International Civil Aviation Organization
North American, Central American and Caribbean Office
Second Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/2)
Tegucigalpa, Honduras, 11 – 14 October 2005

Agenda Item 3:   **Air Navigation Services**

3.1   Air Navigation Deficiencies

HUMAN RESOURCES AND TRAINING PLANNING

(Presented by the Secretariat)

SUMMARY
The Meeting is invited to monitor the subject of human resources planning and training, in order to accomplish and maintain an efficient transition towards CNS/ATM, safety oversight and civil aviation security systems.

1.   Introduction

1.1   The First North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/1, Grand Cayman, Cayman Islands, 8-11 October 2002), recognized that human resources planning was a subject requiring priority action by the Aeronautical Administrations for their adequate development at the different categories of all the civil aviation fields involved in the new systems and technologies. To that end, the NACC/DCA/1 Meeting adopted Conclusion 1/21-Human Resources planning and Training; and Conclusion 1/22 – Training Standardization, TRAINAIR Methodology in the CAR Region- transcribed in the **Appendix A** of this working paper.

1.2   The GREPECAS/12 Meeting (Havana, 7-11 June 2004) also recognized the high priority that should be granted to planning and development of human resources and their training. To this end, and in view of the funding difficulties, in order for a Subgroup to work as a GREPECAS Contributory Body, that Meeting adopted Conclusion 12/129, also transcribed in the mentioned Appendix A.

1.3   Based on the above, and in order to follow up to the agreement adopted during the NACC/DCA/1, a review of such Conclusion of Human Resource Planning and Training has been made in different sub regional meetings of Directors General where it has been recognized that human resources planning and training requires greater attention and priority by the Administrations.

1.4   Within this context, as requested in the Conclusion 1/21, the ICAO NACC Office distributed to the Administrations the form, attached in **Appendix B** to this working paper, whose aim was to determine the regional needs for human resources and training in the different aeronautical fields.

1.5   With respect to the TRAINAIR methodology, the Meeting is informed on the important steps given in this subject in CAR Region, since the COCESNAS's School (ICCAE) has improved significantly in training matters and has obtained already the TRAINAIR certification. As well, Mexico is developing an ICAO TC Project in order to reorganize and reactivate the CIAAC within the Meeting. It will be useful that all the CAR States support their actions by providing inputs for this initiative.

2.   **Discussion**

2.1   During the First NACC/DCA Meeting, Civil Aviation Directors discussed on the importance of fostering human resources planning, complemented by training, in order to develop the new regional air navigation, safety oversight and aviation security systems.

2.2   It was also recognized that it is necessary to face the challenges posed by the changes on these aspects arising in civil aviation such as the implementation of new technologies makes progress, and as the diversity of new concepts calls for a consistent and in-line human resources, permitting a global and harmonized development.

2.3   The Administrations of the CAR States/Territories have performed efforts in order to keep optimum training and rosters of qualified personnel at the different services as one of their main objectives. Notwithstanding, concerning "(to) *appoint and train personnel in human resources planning within the units responsible for the different aeronautical services*", as established by item a) of the aforementioned NACC/DCA/1 Conclusion 1/21, major efforts are still needed in order to develop a human resources plan.

2.4   The following are guidelines, discussed in the NACC/DCA/1, of some of the elements to be considered when developing a human resources plan:

- audit the existing levels of personnel;
- project the needs of the personnel (all categories);
- plan the required human resource in the different services;
- draft a forecast of the need for personnel at all the categories
- determine the effect that automation and new systems cause;
- plan HR projects for the transition and implementation of the new systems;
- plan the human resources training with a quality assurance focus (QA);
- review the selection criteria and personnel qualifications;
- plan the preparation of new instruction programmes;
- plan the instructor's training in new techniques;
- review the personnel's current training and plan the future training;
- review, if necessary, the organizational structures and fit them to the new needs;
- review the aeronautical technical personnel tasks and functions; and
- determine if the new systems will create new work disciplines.

2.5   Mention should be made to the fact that the Global Air Navigation Plan for CNS/ATM Systems contains several recommendations concerning human resources and training, specifically focused towards air navigation activities, and it may serve as a support for the development of a human resources plan. Likewise it is important to mentioned the need to handle and plan the new concepts of the Eleventh Air Navigation Conference on the Global Operational ATM Concept.

