



International Civil Aviation Organization
CAR/SAM Regional Planning Implementation Group (GREPECAS)
**Second Meeting of the Communications, Navigation and Surveillance / Air
Traffic Management Subgroup (CNS/ATM/SG/2)**
(Mexico City, Mexico, 16 to 19 November 2010)

Agenda Item 2: Follow-up to the implementation status of the performance based navigation systems plans for the CAR and SAM Regions and to the latest amendments to the ATM- and CNS-related SARPS

FOLLOW UP TO THE TRAINING ACTIVITIES ON COMPETENCIES OF AERONAUTICAL PROFESSIONALS

(Presented by the Secretariat)

SUMMARY

This working paper presents a follow-up on the training and qualification activities that entails the ICAO initiative on the next generation of aviation professionals (NGAP), the regional activities to guide CAR/SAM States in the development of their aeronautical training programmes, and a draft conclusion is proposed for the consideration of the Meeting.

References:

- Symposium on the Next Generation of Aviation Professionals (NGAP), Montreal, Canada, 1 to 4 March 2010;
- GREPECAS CNS/ATM/SG/1 meeting, Lima, Peru, 15-19 March 2010; and
- State letter Ref. NS2-21 — EMX0758 dated 23 August 2010.

ICAO strategic objectives

This working paper relates with Strategic Objectives A, D and E.

1. Background

1.1 Taking into account that *human performance* centres itself in human capabilities and limitations, which bear an impact on the safety and efficiency of air operations and on the systems' performance, the objective of human resources planning is to guarantee that the civil aviation administrations count with qualified personnel at the various air navigation services. To this end, it was recommended that the civil aviation authorities start, as soon as possible, with the planning of human resources and the training required to implement the new emerging systems. The administrations should, therefore, develop human resources training and planning programmes in the various aeronautical areas. This development should be carried out on the basis of a performance-based air navigation, and a substantial coordination at all levels.

Background

1.2 During the first meeting of the CNS/ATM Subgroup (CNS/ATM/SG/1) it was concluded that States, through their civil aviation training centres (CATC), should also adopt a common approach permitting the development and implementation of a performance-based ATM system. Also, reference was made to the aeronautical training referred to in ICAO Resolution A36/13, Appendix H, as well as the ICAO Aeronautical Training Programme, to encourage and help contracting States to keep a high training level of its aeronautical personnel, especially those providing and operating the services destined to international air navigation.

1.3 In this sense, CNS/ATM/SG/1 meeting commented upon the conclusions and results of the Eleventh Symposium and Global TRAINAIR Conference (GTC/11) and of the SAM directors of civil aviation training centres (CATC) meetings, and presented a list of short and medium term training needs for the consideration of States, as well as a draft Guideline for the Preparation of a GNSS Training Programme based on GBAS and SBAS.

1.4 The CNS/ATM Subgroup was of the opinion that CAR/SAM States/Territories and International Organizations, through their training centres, continue with their efforts in order to improve the training of aeronautical professionals and plan the medium term structure and programmes permitting a response to the new challenges. In this respect, Conclusion CNS/ATM/1-10 - *Training for aeronautical professional competence*, and Conclusion CNS/ATM/1-11 - *GNSS Training*, were formulated to prepare aeronautical training programmes which contemplate regional air navigation and safety requirements.

2. Follow-up

Results of the ICAO USOAP

2.1 On the basis of the USOAP audits results, many conclusions arose related with the insufficiently and inadequately qualified and experienced personnel, appropriate training, certification/licensing system, and authorities to regulate and supervise the services providers' performance, showing the need and priority that States work on this topic.

Next Generation Aeronautical Professionals

2.2 Civil aviation is facing some difficulties: mass retirements from the current generation of aeronautical professionals, access to attainable training, competition with other sectors of the industry for qualified personnel, a lack of competency harmonization in some aviation disciplines, and a lack of conscience from the "next generation" on the types of work available in aviation. Therefore, some interesting and surprising figures have been quoted:

- a) In the next 20 years, airlines will have to add 25,000 new aircraft to the current 17,000 commercial fleet;
- b) For 2026, 480,000 new technicians will be required to maintain these aircraft and more than 350,000 pilots to operate them; and
- c) Between 2005 and 2015, 73% of the United States air traffic controller population will be apt for retirement.

2.3 In addition, in the future the demand for aeronautical professionals will exceed the offer. The training capacity will be insufficient to cover the demand, and the learning methodology will not meet with the teaching style of the next generation.

