OMNI HELICOPTERS INTERNATIONAL

OHI Perspectives

Next Generation of Aviators – The Role of Youth Education in Ensuring the Growth of our Industry

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Aviation is an exciting and emotive space. The notion of a machine in the air elicits words like freedom, courage, confidence. Equally, the sight of a flying machine being maintained evokes respect for the specialist knowledge and attention to detail required to keep the aircraft safe and airworthy.

Yet, aviation, including our niche, the vertical lift, is not without its challenges.

One of the most pressing issues is sustainability. The industry's heavy reliance on fossil fuels presents a formidable barrier to reducing carbon emissions at the pace demanded by climate science.

Additionally, the availability of helicopters and drones is not keeping pace with the growing demand across the diverse missions. The long innovation cycles inherent in aviation, designed to prioritize safety, further complicate the rapid adoption of new technologies.

Perhaps most critically, the industry is grappling with a shortage of skilled pilots and mechanics. In its Aviation Talent Forecast 2023, the aviation training company CAE, estimates that worldwide in 2023 there were 351K commercial pilots and 193K maintenance technicians, for fixed wing and rotary combined. By 2032 the number of pilots should grow by over 250K and mechanics by 170K.

This projection lead to a challenging question: where do we get new talent? Traditional recruitment channels, such as military or commercial airlines, are becoming increasingly difficult with the fixed wing sector itself facing major shortages. Employing former defence forces personnel works mostly for retiring military aviators, but that doesn’t solve the numbers challenge in the longer term. Plus, poaching military personnel in many countries of the Global South does not serve the countries’ best interests.

The solution lies in cultivating a robust pipeline of young talent inspired to pursue careers in aviation.

Apart from solving the talent gap, there are other benefits of this route: younger generations feel strongly about sustainability and could find new ways of solving the challenges, they could develop new missions for the world that is changing fast, their understanding of modern technologies is far superior to that of older generations, and their embrace of diversity, both in terms of background and thinking, goes beyond the previous generations’.

The industry, in turn, can offer several benefits: a sense of purpose (what is more meaningful than flying Emergency Medical Services or Search and Rescue missions?), long-term job security, global professional mobility, access to advanced knowledge, good compensation and solid bragging rights!

But before youngsters can proudly express their wish to dedicate their life to avionics, piloting eVTOLs, or using drones to fight wildfires, first they need to be made aware of all these opportunities and benefits. We need to position aviation, and more specifically, vertical lift, as an attractive career option early on. How many high school girls and boys today, if asked what they want to do when they grow up, would say they want to fly or maintain

airplanes or, even more specifically, helicopters or drones? What will this number be in the countries of the Global South such as Brazil, Guyana or Mozambique? Let's be clear - this is the challenge we face collectively: operators (who will work for us?), clients (who would serve them?) and OEMs (who will operate their machines?). Any solutions we will find, will be most likely solutions that involve all the stakeholders of this industry.

Aviation offers a diverse array of career paths. Pilots, engineers, managers, mechanics, IT experts, supply specialists, rescue swimmers, flying medics etc. Such diversity allows us to target a wide audience of kids who want to do different things in life yet are united by the allure of the big sky. Early engagement, say via schools, should focus on showcasing the existence, impact and the excitement of aviation careers. Then it's about helping develop key general skills, such as STEM, communication, structured thinking or leadership. And later it's about specific training pathways to the profession: scholarships, internships, apprenticeships, leadership skills, flying schools etc – all are useful tools on the way to ensure aviation's long-term success. In Omni Helicopters International´s (OHI) Guyanese operations we are pursuing this model: engaging with high school kids to present aviation as a career option, providing financial support to 10 students at the Aeronautical Engineering School, training entirely local SAR technicians and developing local pilot force by educating graduates from the Aeronautical Engineering School via OHI's ab initio pilot programme.

Operators can take the lead on these endeavours, but when clients and OEM play supportive roles, the outcome can be so much more powerful. Clients and OEMs can establish scholarships or sponsorships or participate in mentorship schemes. More specifically, clients can help by seeking ways in which improved training technologies and cockpit automation could allow for more flexible minimal flight hours requirements to fly in each sub-segment (e.g. O&G has very high requirements that looks for pilots with 500+ hours). OEMs can provide training, technical knowledge or access to training equipment.

For example, OHI has been operating a flight school in Brazil via its affiliate Omni Táxi Aéreo. Today, the graduates of the school are not able to join OHI directly due to the high minimal flight hours requirement of our clients. Since OHI cannot hire graduates, the relatively high cost of education needs to be covered by the students themselves, which makes it a niche career option. Only the most dedicated individuals with access to financial resources can pursue a helicopter pilot career outside of the military pathway today. An unintended consequence of this reality means that candidates from weaker socio-economic backgrounds are effectively shut out form the career opportunities later. Under a close industry cooperation scenario, however, this school could become a regional industry-wide training hub equitably sponsored by various operators, clients and OEMs, thus allowing to draw talent from wider share of the society. Students would begin their piloting or maintenance education, then proceed to launch their careers in aviation segments with lower entry barriers to start accruing their flight experience. As they gain experience over the course of their careers, they could return to the school to enjoy specialist education needed to progress to more challenging aviation segments or gain new skills (e.g. related to new areas like eVTOLs). In essence, the school becomes a key developmental platform to the benefit of the entire industry. This is an early idea that needs more details to become viable, but in OHI's view, this cooperative approach would yield the best results for all.

Finally, it should be mentioned that early engagement with youth is also essential to improving the gender imbalance of the industry. Currently, women make up less than 10% of pilots and less than 3% of mechanics worldwide. How much talent are we missing out on as the industry by allowing this imbalance to exist? Addressing the gender parity in aviation should begin with inspiring girls to dream about careers in aviation just as much as boys do. Promoting equal access to and interest in STEM is vital to preventing gender-based stereotypes from forming at an early age. As industry, and the wider society, we will only benefit if both genders are encouraged to pursue careers in aviation.