2.6   On the other hand, and taking into account the aforementioned difficulties for the operation of the GREPECAS Human Resources and Training Subgroup, it is important to stress out that COCESNA and Jamaica are members of the Ad hoc group activated to this end at the GREPECAS/12 Meeting. It would be useful that all the CAR States support their actions by providing inputs for this initiative.

2.7   Likewise, it is important that the CAAs take actions on the aforementioned NACC/DCA/1 Conclusions 1/21 and 1/22, and consider the tool of the international co-operation, for the development of bilateral/multilateral projects for the suitable developing of human resources planning and training.

3.   **Conclusion**

3.1   Within this context, ICAO different instances dealing with the subject agree that the objective of human resources planning is to ensure that Aeronautical Administration count in a timely manner with sufficient and duly trained personnel at the different services. It is therefore recommended that CAAs begin as soon as possible a human resources and training planning process in order to implement the new systems.

3.2   As human resources planning is one of the new disciplines emerging from the evolution of the new systems, the challenge of applying new technologies requires to double the efforts so that the trained human resources may render the implementation of the new systems easier, bearing in mind that the human element is one of the most important part of a quality system.

4.   **Suggested action**

4.1   Based on the above, the Meeting is invited to note the contents of this working paper and to approve the following Draft Conclusion:

**DRAFT
CONCLUSION 2/XX   HUMAN RESOURCES AND TRAINING PLANNING**

That those States/Territories/International Organizations that do not have a human resources planning process at the different aeronautical services they provide, consider as an urgent matter the need to take the following measures:

a) designate and prepare personnel on human resources planning within the responsible units of the different aeronautical services;

b) develop a plan on human resources aimed at covering the needs for the next 5 years, including a training programme for the civil aviation staff involved in the implementation and operation of the new CNS/ATM systems, safety oversight and civil aviation security, and establish **31 March 2006** as deadline to finalize the plan;

c) submit to the ICAO NACC Regional Office by **30 January 2006,** the form shown in the Appendix B to this paper, duly completed by the CAAs.

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APPENDIX A

NACC/DCA/1 -CONCLUSION 1/21   **HUMAN RESOURCES PLANNING AND TRAINING**

That those States/Territories/International Organizations that do not have a human resources planning process for air navigation services, safety oversight and civil aviation security, consider, on an urgent basis, the need to take the following measures:

a)   appoint and train personnel in human resources planning within the units responsible for the different aeronautical services;

b)   develop a human resource plan for the next five years, containing a civil aviation personnel training programme including the implementation and operation of the new CNS/ATM Systems, safety oversight and civil aviation security;

c)   emphasize to the GREPECAS on the need to follow-up Decision 10/4 to analyze the "impact of automation on human resources" in accordance with the Guidance Manual for the Training of Human Resources on CNS/ATM Systems;

d)   consider the importance of attending activities sponsored by ICAO (courses, seminars, workshops, etc.) taking into account that such activities are aimed at complementing and updating civil aviation personnel training;

e)   request the ICAO NACC Regional Office to distribute the form, attached as the **Appendix** to this part of the Report, to be filled out by the Administrations in order to determine the need for human resources and training in the different aeronautical fields in the CAR States. This form should be sent to the NACC Office, no later than 31 January 2003; and

f)   use the information obtained in the aforementioned form by Aeronautical Administrations, GREPECAS and by the ICAO NACC Regional Office for coordination with Civil Aviation Training Centres (CATCs) of the CAR Region for human resources planning and training purposes.

NACC/DCA/1-CONCLUSION 1/22   **TRAINING STANDARDIZATION – TRAINAIR METHODOLOGY IN THE CAR REGION**

That, for the development of human resources, States/Territories/International Organizations in the CAR Region, consider the following actions:

a) take the necessary measures to standardize civil aviation training, in accordance with ICAO guidelines taking into consideration international co-operation;

b) that those training centers who have not yet joined the TRAINAIR Programme, do so; and

c) that in the spirit of international co-operation, development of bilateral/multilateral projects to facilitate co-operation and technical assistance for adequately developing human resource planning and training should be considered.

