INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFRICA AND INDIAN OCEAN PLANNING AND IMPLEMENTATION
REGIONAL GROUP THIRTEENTH MEETING
(APIRG/13)**
(Cape Verde, Sal, 25 – 29 June 2001)

Agenda Item 4.3:   Africa and Indian Ocean (AFI) Air Navigation issues - CNS/ATM

HUMAN RESOURCE AND TRAINING ISSUES IN THE AFI REGION
(Presented by the Secretariat)

SUMMARY
This paper invites APIRG/13 to examine human resource and training issues as they relate to the implementation of all elements in the AFI Regional Air Navigation Plan, including new CNS/ATM systems, and proposes that an ICAO project be developed in order to assist the Region in the planning process.

REFERENCES

– Report of the first meeting of the ALLPIRG/Advisory Group (ALLPIRG/1)
– Report of the Seventh Africa and Indian Ocean (AFI) Regional Air Navigation Meeting (Doc 9702)
– Report of the Third Caribbean/South American Regional Air Navigation (CAR/SAM/3) Meeting (Doc 9749)
– Report of the Twelfth Africa and Indian Ocean Regional Planning and Implementation Group (APIRG/12)
– ICAO Training Directory
– ICAO global Air Navigation Plan for CNS/ATM Systems (Doc 9750)

1.   INTRODUCTION

1.1   The Seventh Africa and Indian Ocean (AFI) Regional Air Navigation Meeting (AFI/7, Abuja, 12-23 May 1997) noted Recommendation 9/6 of the Limited Middle East (COM/MET/RAC) Regional Air Navigation Meeting (Cairo, 7-17 January 1996). In pursuance to this Recommendation, the Air Navigation Commission (ANC) agreed to establish a study group in order to create a common framework, which would facilitate human resource and training planning for all regions for inclusion in their Air Navigation Plans. The Air Navigation Commission (142-3 and 4) established a new ANC task (PEL-9601) to address this issue, and also established the Human Resource Planning and Training Needs Study Group (HRPTSG) to assist the secretariat in addressing this task.

1.2   AFI/7 adopted Recommendation 14/7 calling for the establishment of training needs on regional and sub-regional levels, priority being given to maintaining and upgrading, where applicable, the existing training infrastructures and the quality of courses offered, and encouraging the AFI Region to participate in particular in the ICAO TRAINAIR Programme.

1.3   The worldwide CNS/ATM systems implementation Conference (Rio de Janeiro, 1998) also considered human resource and training related issues. The Conference agreed that the planning method for regional training capabilities should be enhanced to meet the current and future training needs, and noted that there did exist structures within the ICAO Regions that would be appropriate for this type of coordination and planning. The conference also agreed that consideration should be given to a systemized approach towards regional air navigation planning in which training forms an integral part of each plan.

2. DISCUSSION

2.1 Need for guidance material

2.1.1   The effectiveness of a regional training plan will depend upon the accuracy to which individual States within a region can project their human resource ne eds. To assist States and Regions in this process, **ICAO is preparing guidance material that will assist States in planning for the human resource and training needed for CNS/ATM systems, as well as for existing air navigation systems.** Most of the ICAO Regions already have discussions and plan for regional human resource and training needs. The outputs of the task being carried out by ICAO will enhance the existing regional planning processes by providing a consistent approach for use by all regions. It is e xpected that the ANC task will produce the following two major outputs:

> a) **A human resource planning tool which would consist of planning tables**
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> **or a computer programme** that will assist States in determining current and projected personnel needs.   A prototype software programme is being developed in parallel with the Human Resource Planning Manual. The prototype is a database that indicates the effects of introducing specific combinations of CNS/ATM technologies to civil aviation job profiles. The job profile changes could then be used by States to identify the impact of new technologies and procedures on their human resource plans and subsequent training requirements; and
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> b) **A model for planning regional activities, which would provide a systematic methodology for analyzing human resources,** plans; determining the needs for national/or regional training capabilities; and documenting the results. A quantitative approach to training planning will undoubtedly help to ensure that the training needed is available. It would also provide a means to accurately determine the number of training centers within a region or sub-region that are needed to provide specialized types of training that are not cost-effective to the individual States based on their national training needs alone. **This type of analysis is important to ensure that there is a sufficient market to support the development and ongoing implementation of high quality training within one or more training centers**.

2.1.2   ICAO has also developed a Human Resource Planning Manual, which is being finalized.

2.2 Common Framework for all ICAO Regions

2.2.1   The completion of the Human Resource Planning Manual is a fundamental element in the overall strategy of ANC in the creation of a common framework, which would facilitate h uman resource and training planning for all ICAO Regions. The specific steps and procedures that could form the basis of a regional planning process were presented to the CAR/SAM/3 RAN meeting. It was agreed that the process needed to be refined by GREPECAS, or a sub-regional training planning body, to ensure that it fully met the needs of the States involved. The output would be a training plan for the region that would ensure that the human resource development capabilities in the region are compatible wi th the plans to implement facilities and services. The procedures, as well as lessons learned, during this trial could then form the basis for implementation in other ICAO Regions.

It is recommended that planners take the following human resource planning factors into consideration:

> a)   there are several job disciplines that will no longer be required once a State has fully implemented the new systems;
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> b)   there will be new job disciplines as a result of the implementation of the new systems;
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> c)   most of the existing jobs will require additional training for the new systems;

d) there will be a period of time in which the old and new systems will operate in parallel; and

e) much of the training will be in areas that involve a greater use of automation.

2.3   **Training Planning in the Africa and Indian Ocean (AFI)**

2.3.1   To obtain consistent and appropriate data from States within the AFI Region, a process is proposed that includes the following steps:

- **Step 1:** Identification of training needs based on commitments made by States to implement facilities and services within the Regional Air Navigation Plan;

- **Step 2:** Collection of consistent and appropriate data from States relating to specific training requirements, based upon their national implementation plans;

- **Step 3:** Determination of the requirement for regional training capabilities;

- **Step 4**: Formulation of a plan for establishment of regional training capabilities.

2.3.2   Given the amount of work and co-ordination to be carried out through this process, the **AFI Planning and Implementation Regional Group may wish to recommend that ICAO *develop* a Project** that could address human resource and training planning issues and ensure that the human resource development capabilities within the Region are compatible with plans for implementing facilities and services concerned. **The terms of reference of such a Project would include the analysis of the aggregate of the Region's human resource development needs and the determination of the resulting requirement for regional training capabilities.** Criteria and recommendations for the establishment of regional training capabilities would be presented to APIRG for evaluation. APIRG could then determine the appropriate process for formulating a plan for the development of regional training capabilities within specific training centers. APIRG could also review the appropriateness of including human resource and/training planning information in the AFI ANP (APIRG Conclusion 12/53 refers). AFI States will have to adhere and contribute to the project, and should prepare to provide an assessment of their current situation.

3.   **ACTION BY THE APIRG**

3.1   The AFI Planning and Implementation Regional Group is invited to:

a) urge ICAO to develop a Project in order to assist the AFI Region in formulating a regional Human Resource and Training Programme, based on identified regional training capabilities; and

b) invite States in the Region to conduct preliminary surveys of their facilities as soon as possible, and prepare to provide an assessment of their current situation as well as their inputs to the Project.

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