



**WORKING PAPER**

**COUNCIL — SPECIAL MODEL SESSION**

**Subject No. XX: Creation of a Collaborative Research Network to study NGAP regional situation**

(Presented by Argentina)

**EXECUTIVE SUMMARY**

This working paper states the need to carry out regional studies about the demands of the aviation labor market, and the Latin American “millennials” preferences and needs to adjust the existing training offer.

Given that to attract potentially qualified candidates is fundamental to have an adequate training and development plan, this paper suggests studying the possibility to complement aviation professional training with academic education, expanding joint actions between the university and the aviation system on those disciplines that require to do so. This is meant to raise the level of aviation training in general.

We propose to create a Collaborative Research Network (CRN) among different universities and key aviation organizations from the CAR/SAM region in order to carry out the mentioned studies in Latin America. The later will provide empirical data to design different strategic initiatives regarding how to attract professionals to the available positions, to retain and develop them professionally in the medium and long term.

**1. INTRODUCTION**

1.1 According to the data provided from the IATA Training and Qualification Initiative (ITQI), in the next ten years, the global commercial aviation will suffer a lack of more than 200.000 pilots and 400.000 specialized maintenance workers<sup>1</sup>.

1.2 “Although the ITQI figures are based on specific research applied only to pilots and maintenance personnel, ICAO, IATA and a wide range of industry, education and human resources stakeholders have also drawn attention to the fact that additional aviation professions (controllers, managers, inspectors, technicians, etc.) will likely demonstrate similar vulnerabilities”<sup>2</sup>.

1.3 In order to give an answer to the aeronautic crisis that can get to be severe due to the lack of specialized personnel in the whole industry, ICAO has launched the Next Generation of Aeronautical Professionals initiative (NGAP), contributing and complementing the job made by the ITQI.

<sup>1</sup> ICAO Journal - Issue 06, 2009, p.3

<sup>2</sup> Idem

1.4 In the 1st Symposium in 2010, it was reported that “causes for the trends being revealed range across demographic, social, sectoral and political factors. They include the increase in the median age of practitioners, the fact that many aviation skill sets are very desirable for, and transferable to, other industries, that sector needs can vary considerably depending on the States or Regions under consideration, and the reality that the ‘wild blue yonder’ is no longer as glamorous or exciting as it was once perceived by younger demographics”<sup>3</sup>.

1.5 “It has also been highlighted that the particularly cyclical nature of air transport economics, with the commensurate hiring and layoff periods these produce, makes personnel attraction and retention more difficult. Furthermore, non-harmonized government programmes can have a tendency to exacerbate wider industry recruitment issues and concerns”<sup>4</sup>.

1.6 Consequently, the aviation industry is facing the challenge to guarantee the availability of enough qualified and competent professionals to operate, and keep the international air transport system working in the future.

## 2. ANALYSIS

2.1 To reach this aim, a workforce with specific competencies is required. These competencies need to be adjusted to the demand of the constitutive companies and organizations of the industry, as well as to the needs and preferences of young people who look for a job and/or professional development.

2.2 It is important to consider that the challenges that arise from the economic-productive and technological changes at global level do not have the same impact in all regions.

2.3 It can be noticed how in the current Latin American labor markets, “at the same time that a lack of qualified workers in some sectors and professions is produced, the difficulties to find and maintain stable and productive jobs for less qualified workers increase. It is still difficult for young professionals to join the labor market, mainly due to the deficiencies of educational systems, which results in terms of quality and retention are generally below the average compared to other regions, and also due to the fact that they belong to the poorest sectors in society, being their educational and social levels deficient”<sup>5</sup>.

2.4 “The most recent data collected by the OIT Regional Office for Latin America and The Caribbean show that the urban unemployment rate of youths between 15 and 24 years old reach at 14,3%, slightly higher than the double of the general rate (6,4%). In addition, the youth population lives in a socio-economic segmentation context that at same time portrays the high inequality in the region, which defines their expectations and their links to the labor market. The paradox is that while the youth labor offer is significantly higher than in other regions (69% of the total Latin American population is less than 40 years old), the education and training systems fail to retain and develop the necessary competencies required by the information and knowledge society. However, during the last five years, a drop in youth participation rate in the labor market has been detected, which corresponds with longer permanence in the education system that would result in a better labor placement in the future”<sup>6</sup>.

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<sup>3</sup> ICAO Journal - Issue 06, 2009, p.4

<sup>4</sup> Idem

<sup>5</sup> <http://www.cepal.org/publicaciones/xml/4/51404/CEPAL-OITNo9.pdf>

<sup>6</sup> Idem

2.5 If we consider the needs and preferences of the people who look for a job and/or professional development, it is fundamental to consider that, although there are general features of the “millennials” at global level<sup>7</sup>, we should not leave aside the existence of particular characteristics at regional/national level.

