



**Opening remarks by the President of the Council of the  
International Civil Aviation Organization (ICAO),  
Mr. Roberto Kobeh González,  
to the Next Generation of Aviation Professionals Symposium**

**(Montréal, 2 March 2010)**

I would like to welcome you all to ICAO and to this very timely Symposium on the Next Generation of Aviation Professionals.

I am particularly pleased to see so many younger people here with us today because you are the ones who will be at the controls of the air transport industry in a few short years.

Over the coming days, we have the opportunity to share the experience and expertise of the older generation as well as the expectations and perhaps the concerns of those who are just starting out or contemplating a career in the exciting world of aviation. We have a lot to learn from each other and let us make the most of our time here together.

Let me start by summarizing some statistics for us to contemplate.

According to the most recent estimates, the aviation industry could experience a severe shortage of human resources in safety-critical areas in this decade and the next if nothing is done to avert the situation. IATA predicts there could be a lack of 200,000 new pilots and 400,000 new maintenance personnel worldwide by 2018. The estimates were made before the economic crisis we are just coming out of, but we have only bought time. The industry should be back to regular growth patterns in 2011 and the global system will have to accommodate greater numbers of aircraft movements and passengers than at any other time in history.

My fear is that we are not ready to fill the void created by the wave of baby boomers that are gradually retiring or by the transformation of the industry to a new high tech, computerized environment.

We are entering a bold new world without sufficient training capacity worldwide. Policies and regulatory frameworks are not well enough aligned with the aggressive, proactive policies we need to recruit, educate, train and retain the next generation of aviation professionals. If we do not address the quality of education issue, employment decisions will be based mainly on business forces, jobs will be filled by individuals with inadequate training and safety will be at risk.

The international aviation community must be more keenly aware that the safe and orderly development of the international air transportation system depends on the availability of the necessary human resources. Times have changed and we must adapt.

Many of us started and pursued our careers in aviation because it promised the realization of a dream and a lifetime of fulfilling work. We became engineers and technicians because we could immerse ourselves in emerging technologies. We became pilots because we wanted to rise above the clouds. We became controllers because we enjoyed the challenge of managing the flight of several aircraft at the same time. We were not disappointed.

I suspect that for many of the next generation, the motivations are much the same but the choices and challenges they face are very different.

I like the expression of Mr. Prensky, the internationally-acclaimed expert in e-learning, who said that young people are digital natives while we, the elders, are digital immigrants. We still remember a world without computers or the Internet, while the next generation has a hard time imagining the world without them.

This generational digital divide means that education and training have to be approached differently. We have to reassess the effectiveness of our education and training systems. If we are to attract the best and the brightest, we must respond to their needs and aspirations.

The next generation will work in an aviation world that is radically changing with the advent of global navigation systems, unmanned aircraft, glass cockpits and even sub-orbital flights. How will that impact existing essential aviation professions and what new aviation professions will be created? I very much look forward to what our guest speakers will have to say about these questions.

And then there are fundamental social issues that are transforming the work environment and personal values — issues such as the global citizen's responsibility to protect the planet, the need for a lifestyle that balances work and family, access to aviation training and education that is affordable. All of these considerations, we know, are of growing importance to the next generation.

The international aviation community, collectively, needs to address all of these issues, in a holistic and harmonized manner. All stakeholders present in this room need to engage in finding creative alternatives to ensure that the air transportation system continues to evolve in a safe, secure and sustainable manner.

And so, what do we need?

- We need to actively reach out to the next generation and communicate with them about the wide range of career possibilities in aviation.
- We need to improve the way we train in terms of quality and in terms of cost and time dedicated to training.
- We need hard data on human resources and training. Without it, we cannot plan.
- We need to remove regulatory obstacles.
- We need to harmonize regulations.
- We need to facilitate the free flow of professionals across various parts of the world.

And more generally:

- We need to make aviation careers interesting and rewarding so we can attract and retain the young talent we need to support the development of aviation.

That is quite an agenda. The good news is that your hard work will certainly be worth the effort. Adapting and harmonizing our approach to aviation training and education will yield not only sound operational benefits, but concrete economic benefits as well by facilitating the migration of the workforce where and when it is needed and reducing costs associated with certification.

Over the coming days, you will examine the issue of the next generation of aviation professionals from all angles. Throughout your discussions, I would ask you to keep in mind four fundamental questions that should be answered by the end of this symposium:

1. What is the underlying problem? We must start with a clear problem statement.
2. What is the size of the problem and how do we measure it?
3. What are the possible solutions?

And finally,

4. How can ICAO support you in the application of these solutions.

Ladies and gentlemen, this symposium is the result of work that started in IATA, in its training and qualifications initiative. It is also the fruit of the Next Generation of Aviation Professionals Task Force. These two complementary initiatives share a similar format: they bring together all stakeholders of the aviation industry. I encourage you to participate fully in these initiatives and in this Symposium, paving the way for an exciting and fulfilling future for the Next Generation of Aviation Professions.

Let me close with a few words to the young aviation enthusiasts here today. Over the years, international air transport has contributed much to the world. To quote the preamble to ICAO's founding document, the Chicago Convention — aviation has “helped to create and preserve friendship and understanding among the nations and peoples of the world”. Now, we need your energy and your ideas to take aviation into the future.