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**International Civil Aviation Organization
UNDP/ICAO Regional Project RLA/98/003
Transition to the CNS/ATM Systems in the CAR and SAM Regions**

CNS/ATM Systems Human Resources and Training Seminar

(Cartagena de Indias, Colombia, 14 to 18 July 2003)

AGENDA ITEM 4: REGIONAL TRAINING PLANNING

(Presented by the Secretariat)

SUMMARY

This discussion paper provides samples of planning tables that could be used to facilitate regional training planning within the CAR/SAM regions. The paper also outlines a proposed approach towards the use of the tables and provides a sample format for the resulting regional training plan.

1. INTRODUCTION

1.1 The CAR/SAM Regions were the first to use an established process to analyse human resource demands and determine the need for training capabilities within the regions. The analysis is presently carried out during Directors of Civil Aviation Training Centres meetings in the CAR/SAM Regions.

1.2 During the Third Caribbean/South American Regional Air Navigation Meeting (CAR/SAM/3, Argentina, 1999) a proposal was made to consolidate the existing training planning bodies within the Regions into an appropriate contributory body of GREPECAS. It was agreed that a contributory body of GREPECAS would help to ensure that the plans for facilities and services, based on existing and emerging technologies, and the plans for the human resources are fully compatible. It was also recognized that sub-regional training planning is an effective means to meet the training needs of many States. To foster the establishment of a body that could address the need for compatibility between regional air navigation planning and training planning, yet not preclude training planning at a sub-regional basis, the meeting agreed on:

Recommendation 13/5 - Human resource planning and training in the CAR/SAM Regions

That:

- 1) GREPECAS examine human resource planning and training issues as they relate to the implementation of all elements in the new CAR/SAM Regional Air Navigation Plan ensuring that the human resource development capabilities in the regions are compatible with the plans to implement facilities and services; and
- 2) States in the CAR/SAM Regions involve their civil aviation training and human resource planning professionals in the activities of GREPECAS related to training and human resource planning.®

1.3 The CAR/SAM/3 RAN Meeting also reviewed the Introduction, Parts I and II of the Basic Air Navigation Plan and included a section on the regional training planning concept under General Planning Aspects (GEN). On 8 December 1999, the ICAO Council (158/13) approved the changes and the Basic Air Navigation Plan for the Caribbean and South American Regions became the first ANP Publication with a regional training planning section. While the decision has not yet been made to incorporate a “training plan” in the ANP, the new training section of the ANP lays the framework for regional training planning within the CAR/SAM Regions.

1.4 During the GREPECAS/9 meeting (Rio de Janeiro, 2000) a Human Resources and Training Sub-group was formed as a part of a restructuring of the PIRG. This sub-group reports directly to the PIRG. Several other regions have formed similar contributory bodies. One of the primary roles of the GREPECAS Human Resources and Training Sub-group will be to review the regional training planning process to see if it would be viable within the CAR/SAM regions and, if so, adapt it as necessary to the specific needs of the region. This is the first meeting that would consider the planning methodology in detail. The input of this Seminar is therefore considered essential to this review.

2. DISCUSSION

2.1 As a part of ANC Task PEL-9601, ICAO developed the basis for a regional training planning process. The Organization will be working with the planning and implementation regional groups (PIRGs) to refine the process to ensure that it fully meets the needs of States within each region. At present the process consists of four basic steps, as follows:

Step 1: In the first step, the types of training needed within a region would be identified based on commitments made by States to implement facilities and services specified in their regional air navigation plans. An appropriate PIRG contributory body would be established and make the identification of training needs based on the regional air navigation plan. This information would then be communicated to each State within a region using a standard format.

Step 2: In the next step, each State would identify the number of personnel needing specific types of training, using a questionnaire developed by ICAO. The training needs identified in the first step are reflective of the overall training needed within the region. Therefore, each State would need to identify its own training needs based on their national plans to implement existing and future CNS/ATM systems. States would also identify planning factors that would affect a regional training plan, such as training capabilities that already exist within a State in specific areas.