2.6 Consequently, it is essential to explore the economic, social, labor and production context of each country in the region as well as the local particularities of “millennials” in order to understand the main work placement challenges that the new generation has to deal with in the Latin American aviation.

### 3. PROPOSAL

3.1 It is fundamental to accomplish a study of both the aviation labor market demands in Latin America, and the needs and preferences of the “millennials” at regional/national level, assuming that even within the region/nation there exist diversities even within the age group if we consider, for example, their socio-economic level.

3.2 Assuming that to attract potential candidates is vital to have an adequate training and development plan, it is necessary to adjust the existing training offer to both the real needs of the labor market and the preferences of the next generation of professionals.

3.3 We propose to create a Collaborative Research Network (CRN) among different universities and key aviation organizations from the CAR/SAM region in order to carry out the mentioned studies in Latin America. The later will provide empirical data to design different strategic initiatives regarding how to attract professionals to the available positions, to retain and develop them professionally in the medium and long term.

3.4 Towards the aim of reaching knowledge societies<sup>8</sup> in the whole region, and based on the data provided by various local aviation system stakeholders<sup>9</sup>, we assume that there is a need in our region to raise the general training level of the aviation sector. It could be achieved by expanding joint actions between aviation professional training and university.

3.5 Although progress is being made in Competencies Based Training (CBT) regarding to a more comprehensive training of human resources, it is worth thinking about expanding joint actions between university and the aviation system in order to raise the general training level. In this context Aviation Professionals could access to additional academic education (graduate, postgraduate, etc.) as part of their development, besides being trained in competence-based specific disciplines. Consequently, the aviation system could rely on highly qualified human resources to meet the demands of an increasingly complex and changing world.

3.6 To achieve this goal, an analysis of those job positions that could eventually require personnel with an academic profile is necessary. Once that those sectors requiring an academic profile have been identified, and expanding joint actions between universities and the aviation system, personnel

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<sup>7</sup> See data from think tank Pew Research Center, available at: <http://www.pewsocialtrends.org/2014/03/07/millennials-in-adulthood/>

<sup>8</sup> According to OEA: “A knowledge society refers to the type of society that is needed to compete and succeed against the economics and politics changes of the modern. Also, refers to the society that is well educated and which is based on the knowledge of its citizens to boost innovation of the entrepreneurial spirit and the dynamism of its economy”.

<sup>9</sup> Significantly, it is necessary to corroborate this assumption.

will be highly qualified to support current industry requirements, and will effectively meet the demands of a competitive and changing labor environment.

3.7 Given that there are some experiences of joint actions between professional and academic training at regional level, it seems relevant to survey them and share best practices in order to replicate them and develop new training offers to those disciplines which require doing so. In different countries of the region an increasing offer of university degrees related to aviation already exists, besides the traditional ones like Aeronautical Engineering. In this way we can mention, among others: in Argentina, Ezeiza University offers, since 2012, a University Technical Degree in Aircraft Dispatch and Airport Operations<sup>10</sup>; Chile offers a University Technical Degree in Aviation Maintenance at the Aeronautical Science Academy<sup>11</sup>; and the Dominican Republic offers an Aeronautical Management High Technician Degree at the Aeronautical Science Higher Academy<sup>12</sup>.

3.8 Finally, as mentioned earlier, it is relevant to highlight the need to carry out the studies outlined in this working paper from the region CAR/SAM itself, resulting significant and innovative to count with researches conducted from Latin America so as to promote the development of regional/national Think Tanks focused on the problems described in this working paper. This is why we propose to reach cooperation agreements between universities and key aviation organizations in the region, creating a Collaborative Research Network (CRN) to carry out this task. The results would be available for the different actors in the system for decision-making and strategic actions.

3.9 The resulting empirical data will become relevant to undertake various initiatives related to efficient human resources management in order to reflect about the best way to: attract potential candidates for available positions; retain talented professionals; and develop professionals in the medium and long term.

#### 4. SUGGESTED ACTION

4.1 Delegations are invited to become aware of the information presented, exchange ideas and consider these points when adopting the necessary actions to support and encourage NGAP priorities at local and regional level.

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<sup>10</sup> <http://upe.edu.ar/departamento-de-desarrollo-aeroportuario/tecnicatura-universitaria-en-despacho-de-aeronaves/>

<sup>11</sup> <http://www.aca.cl/sitio/carreras/tecnico-universitario-en-mantenimiento-aeronautico/>

<sup>12</sup> <http://www.asca.edu.do/index.php/carreras-6/taa-177>