2.4 There are many tools to use and many approaches were elaborated to ensure an appropriate number of aeronautical professionals for the future, from human resources planning tools up to new well-adapted learning technologies and methodologies for the next generation. Civil aviation should be part of the solution to ensure a numerous and well trained next generation of aeronautical professionals.

2.5 To this end, ICAO launched the next generation aeronautical professional (NGAP) initiative to ensure that sufficient competent and qualified aeronautical professionals are available to operate, manage and maintain the future air transport international system. In May 2009, the NGAP Task Force was established and it was decisive in the support to the preparatory work for the NGAP symposium held in ICAO Headquarters from 1 to 4 March 2010. The NGAP Task Force held its second meeting on 5 March 2010, after the symposium, and established a work programme to deal with training improvements for crew, air traffic management and aircraft maintenance personnel, to comply with the demands of the new procedures and with the ever more complex technologies. The High Level Safety Conference (HLSC), held in Montreal in March 2010, recommended that States and international organizations support the work of the NGAP Task Force.

2.6 The second meeting of the NGAP Task Force recognized that many aviation professions merit attention and that competencies should be developed for them. To develop the material in duly and efficiently, it was decided to continue with a by-phase approach. Participants of the Task Force offered to contribute with the subgroups that have been established for the following deliverables:

a) **Accreditation/approval**

Deliverable: Support in the development of a policy and criteria for the institutions approved to provide training related with *Annex 1 – Personnel Licensing* and Government Safety Inspector training by October 2010, which will permit the voluntary approval by ICAO of aeronautical training institutions by the end of 2010.

b) **Licenses to flight crew members**

Deliverable: Develop competencies for left-seat flight crew members, flight inspectors and large turbine-impulsed aircraft instructors (greater than 5 700 kg) by December 2011.

c) **Air traffic management professionals**

Deliverable: Develop competencies for air traffic controllers and professionals in air traffic electronic security professionals (ATSEP) by December 2011.

d) **Second NGAP symposium and its scope**

Deliverable: Guide the Organization in the planning of the next global symposium and/or alternate event tentatively scheduled for the end of 2011.

Deliverable: Develop and implement a communications strategy to reach the next generation of aeronautical professionals.

Regional actions

CAR/NAM Regions

2.7 In attention to ICAO Resolution A36/13 and the NAM/CAR Directors General of Civil Aviation conclusions, the ICAO NACC Regional Office is drafting an Aviation Training Plan proposal for the CAR Region (2012 – 2016), to present to the Directors at the next NACC/DCA/4 meeting. To this end, CAR States have been requested to complete a survey, reference NS2-21 — EMX0758 of 23 August 2010, which is available at the ICAO NACC Regional Office website: <http://mexico.icao.int/restricted/StateLetters>.

SAM Region

2.8 In the SAM Region, annual civil aviation training centres (CATC) meetings are carried out, which evaluate current and future air navigation requirements. The first CATC meeting was held in Lima, Peru, on November 1996. Same have been conducted annually until 2003 (CATC/7) and after a long period of inactivity, CATC/8 meeting was held in November 2008. CATC/10 will be held in Lima, from 8 to 12 November 2010. The reports and documentation produced by the CATC meetings is available at the ICAO SAM Regional Office website: <http://www.lima.icao.int/MeetProg/MeetingProgramme.asp>. In consideration to the new requirements derived from the implementation of the ATM Operational Concept, SAM States are planning for the Development of Human Resources and Competency Management, taking into account the global air navigation plan initiatives, as well as the new dispositions and requirements for its implementation in the short and medium term.

2.9 Taking into consideration all of the above mentioned activities and guidelines, the Meeting is invited to adopt the following draft conclusion for the follow-up to the training activities for the competency of aeronautical professionals for the CAR/SAM Regions:

DRAFT

CONCLUSIÓN CNS/ATM/2-X - Training programme for the competency of aeronautical professionals for the CAR/SAM Regions

That, to train aeronautical professionals as regards necessary competencies, CAR/SAM States/Territories and international organizations:

- a) Follow-up and take under consideration the recommendations of the Symposium on Next Generation Aeronautical Professionals (NGAP) and the results of the NGAP Task Force;
- b) In coordination with the ICAO Regional Offices, establish a training programme that responds to the performance objectives identified in the CAR and SAM performance based implementation plans for the 2011-2016 period; and
- c) Inform the ICAO Regional Offices on the progress made in the development of this Programme, no later than 30 September 2011.

3. **Action suggested**

3.1 The Meeting is invited to:

- a) Consider, within States/Territories national human resources planning, the results and activities of the Next Generation Aeronautical Professionals Task Force, as well as the guideline developed by GREPECAS; and
- b) Examine and approve the draft Conclusion presented in paragraph 2.9.

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