionals that entered the system, as well as reduce the time for obtaining the CHT and Professional License. From a concept developed during the years of 2005-2006, the capacity of the Simulation Laboratory of ICEA was expanded from 10 to 32 operational positions, increasing the capacity from 280 to 896 students per year.

2.4 In addition to expanding the learning environment, the Simulation Laboratory of ICEA has been implemented with similar characteristics to the operational environment, containing consoles, operational scenarios, air traffic movement in each operational sector and communication systems identical to those found in the main Brazilian ATC units, in order to ensure the ATCO adaptation to the operational environment previously to the on-the-job training phase.

2.5 Since 2009, about 50% of ATCO graduates undertake the module called “Simulated Practices” where each controller performs a simulated training with identical characteristics and carries out activities related to the operational sectors of the ATC unit where the controller will work. So the time took to obtain the CHT was reduced, by decreasing the needed time for the on-the-job training.

2.6 During 2010, a new Simulation Laboratory was installed at the institution where the initial training of the Air Traffic Controllers is conducted, following the identical model of the one installed at ICEA, providing 32 operational positions, allowing the radar specialization during the initial training phase.

2.7 When this latter Simulator Centre entered into operation, the operational refresher activities were increased. It was created the Annual Program for the Use of ATC Simulator Laboratory (PROSIMA) that is a document regulating the use of the simulation structure to conduct the ATCO simulator training, the ATCO annual operational refresher of the main Brazilian ATC units, as well as the activities for the Real Time Simulation.

3. Conclusion

3.1 The training of air traffic controllers is a challenge for all Air Navigation Services Providers, considering the significant increase of air traffic flow in the recent years and also the growth expected through the next years.

3.2 To face such challenge, States and International Organizations must share their experiences to develop together strategies and solutions to use the available resources to solve problems related to the training and specialization of the air traffic controllers.

3.3 In this working paper, Brazil presented a new methodology of specialization which reduced the time for obtaining the CHT and Professional License and increased the quality of the service provided.

4. Action by GREPECAS

The meeting is invited to:

a) Take note of the information provided in this working paper; and
b) Evaluate exchange mechanisms for the process of training/specialization, to optimize available resources, so as to ensure the operational safety and efficiency of air navigation in the CAR/SAM Regions.

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