



# SHAPING TOMORROW'S AIR TRANSPORT



**PASCAL REVEL**

*He is the Special Counsellor (Strategy/Partnerships) to the President of ENAC in France. Previously he was the Director of Civil Aviation for the French Southwest Region at the Directorate General of Civil Aviation (DGAC) - Bordeaux Airport, serving as State State representative at the Bordeaux Airport Board of Administrators. Prior to that experience he was the Vice-President of ENAC.*

✈ In workforce-driven industries, the availability of qualified personnel is essential to successful growth and development. Since beginning operations in 1948, École Nationale de l'Aviation Civile (ENAC) has been educating men and women in the civil aviation sector in virtually all technical specialties, from air transport pilots and air traffic controllers, to technicians and engineers.

Though initially focused on national needs, ENAC quickly expanded its activities in the international community, taking a first step with French-speaking countries. In the 1960's ENAC began cooperating with French-speaking African States, under the auspices of agreements with the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA), a supra-national air navigation service provider (ANSP) in the region. Technology improvements and cost reductions in the 1970's and 1980's lead to the exponential growth of air transport which became a mass transportation system worldwide. ENAC acknowledged that the globalization process was underway and decided to take an important step towards more international cooperation by gradually translating the majority of its educational programmes into English.

In parallel, ENAC expanded its work globally, signing dozens of partnership agreements with other academic and training institutions, mostly in Europe, North America and Asia. In Europe, the Partnership of a European Group of Aeronautics and Space Universities (PEGASUS) network was jointly created by ENAC and its main European partner universities, contributed significantly to the visibility of aviation education in many circles outside the educational world itself. PEGASUS made it possible to bridge the gap between continents and developed a cooperation with the American Institute of Aeronautics and Astronautics (AIAA) in North America, Russia and China, who recently created Aerospace College Alliance of Sino Universities (ARCAS), the Chinese equivalent of the PEGASUS network.

ICAO Secretary General Dr. Fang Liu (left) and the Director of France's École Nationale de l'Aviation Civile (ENAC), M. Marc Houalla (centre), signed the Memorandum of Understanding covering the development and delivery of new educational programmes and training activities within the framework of the ICAO TRAINAIR PLUS Programme. The signing was attended by the Permanent Representative of France on the ICAO Council, Ambassador Philippe Bertoux (far right), and Meshesha Belayneh (far left) ICAO's Deputy Director, Technical Cooperation Bureau and Chief of its Global Aviation Training Office. The first outcome of the new partnership will be a Master's Programme in Aviation Safety Management, which is expected to launch in 2018.





While partnerships may differ from one place to another in terms of their scope, ambitions and various alliances (including industry), they all attest to the high value of collaboration. Working together across State boundaries allows for a better understanding of aviation training needs and for anticipating the competences that will be necessary for the next generation of aviation professionals.

Examples of this include the educational projects that ENAC has been conducting in China since 2001. Beginning with a few professional training programmes in the area of aviation safety, airworthiness, flight operations and aircraft maintenance, ENAC was asked to create and develop a full-scale school of aviation engineering in Tianjin. The Sino-European Institute of Aviation Engineering eventually opened in 2007 and is now fully operational, delivering around 100 engineering graduates to the industry every year since 2013. ENAC also developed pilot training for Chinese airlines and other higher education programmes with prestigious Chinese universities in Beijing (Qinghua University, Beihang University, etc.) and Hong Kong. Currently China is one of the fastest-growing aviation countries in the world.

Other aviation authorities and other stakeholders benefit from ENAC B2B programmes. ENAC delivers ATCO and ATSEP training for the Airports Authority of India, providing participants with the opportunity to take up management positions and boost their careers. In Brazil, ENAC will soon begin delivering high-end courses in air transport and air traffic management to executives and senior managers from the three governmental aviation bodies.

Recently, ENAC partnered with McGill University on an unprecedented Global Aviation Leadership programme that is specifically designed

for future decision makers in the aviation industry. Delivered on a part-time basis, this new programme will allow students from all over the world to complete a McGill Graduate Certificate in Aviation Leadership, as well as an Advanced Master in Strategic Aviation Leadership from ENAC, without taking a leave from their current jobs.

In more recent years, after recovering from the world economic crisis of 2008-2009, air transport has been boasting tremendous growth and record profits. This has led to increased pressure on the labor market, and the fear that some aviation professions will suffer from shortages in the years to come. ICAO recognized this potential threat when it established the NGAP initiative.

Even before joining the network of ICAO Regional Training Centers of Excellence and the TRAINAIR PLUS programme, ENAC was committed to supporting NGAP. In October 2017, ICAO and ENAC signed a comprehensive Memorandum of Understanding (MoU) to jointly deliver educational programmes that bestow an academic diploma. Building up on these partnerships and the existing regional initiatives, it is the right time to consider a new initiative at ICAO level, that would encompass academia and training institutions, to bridge the gap between aviation professions and university programmes and address the future manpower needs of aviation.

Ultimately, one objective will always remain constant – to better train the next generation of aviation professionals and give them the relevant competencies they will need for tackling future issues in aviation. This is key to ensuring that air transport economic growth will continue while we increase safety, security and the preservation of our natural environment. ■