International Civil Aviation Organization
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE
Fifth Central Caribbean Working Group Meeting (C/CAR WG/5)
Mexico City, Mexico, 21 to 24 February 2005

Agenda Item 5:   **Human Resources and Training**

HUMAN RESOURCES AND TRAINING PLANNING

(Presented by the Secretariat)

SUMMARY
The Meeting is invited to monitor the subject of human resources planning 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), recognised 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, transcribed hereunder for ease of reference:

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

d) 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.

1.2   GREPECAS/12 Meeting (Havana, 7-11 June 2004) also recognised 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 hereunder for ease of reference

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.

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 recognised that it is necessary to face the challenges posed by the changes on these aspects arising in civil aviation 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 Central Caribbean 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, "(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, greater efforts are still needed in order to develop a human resources plan.

2.3   The following are guidelines 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 in the Central Caribbean.

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 that the Central Caribbean is represented by Cuba and Jamaica, who were members of the Ad hoc group activated to this end at the GREPECAS/12 meeting. It will be useful that all the Caribbean States support these members by providing input for this initiative.

2.7   Likewise, it is important that the CAA take action on the aforementioned NACC/DCA/1 Conclusion 1/21.

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 CAA 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 disciplines emerging from the evolution of the new systems, nowadays, several States of the CAR Region do not have qualified personnel in this field at the air navigation units and other aviation areas, it would be advisable that the first step to make would be to designate and train the personnel responsible for human resources planning.

3.3   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.

3.4   Based on the above, and considering Conclusion 1/21 of the NACC/DCA/1 Meeting, the following Draft Conclusion is suggested.

**DRAFT
CONCLUSION 5/X   HUMAN RESOURCES AND TRAINING PLANNING**

That those States/Territories 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 national 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;

c)   submit to the ICAO NACC Regional Office by **15 May 2005**, the form shown in the **Appendix** to this paper, duly completed by the CAAs; and

d)   establish the month of May 2005 as deadline to finalize the plan.

4.   **Suggested action**

4.1   The Meeting is invited to note the contents of this working paper and to approve the suggested Draft Conclusion of paragraph 3.4., in order to start actions as soon as possible, concerning human resources planning and training.

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APPENDIX

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	E x t.
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												

- A4 -

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												

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