Step 3: States would then forward their completed questionnaires to the appropriate ICAO regional office. The regional offices would compile the information provided by States and prepare a summary of the results. In the third step of the process, the contributory body to the PIRG would determine the need to establish “regional training” in specialized areas in which it would be difficult for individual States to justify the cost on a national basis.

Step 4: In the fourth step, a State-to-State consultative process would be used by a PIRG to formulate a plan for the development of regional training capabilities within specific civil aviation training centres.

2.2 Appendix A, provides an example of the level of detail that could be used to communicate the major types of training needed to implement the CAR/SAM Regional Air Navigation Plan (Step 1 refers). This inventory of training needs describes the major types of training needed to implement existing and future air navigation facilities and services. The types of training required are broken down in classifications that are describe below.

- a) **Foundation Training.** This type of training is required when the target population does not possess the underlying knowledge and/or skills needed to enter job oriented training. For example, it may be necessary to provide foundation training in basic electricity to staff who will maintain airport lighting, if they do not already have basic electrical maintenance skills. Foundation training is frequently required in aviation as entry level personnel may not have previous exposure or knowledge of the aviation field.
- b) **Initial Training.** Initial training is the first job specific training that personnel receive to qualify for a specific aviation job within a category of jobs as defined by the ICAO job category numbers (see column two of Appendix A). For example, once a newly hired AIS staff member has completed foundation training, the subsequent training required to qualify him/her as an Aerodrome Officer would be considered initial training.
- c) **Transition Training.** This type of training is required to prepare an existing staff member to perform another job within a given category of jobs (i.e. ICAO job categories). For example, training a procedural approach controller to become a radar approach controller would be considered transition training.
- d) **Conversion Training.** This type of training is required for a qualified staff member in a specific job to obtain the skills required to use new procedures and/or technologies such as ICAO CNS/ATM systems.
- e) **Refresher Training.** Regular refresher training is provided to ensure that personnel maintain a skill and knowledge level needed to perform their jobs safely and in compliance with all established performance standards. Refresher and conversion training are sometimes combined to introduce new procedures and/or technologies.

2.3 The inventory of training needs shown in Appendix A is intended to illustrate the level of detail suggested to communicate the major types of training required to implement a Regional Air Navigation Plan. As such, the training needs indicated in Appendix A are examples and should not be considered the actual training requirements associated with the implementation of the CAR/SAM Regional Air Navigation Plan.

2.4 Once the major types of training needed to implement the CAR/SAM Regional Air Navigation Plan are identified (Step 1), this information would be incorporated into a questionnaire and forwarded to States (Step 2). A sample of the Projected Training Demand Questionnaire is at Appendix B to this working paper. The aim of the questionnaire would be to gather information from States concerning the projected number of trainees in specific types of training, based on their human resource plans, and then to compile this information into a report that would reflect the aggregate training needs of States within a region.

2.5 Column 4 of the table at Appendix B, Planning Factors, is intended to provide information concerning specific factors that may affect a regional training plan. Primarily this column would be used to identify training programmes that already exist within States in specific areas. In addition, there may be other factors identified such as the introduction of some new types of air navigation systems technologies that may require old and new systems to operate in parallel for period of time.

2.6 GREPECAS would then consider the demand for regional training capabilities and agree to the establishment of regional courses within specific civil aviation training centres. The results of the deliberations would constitute a Regional Training Plan. A potential format for a Regional Training Plan is at Appendix C.

3. CONCLUSIONS

3.1 The attached Inventory of Training Needs, Projected Training Demand Questionnaire and Regional Training Plan are provided to illustrate a potential framework and format for integrating the regional human resource planning and regional air navigation planning. The integration of the two processes within the CAR/SAM Regions represents a new initiative for the international civil aviation community. Thus, the framework and tables are intended as a starting point and may need to be modified based upon the specific needs of the Regions.

3.2 Based on the results of regional training planning within the CAR/SAM Regions, and recommendations of the Group, the Air Navigation Commission would determine if technical merit exists to integrate regional training plans into the ANP Publications.

3.3 In the future, it is recommended that human resource development issues be considered simultaneously and as an integral part of amendments to the air navigation plans. This systematic approach towards regional planning would ensure that the plan for facilities and services and for human resources remain compatible.