GREPECAS/12 - CONCLUSION 12/129   MANAGEMENT AND OPERATION OF THE HUMAN RESOURCES AND TRAINING SUBGROUP

That:

a)   a task force composed by Brazil, Colombia, Cuba, Jamaica, Venezuela, COCESNA and IFATCA, be created to determine the appropriateness of a human resources and training subgroup and support fund-raising efforts including a possible Regional Technical Co-operation Project aimed at the operation of the HRT/SG Subgroup, and that it submit its findings to the fifth meeting of the Administration Coordination Group (ACG/5), to be held in March 2005; and

b)   GREPECAS Contributory Bodies place particular attention to Human Resources and Training issues.

APPENDIX B

TRAINING NEEDS-CAR REGION STATES (PERIOD 2005-2009)
State/Territory/Organisation_____
(Please indicate in each column the estimated total number of personnel to be trained each year locally or abroad and by specialty)

AREA	CATEGORY/SPECIALTY	LOCAL INSTRUCTION					EXTERNAL INSTRUCTION					Total HR required	
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Local	Ext.
AIG	Officer - Accident Investigation and Prevention												
AIR	Inspector - Shop Specialist												
	Inspector - Fixed wing												
	Inspector - Helicopter												
	Specialist - Avionics												
	Inspector - Airworthiness certification												
	Specialist - RVSM												
AIS	Directorate/Supervisor AIS												
	AIS Officer												
	Aeronautical Cartography (MAP)												
	Specialist Data Base/Automation and Quality Assurance AIS												

NOTE: 1)The information required in the blank columns will be provided by the Administrations

2)   Useful information for the Administration's training programmes planning

3)   Information considered by the CATCs, GREPECAS and ICAO's for the programming of courses, seminars, etc.

AREA	CATEGORY/SPECIALTY	LOCAL INSTRUCTION					EXTERNAL INSTRUCTION					Total HR required	
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Local	Ext.
AGA	Supervision/Certification/Aerodrome Regulations												
	Aerodromes Inspector/Auditor												
	Officer – Airport Operations												
	Officer Airport Security												
	Trainer – Aerodrome Emergencies												
	Fire fighter - Rescue												
	Control – Natural resources												
	Maintenance - Pavements and drainage - Civil Engineer												
	Electric maintenance (lighting, markings, power generators) – Electric engineer												
	Inspector –Obstacle control												
	Inspector-environment control												
ATM	Air Traffic Controller - TWR												
	Air Traffic Controller - APP												
	Air Traffic Controller -Area												
	Air Traffic Controller-Radar/Area												
	Air Traffic Controller - Radar/APP												
	Supervisor – Air Traffic Control												
	ATC/OJT Instructor												
	ATS Airspace Planner												
	ATS Regulations Officer												
	Specialist – ATS Quality Assurance												
	Safety Officer												
	ATM Internal Audit Officer												
	Specialist – Search and Rescue SAR for RCC or RSC												

AREA	CATEGORY/SPECIALTY	LOCAL INSTRUCTION					EXTERNAL INSTRUCTION					Total HR required	
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Local	Ext.
AVSEC	Administrator AVSEC												
	Control Officer AVSEC												
CNS	Specialist - Communications												
	Specialist - Navigation												
	Specialist –ADS and Radar Systems												
	Digital communication system specialization course												
MET	Technician Meteorologist/Observer												
	Professional Meteorologist/Forecaster												
OPS	Inspector – Flight checks - Large airplanes												
	Inspector – flight checks – General aviation												
	Inspector – flight checks - Helicopter												
	Specialist – Regulatory compliance												
	Inspector OPS Certification												
	Inspector – Cabin safety												
	Inspector- Dangerous goods												
	Inspector – Ramp safety												
PEL	Specialist - Licensing												
	Examiner/Inspector – Flight schools												
GENERAL	Introduction to CNS/ATM Systems												
	CNS/ATM - Implementation systems global												
MANA-GEMENT	Management – Civil Aviation												
	Management – Aeronautical Operations												
	Management – AIS Services												
	Management – ATM Services												

AREA	CATEGORY/SPECIALTY	LOCAL INSTRUCTION					EXTERNAL INSTRUCTION					Total HR required	
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	Local	E x t.
PLNG	Human Resources Planning												
Q.A.	Specialist – Quality Assurance												
TRNG	Instructors training -TRAINAIR												

- END –